

**ELECTRONIC CODE OF FEDERAL REGULATIONS****e-CFR data is current as of October 4, 2019**[Title 40](#) → [Chapter I](#) → [Subchapter E](#) → [Part 180](#)

---

Title 40: Protection of Environment

---

**PART 180—TOLERANCES AND EXEMPTIONS FOR PESTICIDE CHEMICAL RESIDUES IN FOOD**

---

**Contents****Subpart A—Definitions and Interpretative Regulations**

- §180.1 Definitions and interpretations.
- §180.3 Tolerances for related pesticide chemicals.
- §180.4 Exceptions.
- §180.5 Zero tolerances.
- §180.6 Pesticide tolerances regarding milk, eggs, meat, and/or poultry; statement of policy.

**Subpart B—Procedural Regulations**

- §180.7 Petitions proposing tolerances or exemptions for pesticide residues in or on raw agricultural commodities or processed foods.
- §180.8 Withdrawal of petitions without prejudice.
- §180.9 Substantive amendments to petitions.
- §180.29 Establishment, modification, and revocation of tolerance on initiative of Administrator.
- §180.30 Judicial review.
- §180.31 Temporary tolerances.
- §180.32 Procedure for modifying and revoking tolerances or exemptions from tolerances.
- §180.33 Fees.
- §180.34 Tests on the amount of residue remaining.
- §180.35 Tests for potentiation.
- §180.40 Tolerances for crop groups.
- §180.41 Crop group tables.

**Subpart C—Specific Tolerances**

- §180.101 Specific tolerances; general provisions.
- §180.103 Captan; tolerances for residues.
- §180.106 Diuron; tolerances for residues.
- §180.107 Triflumezopyrim; tolerance for residues.
- §180.108 Acephate; tolerances for residues.
- §180.109 Fenpicoxamid; Tolerances for residues.
- §180.111 Malathion; tolerances for residues.
- §180.114 Ferbam; tolerances for residues.
- §180.116 Ziram; tolerances for residues.
- §180.117 S-Ethyl dipropylthiocarbamate; tolerances for residues.
- §180.123 Inorganic bromide residues resulting from fumigation with methyl bromide; tolerances for residues.
- §180.123a Inorganic bromide residues in peanut hay and peanut hulls; statement of policy.
- §180.124 Methyl bromide; tolerances for residues.
- §180.127 Piperonyl butoxide; tolerances for residues.
- §180.128 Pyrethrins; tolerances for residues.
- §180.129 o-Phenylphenol and its sodium salt; tolerances for residues.
- §180.130 Hydrogen Cyanide; tolerances for residues.
- §180.132 Thiram; tolerances for residues.
- §180.142 2,4-D; tolerances for residues.
- §180.145 Fluorine compounds; tolerances for residues.
- §180.151 Ethylene oxide; tolerances for residues.
- §180.153 Diazinon; tolerances for residues.
- §180.155 1-Naphthaleneacetic acid; tolerances for residues.

- §180.163 Dicofol; tolerances for residues.
- §180.169 Carbaryl; tolerances for residues.
- §180.172 Dodine; tolerances for residues.
- §180.175 Maleic hydrazide; tolerances for residues.
- §180.176 Mancozeb; tolerances for residues.
- §180.178 Ethoxyquin; tolerances for residues.
- §180.181 Chlorpropham; tolerances for residues.
- §180.182 Endosulfan; tolerances for residues.
- §180.183 Disulfoton; tolerances for residues.
- §180.184 Linuron; tolerances for residues.
- §180.185 DCPA; tolerances for residues.
- §180.189 Coumaphos; tolerances for residues.
- §180.190 Diphenylamine; tolerances for residues.
- §180.191 Folpet; tolerances for residues.
- §180.198 Trichlorfon; tolerances for residues.
- §180.200 Dicloran; tolerances for residues.
- §180.202 *p*-Chlorophenoxyacetic acid; tolerances for residues.
- §180.204 Dimethoate; tolerances for residues.
- §180.205 Paraquat; tolerances for residues.
- §180.206 Phorate; tolerances for residues.
- §180.207 Trifluralin; tolerances for residues.
- §180.208 Benfluralin; tolerances for residues.
- §180.209 Terbacil; tolerances for residues.
- §180.210 Bromacil; tolerances for residues.
- §180.211 Propachlor; tolerances for residues.
- §180.212 *S*-Ethyl cyclohexylethylthiocarbamate; tolerances for residues.
- §180.213 Simazine; tolerances for residues.
- §180.215 Naled; tolerances for residues.
- §180.217 Metiram; tolerances for residues.
- §180.220 Atrazine; tolerances for residues.
- §180.222 Prometryn; tolerances for residues.
- §180.225 Phosphine; tolerances for residues.
- §180.226 Diquat; tolerances for residues.
- §180.227 Dicamba; tolerances for residues.
- §180.229 Fluometuron; tolerances for residues.
- §180.231 Dichlobenil; tolerances for residues.
- §180.235 Dichlorvos; tolerances for residues.
- §180.236 Triphenyltin hydroxide; tolerances for residues.
- §180.241 Bensulide; tolerances for residues.
- §180.242 Thiabendazole; tolerances for residues.
- §180.243 Propazine; tolerances for residues.
- §180.245 Streptomycin; tolerances for residues.
- §180.249 Alachlor; tolerances for residues.
- §180.252 Tetrachlorvinphos; tolerances for residues.
- §180.253 Methomyl; tolerances for residues.
- §180.254 Carbofuran; tolerances for residues.
- §180.258 Ametryn; tolerances for residues.
- §180.259 Propargite; tolerances for residues.
- §180.261 Phosmet; tolerances for residues.
- §180.262 Ethoprop; tolerances for residues.
- §180.269 Aldicarb; tolerances for residues.
- §180.272 Tribuphos; tolerances for residues.
- §180.274 Propanil; tolerances for residues.
- §180.275 Chlorothalonil; tolerances for residues.
- §180.276 Formetanate hydrochloride; tolerances for residues.
- §180.278 Phenmedipham; tolerances for residues.
- §180.284 Zinc phosphide; tolerances for residues.
- §180.287 Amitraz; tolerances for residues.
- §180.288 2-(Thiocyanomethylthio)benzothiazole; tolerances for residues.
- §180.289 Methanearsonic acid; tolerances for residues.
- §180.291 Pentachloronitrobenzene; tolerance for residues.
- §180.292 Picloram; tolerances for residues.

- §180.293 Endothall; tolerances for residues.
- §180.297 *N*-1-Naphthyl phthalamic acid; tolerances for residues.
- §180.298 Methidathion; tolerances for residues.
- §180.299 Dicrotophos; tolerances for residues.
- §180.300 Ethephon; tolerances for residues.
- §180.301 Carboxin; tolerances for residues.
- §180.303 Oxamyl; tolerances for residues.
- §180.304 Oryzalin; tolerances for residues.
- §180.314 Triallate; tolerances for residues.
- §180.316 Pyrazon; tolerances for residues.
- §180.317 Propyzamide; tolerances for residues.
- §180.318 4-(2-Methyl-4-chlorophenoxy) butyric acid; tolerance for residues.
- §180.319 Interim tolerances.
- §180.324 Bromoxynil; tolerances for residues.
- §180.328 Napropamide; tolerances for residues.
- §180.330 *S*-(2-(Ethylsulfinyl)ethyl) *O,O*-dimethyl phosphorothioate; tolerances for residues.
- §180.331 4-(2,4-Dichlorophenoxy) butyric acid; tolerances for residues.
- §180.332 Metribuzin; tolerances for residues.
- §180.337 Oxytetracycline; tolerances for residues.
- §180.339 MCPA; tolerances for residues.
- §180.341 2,4-Dinitro-6-octylphenyl crotonate and 2,6-dinitro-4-octylphenyl crotonate; tolerances for residues.
- §180.342 Chlorpyrifos; tolerances for residues.
- §180.345 Ethofumesate; tolerances for residues.
- §180.349 Fenamiphos; tolerances for residues.
- §180.350 Nitrapyrin; tolerances for residues.
- §180.352 Terbufos; tolerances for residues.
- §180.353 Desmedipham; tolerances for residues.
- §180.355 Bentazon; tolerances for residues.
- §180.356 Norflurazon; tolerances for residues.
- §180.360 Asulam; tolerance for residues.
- §180.361 Pendimethalin; tolerances for residues.
- §180.362 Fenbutatin-oxide; tolerances for residues.
- §180.364 Glyphosate; tolerances for residues.
- §180.367 *n*-Octyl bicycloheptenedicarboximide; tolerances for residues.
- §180.368 Metolachlor; tolerances for residues.
- §180.370 5-Ethoxy-3-(trichloromethyl)-1,2,4-thiadiazole; tolerances for residues.
- §180.371 Thiophanate-methyl; tolerances for residues.
- §180.372 2,6-Dimethyl-4-tridecylmorpholine; tolerances for residues.
- §180.373 [Reserved]
- §180.377 Diflubenzuron; tolerances for residues.
- §180.378 Permethrin; tolerances for residues.
- §180.380 Vinclozolin; tolerances for residues.
- §180.381 Oxyfluorfen; tolerances for residues.
- §180.383 Sodium salt of acifluorfen; tolerances for residues.
- §180.384 Mepiquat (N,N-dimethylpiperidinium); tolerances for residues.
- §180.385 Diclofop-methyl; tolerances for residues.
- §§180.388-180.389 [Reserved]
- §180.390 Tebuthiuron; tolerances for residues.
- §180.395 Hydramethylnon; tolerances for residues.
- §180.396 Hexazinone; tolerances for residues.
- §180.399 Iprodione; tolerances for residues.
- §180.401 Thiobencarb; tolerances for residues.
- §180.403 Thidiazuron; tolerances for residues.
- §180.404 Profenofos; tolerances for residues.
- §180.405 Chlorsulfuron; tolerances for residues.
- §180.407 Thiodicarb; tolerances for residues.
- §180.408 Metalaxyl; tolerances for residues.
- §180.409 Pirimiphos-methyl; tolerances for residues.
- §180.410 Triadimefon; tolerances for residues.
- §180.411 Fluazifop-P-butyl; tolerances for residues.
- §180.412 Sethoxydim; tolerances for residues.
- §180.413 Imazalil; tolerances for residues.

- §180.414 Cyromazine; tolerances for residues.
- §180.415 Aluminum tris (*O*-ethylphosphonate); tolerances for residues.
- §180.416 Ethalfuralin; tolerances for residues.
- §180.417 Triclopyr; tolerances for residues.
- §180.418 Cypermethrin and isomers alpha-cypermethrin and zeta-cypermethrin; tolerances for residues.
- §180.419 Chlorpyrifos-methyl; tolerances for residues.
- §180.420 Fluridone; tolerances for residues.
- §180.421 Fenarimol; tolerances for residues.
- §180.425 Clomazone; tolerances for residues.
- §180.426 2-[4,5-Dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1*H*-imidazol-2-yl]-3-quinoline carboxylic acid; tolerance for residues.
- §180.427 Tau-Fluvalinate; tolerances for residues.
- §180.428 Metsulfuron methyl; tolerances for residues.
- §180.429 Chlorimuron ethyl; tolerances for residues.
- §180.430 Fenoxaprop-ethyl; tolerances for residues.
- §180.431 Clopyralid; tolerances for residues.
- §180.432 Lactofen; tolerances for residues.
- §180.433 Fomesafen; tolerances for residues.
- §180.434 Propiconazole; tolerances for residues.
- §180.435 Deltamethrin; tolerances for residues.
- §180.436 Cyfluthrin and the isomer beta-cyfluthrin; tolerances for residues.
- §180.437 Imazamethabenz-methyl; tolerances for residues.
- §180.438 Lambda-cyhalothrin and an isomer gamma-cyhalothrin; tolerances for residues.
- §180.439 Thifensulfuron methyl; tolerances for residues.
- §180.440 Tefluthrin; tolerances for residues.
- §180.441 Quizalofop ethyl; tolerances for residues.
- §180.442 Bifenthrin; tolerances for residues.
- §180.443 Myclobutanil; tolerances for residues.
- §180.444 Sulfur dioxide; tolerances for residues.
- §180.445 Bensulfuron methyl; tolerances for residues.
- §180.446 Clofentezine; tolerances for residues.
- §180.447 Imazethapyr; tolerances for residues.
- §180.448 Hexythiazox; tolerance for residues.
- §180.449 Avermectin B1 and its delta-8,9-isomer; tolerances for residues.
- §180.450 Beta-(4-Chlorophenoxy)-alpha-(1,1-dimethylethyl)-1*H*-1,2,4-triazole-1-ethanol; tolerances for residues.
- §180.451 Tribenuron methyl; tolerances for residues.
- §180.452 Primisulfuron-methyl; tolerances for residues.
- §180.454 Nicosulfuron; tolerances for residues.
- §180.455 Procymidone; tolerances for residues.
- §180.457 Bitertanol; tolerances for residues.
- §180.458 Clethodim; tolerances for residues.
- §180.459 Triasulfuron; tolerances for residues.
- §180.460 Benoxacor; tolerances for residues.
- §180.461 Cadusafos; tolerances for residues.
- §180.462 Pyridate; tolerances for residues.
- §180.463 Quinclorac; tolerances for residues.
- §180.464 Dimethenamid; tolerances for residues.
- §180.465 4-(Dichloroacetyl)-1-oxa-4-azaspiro[4.5]decane.
- §180.466 Fenpropathrin; tolerances for residues.
- §180.467 Carbon disulfide; tolerances for residues.
- §180.468 Flumetsulam; tolerances for residues.
- §180.469 Dichlormid; tolerances for residues.
- §180.470 Acetochlor; tolerances for residues.
- §180.471 Furilazole; tolerances for residues.
- §180.472 Imidacloprid; tolerances for residues.
- §180.473 Glufosinate ammonium; tolerances for residues.
- §180.474 Tebuconazole; tolerances for residues.
- §180.475 Difenoconazole; tolerances for residues.
- §180.476 Triflumizole; tolerances for residues.
- §180.477 Flumiclorac pentyl; tolerances for residues.
- §180.478 Rimsulfuron; tolerances for residues.
- §180.479 Halosulfuron-methyl; tolerances for residues.

- §180.480 Fenbuconazole; tolerances for residues.
- §180.481 Prosulfuron; tolerances for residues.
- §180.482 Tebufenozide; tolerances for residues.
- §180.484 Flutolanil; tolerances for residues.
- §180.485 Cyproconazole; tolerances for residues.
- §180.486 Chlorethoxyfos; tolerances for residues.
- §180.487 Pyriothiobac sodium; tolerances for residues.
- §180.490 Imazapic; tolerances for residues.
- §180.491 Propylene oxide; tolerances for residues.
- §180.492 Triflurosulfuron-methyl; tolerances for residues.
- §180.493 Dimethomorph; tolerances for residues.
- §180.494 Pyridaben; tolerance for residues.
- §180.495 Spinosad; tolerances for residues.
- §180.498 Sulfentrazone; tolerances for residues.
- §180.499 Propamocarb; tolerances for residues.
- §180.500 Imazapyr; tolerances for residues.
- §180.501 Hydroprene; tolerances for residues.
- §180.502 Aminoethoxyvinylglycine hydrochloride (aviglycine HCl); tolerances for residues.
- §180.503 Cymoxanil, tolerance for residues.
- §180.504 [Reserved]
- §180.505 Emamectin; tolerances for residues.
- §180.506 Cyclanilide; tolerances for residues.
- §180.507 Azoxystrobin; tolerances for residues.
- §180.509 Mefenpyr-diethyl; tolerance for residues.
- §180.510 Pyriproxyfen; tolerances for residues.
- §180.511 Buprofezin; tolerances for residues.
- §180.512 [Reserved]
- §180.513 Chlorfenapyr; tolerances for residues.
- §180.514 Cloransulam-methyl; tolerances for residues.
- §180.515 Carfentrazone-ethyl; tolerances for residues.
- §180.516 Fludioxonil; tolerances for residues.
- §180.517 Fipronil; tolerances for residues.
- §180.518 Pyrimethanil; tolerances for residues.
- §180.519 Bromide ion and residual bromine; tolerances for residues.
- §180.521 Fumigants for grain-mill machinery; tolerances for residues.
- §180.522 Fumigants for processed grains used in production of fermented malt beverage; tolerances for residues.
- §180.523 Metaldehyde; tolerances for residues.
- §180.525 Resmethrin; tolerances for residues.
- §180.526 Synthetic isoparaffinic petroleum hydrocarbons; tolerances for residues.
- §180.527 Flufenacet, N-(4-fluorophenyl)-N-(1-methylethyl)-2-[[5-(trifluoromethyl)-1, 3, 4-thiadiazol-2-yl] oxy]acetamide and its metabolites containing the 4-fluoro-N-methylethyl benzenamine tolerances for residues.
- §180.532 Cyprodinil; tolerances for residues.
- §180.533 Esfenvalerate; tolerances for residues.
- §180.535 Fluroxypyr 1-methylheptyl ester; tolerances for residues.
- §180.537 Isoxaflutole; tolerances for residues.
- §180.539 d-Limonene; tolerances for residues.
- §180.540 Fenitrothion; tolerances for residues.
- §180.543 Diclosulam; tolerances for residues.
- §180.544 Methoxyfenozide; tolerances for residues.
- §180.545 Prallethrin; tolerances for residues.
- §180.546 Mefenoxam; tolerances for residues.
- §180.547 Prohexadione calcium; tolerances for residues.
- §180.549 Diflufenzopyr; tolerances for residues.
- §180.551 Fluthiacet-methyl; tolerances for residues.
- §180.552 Sulfosulfuron; tolerances for residues.
- §180.553 Fenhexamid; tolerances for residues.
- §180.554 Kresoxim-methyl; tolerances for residues.
- §180.555 Trifloxystrobin; tolerances for residues.
- §180.556 Pymetrozine; tolerances for residues.
- §180.557 Tetraconazole; tolerances for residues.
- §180.559 Clodinafop-propargyl; tolerances for residues.
- §180.560 Cloquintocet-mexyl; tolerances for residues.



- §180.561 Acibenzolar-S-methyl; tolerances for residues.
- §180.562 Flucarbazone-sodium; tolerances for residues.
- §180.563 Ethametsulfuron-methyl; tolerances for residues.
- §180.564 Indoxacarb; tolerances for residues.
- §180.565 Thiamethoxam; tolerances for residues.
- §180.566 Fenpyroximate; tolerances for residues.
- §180.567 Zoxamide; tolerances for residues.
- §180.568 Flumioxazin; tolerances for residues.
- §180.569 Forchlorfenuron; tolerances for residues.
- §180.570 Isoxadifen-ethyl; tolerances for residues.
- §180.571 Mesotrione; tolerances for residues.
- §180.572 Bifenazate; tolerance for residues.
- §180.573 Tepraloxydim; tolerances for residues.
- §180.574 Fluazinam; tolerances for residues.
- §180.575 Sulfuryl fluoride; tolerances for residues.
- §180.576 Cyhalofop-butyl; tolerances for residues.
- §180.577 Bispyribac-sodium; tolerances for residues.
- §180.578 Acetamiprid; tolerances for residues.
- §180.579 Fenamidone; tolerances for residues.
- §180.580 Iodosulfuron-Methyl-Sodium; tolerances for residues.
- §180.581 Iprovalicarb; tolerances for residues.
- §180.582 Pyraclostrobin; tolerances for residues.
- §180.583 Triticonazole; tolerances for residues.
- §180.584 Tolyfluanid; tolerances for residues.
- §180.585 Pyraflufen-ethyl; tolerances for residues.
- §180.586 Clothianidin; tolerances for residues.
- §180.587 Famoxadone; tolerance for residues.
- §180.588 Quinoxifen; tolerances for residues.
- §180.589 Boscalid; tolerances for residues.
- §180.590 2, 6-Diisopropyl-naphthalene (2, 6-DIPN); tolerances for residues.
- §180.591 Trifloxysulfuron; tolerances for residues.
- §180.592 Butafenacil; tolerances for residues.
- §180.593 Etoxazole; tolerances for residues.
- §180.594 Thiacloprid; tolerances for residues.
- §180.595 Flufenpyr-ethyl; tolerances for residues.
- §180.596 Fosthiazate; tolerances for residues.
- §180.597 Mesosulfuron-methyl; tolerances for residues.
- §180.598 Novaluron; tolerances for residues.
- §180.599 Acequinocyl; tolerances for residues.
- §180.600 Propoxycarbazon; tolerances for residues.
- §180.601 Cyazofamid; tolerances for residues.
- §180.602 Spiroxamine; tolerances for residues.
- §180.603 Dinotefuran; tolerances for residues.
- §180.604 Mepanipyrim; tolerances for residues.
- §180.605 Penoxsulam; tolerances for residues.
- §180.607 Spiromesifen; tolerances for residues.
- §180.608 Spirodiclofen; tolerances for residues.
- §180.609 Fluoxastrobin; tolerances for residues.
- §180.610 Aminopyralid; tolerances for residues.
- §180.611 Pinoxaden; tolerances for residues.
- §180.612 Topramezone; tolerances for residues.
- §180.613 Flonicamid; tolerances for residues.
- §180.614 Kasugamycin; tolerances for residues.
- §180.615 Amicarbazone; tolerances for residues.
- §180.616 Fenpropimorph; tolerances for residues.
- §180.617 Metconazole; tolerances for residues.
- §180.618 Benthiavalicarb-isopropyl; tolerance for residues.
- §180.619 Epoxiconazole; tolerances for residues.
- §180.620 Etofenprox; tolerances for residues.
- §180.621 Dithianon; tolerances for residues.
- §180.622 Ethaboxam; tolerances for residues.
- §180.623 Flufenoxuron; tolerances for residues.

- §180.624 Metrafenone; tolerances for residues.
- §180.625 Orthosulfamuron; tolerances for residues.
- §180.626 Prothioconazole; tolerances for residues.
- §180.627 Fluopicolide; tolerances for residues.
- §180.628 Chlorantraniliprole; tolerances for residues.
- §180.629 Flutriafol; tolerances for residues.
- §180.631 Pyrasulfotole; tolerances for residues.
- §180.632 Fenazaquin; Tolerances for residues.
- §180.633 Florasulam; tolerances for residues.
- §180.634 Tembotrione; tolerances for residues.
- §180.635 Spinetoram; tolerances for residues.
- §180.636 1,3-dichloropropene; tolerances for residues.
- §180.637 Mandipropamid; tolerances for residues.
- §180.638 Pyroxsulam; tolerances for residues.
- §180.639 Flubendiamide; tolerances for residues.
- §180.640 Pyridalyl; tolerances for residues.
- §180.641 Spirotetramat; tolerances for residues.
- §180.643 Uniconazole; tolerances for residues.
- §180.644 Cyprosulfamide; tolerances for residues.
- §180.645 Thiencarbazone-methyl; tolerances for residues.
- §180.646 Ipconazole; tolerances for residues.
- §180.647 d-Phenothrin; tolerances for residues.
- §180.648 Meptyldinocap; tolerances for residues.
- §180.649 Saflufenacil; tolerances for residues.
- §180.650 Isoxaben; tolerances for residues.
- §180.651 Imazosulfuron; tolerances for residues.
- §180.652 Ethiprole; tolerances for residues.
- §180.653 Indaziflam; tolerances for residues.
- §180.654 Isopyrazam; tolerances for residues.
- §180.655 Flazasulfuron; tolerances for residues.
- §180.656 Amisulbrom; tolerances for residues.
- §180.657 Metaflumizone; tolerances for residues.
- §180.658 Penthiopyrad; tolerances for residues.
- §180.659 Pyroxasulfone; tolerances for residues.
- §180.660 Pyriofenone; tolerances for residues.
- §180.661 Fluopyram; tolerances for residues.
- §180.662 Trinexapac-ethyl; tolerances for residues.
- §180.663 Ametoctradin; tolerances for residues.
- §180.664 Penflufen; tolerances for residues.
- §180.665 Sedaxane; tolerances for residues.
- §180.666 Fluxapyroxad; tolerances for residues.
- §180.667 Cyflufenamid, tolerance for residues.
- §180.668 Sulfoxaflor; tolerances for residues.
- §180.669 Picoxystrobin; tolerances for residues.
- §180.671 Fenpyrazamine; tolerances for residues.
- §180.672 Cyantraniliprole; tolerances for residues.
- §180.673 Triforine; tolerances for residues.
- §180.674 Proquinazid; tolerances for residues.
- §180.675 Tolfenpyrad; tolerances for residues.
- §180.676 Fenpropidin; tolerances for residues.
- §180.677 Cyflumetofen; tolerances for residues.
- §180.678 Tricyclazole; tolerances for residues.
- §180.679 Flupyradifurone; tolerances for residues.
- §180.680 Fluensulfone; tolerances for residues.
- §180.681 Isofetamid; tolerances for residues.
- §180.682 Bicyclopyrone; tolerances for residues.
- §180.684 Benalaxyl-M; tolerances for residues.
- §180.685 Oxathiapiprolin; tolerances for residues.
- §180.686 Benzovindiflupyr; tolerances for residues.
- §180.687 Teflubenzuron; tolerances for residues.
- §180.688 Diethofencarb; tolerance for residue.
- §180.689 Aminocyclopyrachlor; tolerances for residues.

- §180.690 Mandestrobin; tolerances for residues.
- §180.691 Halauxifen-methyl; tolerances for residues.
- §180.692 Tioxazafen; tolerances for residues.
- §180.693 Benzobicyclon; tolerances for residues.
- §180.694 Cyclaniliprole; tolerances for residues.
- §180.696 Tolpyralate; tolerances for residues.
- §180.697 Flutianil; tolerances for residues.
- §180.698 Chloromequat chloride; tolerances for residues.
- §180.699 Pydiflumetofen; tolerances for residues.
- §180.700 Afidopyropen; Tolerances for residues.
- §180.701 Pyrifluquinazon; tolerances for residues.
- §180.702 Bixafen; tolerances for residues.
- §180.703 6-benzyladenine; tolerances for residues.
- §180.704 Sulfometuron-methyl; tolerances for residues.
- §180.705 Mefentrifluconazole; tolerances for residues.
- §180.706 Valifenalate; tolerances for residues.

#### Subpart D—Exemptions From Tolerances

- §180.900 Exemptions from the requirement of a tolerance.
- §180.905 Pesticide chemicals; exemptions from the requirement of a tolerance.
- §180.910 Inert ingredients used pre- and post-harvest; exemptions from the requirement of a tolerance.
- §180.920 Inert ingredients used pre-harvest; exemptions from the requirement of a tolerance.
- §180.930 Inert ingredients applied to animals; exemptions from the requirement of a tolerance.
- §180.940 Tolerance exemptions for active and inert ingredients for use in antimicrobial formulations (Food-contact surface sanitizing solutions).
- §180.950 Tolerance exemptions for minimal risk active and inert ingredients.
- §180.960 Polymers; exemptions from the requirement of a tolerance.
- §180.1011 Viable spores of the microorganism *Bacillus thuringiensis* Berliner; exemption from the requirement of a tolerance.
- §180.1016 Ethylene; exemption from the requirement of a tolerance.
- §180.1017 Diatomaceous earth; exemption from the requirement of a tolerance.
- §180.1019 Sulfuric acid; exemption from the requirement of a tolerance.
- §180.1020 Sodium chlorate; exemption from the requirement of a tolerance.
- §180.1021 Copper; exemption from the requirement of a tolerance.
- §180.1022 Iodine-detergent complex; exemption from the requirement of a tolerance.
- §180.1023 Propanoic acid; exemptions from the requirement of a tolerance.
- §180.1025 Xylene; exemption from the requirement of a tolerance.
- §180.1027 Nuclear polyhedrosis virus of *Heliothis zea*; exemption from the requirement of a tolerance.
- §180.1033 Methoprene; exemption from the requirement of a tolerance.
- §180.1037 Polybutenes; exemption from the requirement of a tolerance.
- §180.1040 Ethylene glycol; exemption from the requirement of a tolerance.
- §180.1041 *Nosema locustae*; exemption from the requirement of a tolerance.
- §180.1043 Gossypure; exemption from the requirement of a tolerance.
- §180.1049 Carbon dioxide; exemption from the requirement of a tolerance.
- §180.1050 Nitrogen; exemption from the requirements of a tolerance.
- §180.1052 2,2,5-trimethyl-3-dichloroacetyl-1,3-oxazolidine; exemption from the requirement of a tolerance.
- §180.1054 Calcium hypochlorite; exemptions from the requirement of a tolerance.
- §180.1056 Boiled linseed oil; exemption from requirement of tolerance.
- §180.1057 *Phytophthora palmivora*; exemption from requirement of tolerance.
- §180.1058 Sodium diacetate; exemption from the requirement of a tolerance.
- §180.1064 Tomato pinworm insect pheromone; exemption from the requirement of a tolerance.
- §180.1065 2-Amino-4,5-dihydro-6-methyl-4-propyl-s-triazolo(1,5- $\alpha$ )pyrimidin-5-one; exemption from the requirement of a tolerance.
- §180.1067 Methyl eugenol and malathion combination; exemption from the requirement of a tolerance.
- §180.1068 C12-C18 fatty acid potassium salts; exemption from the requirement of a tolerance.
- §180.1069 (Z)-11-Hexadecenal; exemption from the requirement of a tolerance.
- §180.1070 Sodium chlorite; exemption from the requirement of a tolerance.
- §180.1071 Peanuts, Tree Nuts, Milk, Soybeans, Eggs, Fish, Crustacea, and Wheat; exemption from the requirement of a tolerance.
- §180.1072 Poly-D-glucosamine (chitosan); exemption from the requirement of a tolerance.
- §180.1073 Isomate-M; exemption from the requirement of a tolerance.
- §180.1074 F.D.&C. Blue No. 1; exemption from the requirement of a tolerance.
- §180.1075 *Colletotrichum gloeosporioides* f. sp. *aeschynomene*; exemption from the requirement of a tolerance.



- §180.1076 Viable spores of the microorganism *Bacillus popilliae*; exemption from the requirement of a tolerance.
- §180.1080 Plant volatiles and pheromone; exemptions from the requirement of a tolerance.
- §180.1083 Dimethyl sulfoxide; exemption from the requirement of a tolerance.
- §180.1084 Monocarbamide dihydrogen sulfate; exemption from the requirement of a tolerance.
- §180.1086 3,7,11-Trimethyl-1,6,10-dodecatriene-1-ol and 3,7,11-trimethyl-2,6,10-dodecatriene-3-ol; exemption from the requirement of a tolerance.
- §180.1087 Sesame stalks; exemption from the requirement of a tolerance.
- §180.1089 Poly-*N*-acetyl-*D*-glucosamine; exemption from the requirement of tolerance.
- §180.1090 Lactic acid; exemption from the requirement of a tolerance.
- §180.1091 Aluminum isopropoxide and aluminum secondary butoxide; exemption from the requirement of a tolerance.
- §180.1092 Menthol; exemption from the requirement of a tolerance.
- §180.1095 Chlorine gas; exemptions from the requirement of a tolerance.
- §180.1097 GBM-ROPE; exemption from the requirement of a tolerance.
- §180.1098 Gibberellins [Gibberellic Acids (GA3 and GA4 + GA7), and Sodium or Potassium Gibberellate]; exemption from the requirement of a tolerance.
- §180.1100 *Gliocladium virens* isolate GL-21; exemption from the requirement of a tolerance.
- §180.1101 Parasitic (parasitoid) and predatory insects; exemption from the requirement of a tolerance.
- §180.1102 *Trichoderma harzianum* KRL-AG2 (ATCC #20847) strain T-22; exemption from requirement of a tolerance.
- §180.1103 Isomate-C; exemption from the requirement of a tolerance.
- §180.1110 3-Carbamyl-2,4,5-trichlorobenzoic acid; exemption from the requirement of a tolerance.
- §180.1111 *Bacillus subtilis* GB03; exemption from the requirement of a tolerance.
- §180.1114 *Pseudomonas fluorescens* A506, *Pseudomonas fluorescens* 1629RS, and *Pseudomonas syringae* 742RS; exemptions from the requirement of a tolerance.
- §180.1118 *Spodoptera exigua* nuclear polyhedrosis virus; exemption from the requirement of a tolerance.
- §180.1119 Azadirachtin; exemption from the requirement of a tolerance.
- §180.1120 *Streptomyces* sp. strain K61; exemption from the requirement of a tolerance.
- §180.1121 Boric acid and its salts, borax (sodium borate decahydrate), disodium octaborate tetrahydrate, boric oxide (boric anhydride), sodium borate and sodium metaborate; exemptions from the requirement of a tolerance.
- §180.1122 Inert ingredients of semiochemical dispensers; exemptions from the requirement of a tolerance.
- §180.1124 Arthropod pheromones; exemption from the requirement of a tolerance.
- §180.1126 Codlure, (E,E)-8,10-Dodecadien-1-ol; exemption from the requirement of a tolerance.
- §180.1127 Biochemical pesticide plant floral volatile attractant compounds: cinnamaldehyde, cinnamyl alcohol, 4-methoxy cinnamaldehyde, 3-phenyl propanol, 4-methoxy phenethyl alcohol, indole, and 1,2,4-trimethoxybenzene; exemptions from the requirement of a tolerance.
- §180.1128 *Bacillus amyloliquefaciens* MBI600; exemption from the requirement of a tolerance.
- §180.1130 N-(n-octyl)-2-pyrrolidone and N-(n-dodecyl)-2-pyrrolidone; exemptions from the requirement of a tolerance.
- §180.1135 *Pasteuria penetrans*; exemption from the requirement of a tolerance.
- §180.1139 Sodium 5-nitroguaiacolate; exemption from the requirement of a tolerance.
- §180.1140 Sodium *o*-nitrophenolate; exemption from the requirement of a tolerance.
- §180.1141 Sodium *p*-nitrophenolate; exemption from the requirement of a tolerance.
- §180.1142 1,4-Dimethylnaphthalene; exemption from the requirement of a tolerance.
- §180.1143 Methyl anthranilate; exemption from the requirement of a tolerance.
- §180.1145 *Pseudomonas syringae*; exemption from the requirement of a tolerance.
- §180.1146 *Beauveria bassiana* Strain GHA; exemption from the requirement of a tolerance.
- §180.1148 Occlusion Bodies of the Granulosis Virus of *Cydia pomonella*; tolerance exemption.
- §180.1149 Inclusion bodies of the multi-nuclear polyhedrosis virus of *Anagrapha falcifera*; exemption from the requirement of a tolerance.
- §180.1150 6-Benzyladenine; exemption from the requirement of a tolerance.
- §180.1153 Lepidopteran pheromones; exemption from the requirement of a tolerance.
- §180.1156 Cinnamaldehyde; exemption from the requirement of a tolerance.
- §180.1157 Cytokinins; exemption from the requirement of a tolerance.
- §180.1158 Auxins; exemption from the requirement of a tolerance.
- §180.1159 Pelargonic acid; exemption from the requirement of tolerances.
- §180.1160 Jojoba oil; exemption from the requirement of a tolerance.
- §180.1161 Clarified hydrophobic extract of neem oil; exemption from the requirement of a tolerance.
- §180.1162 Acrylate polymers and copolymers; exemption from the requirement of a tolerance.
- §180.1163 Killed *Myrothecium verrucaria*; exemption from the requirement of a tolerance.
- §180.1165 Capsaicin; exemption from the requirement of a tolerance.
- §180.1167 Allyl isothiocyanate as a component of food grade oil of mustard; exemption from the requirement of a tolerance.
- §180.1176 Sodium bicarbonate; exemption from the requirement of a tolerance.
- §180.1177 Potassium bicarbonate; exemption from the requirement of a tolerance.
- §180.1178 Formic acid; exemption from the requirement of a tolerance.

- §180.1179 Plant extract derived from *Opuntia lindheimeri*, *Quercus falcata*, *Rhus aromatica*, and *Rhizophoria mangle*; exemption from the requirement of a tolerance.
- §180.1180 Kaolin; exemption from the requirement of a tolerance.
- §180.1181 *Bacillus cereus* strain BPO1; exemption from the requirement of a tolerance.
- §180.1187 L-glutamic acid; exemption from the requirement of a tolerance.
- §180.1188 Gamma aminobutyric acid; exemption from the requirement of a tolerance.
- §180.1189 Methyl salicylate; exemption from the requirement of a tolerance.
- §180.1191 Ferric phosphate; exemption from the requirement of a tolerance.
- §180.1193 Potassium dihydrogen phosphate; exemption from the requirement of a tolerance.
- §180.1195 Titanium dioxide.
- §180.1196 Peroxyacetic acid; exemption from the requirement of a tolerance.
- §180.1197 Hydrogen peroxide; exemption from the requirement of a tolerance.
- §180.1198 *Gliocladium catenulatum* strain J1446; exemption from the requirement of a tolerance.
- §180.1199 Lysophosphatidylethanolamine (LPE); exemption from the requirement of a tolerance.
- §180.1202 *Bacillus sphaericus*; exemption from the requirement of a tolerance.
- §180.1204 Harpin protein; exemption from the requirement of a tolerance.
- §180.1205 *Beauveria bassiana* ATCC #74040; exemption from the requirements of a tolerance.
- §180.1206 *Aspergillus flavus* AF36; exemption from the requirement of a tolerance.
- §180.1207 N-acyl sarcosines and sodium N-acyl sarcosinates; exemption from the requirement of a tolerance.
- §180.1209 *Bacillus subtilis* strain QST 713 and strain QST 713 variant soil; exemption from the requirement of a tolerance.
- §180.1210 Phosphorous acid; exemption from the requirement of a tolerance.
- §180.1212 *Pseudomonas chlororaphis* Strain 63-28; exemption from the requirement of a tolerance.
- §180.1213 *Coniothyrium minitans* strain CON/M/91-08; exemption from the requirement of a tolerance.
- §180.1218 Indian Meal Moth Granulosis Virus; exemption from the requirement of a tolerance.
- §180.1219 Foramsulfuron; exemption from the requirement of a tolerance.
- §180.1220 1-Methylcyclopropene; exemption from the requirement of a tolerance.
- §180.1222 Sucrose octanoate esters; exemption from the requirement of a tolerance.
- §180.1223 Imazamox; exemption from the requirement of a tolerance.
- §180.1224 *Bacillus pumilus* GB34; exemption from the requirement of a tolerance.
- §180.1225 Decanoic acid; exemption from the requirement of a tolerance.
- §180.1226 *Bacillus pumilus* strain QST2808; temporary exemption from the requirement of a tolerance.
- §180.1228 Diallyl sulfides; exemption from the requirement of a tolerance.
- §180.1230 Ferrous sulfate; exemption from the requirement of a tolerance.
- §180.1231 Lime; exemption from the requirement of a tolerance.
- §180.1232 Lime-sulfur; exemption from the requirement of a tolerance.
- §180.1233 Potassium sorbate; exemption from the requirement of a tolerance.
- §180.1234 Sodium carbonate; exemption from the requirement of a tolerance.
- §180.1235 Sodium hypochlorite; exemption from the requirement of a tolerance.
- §180.1236 Sulfur; exemption from the requirement of a tolerance.
- §180.1237 Sodium metasilicate; exemption from the requirement of a tolerance.
- §180.1240 Thymol; exemption from the requirement of a tolerance.
- §180.1243 *Bacillus subtilis* var. *amyloliquefaciens* strain FZB24; exemption from the requirement of a tolerance.
- §180.1244 Ammonium bicarbonate; exemption from the requirement of a tolerance.
- §180.1245 Rhamnolipid biosurfactant; exemption from the requirement of a tolerance.
- §180.1246 Yeast Extract Hydrolysate from *Saccharomyces cerevisiae*; exemption from the requirement of a tolerance.
- §180.1248 Exemption of citronellol from the requirement of a tolerance.
- §180.1250 C8, C10, and C12 fatty acid monoesters of glycerol and propylene glycol; exemption from the requirement of a tolerance.
- §180.1251 Geraniol; exemption from the requirement of a tolerance.
- §180.1253 *Streptomyces lydicus* WYEC 108; exemption from the requirement of a tolerance.
- §180.1254 *Aspergillus flavus* NRRL 21882; exemption from the requirement of a tolerance.
- §180.1255 *Bacillus pumilus* strain QST 2808; exemption from the requirement of a tolerance.
- §180.1257 *Paecilomyces lilacinus* strain 251; exemption from the requirement of a tolerance.
- §180.1258 Acetic acid; exemption from the requirement of a tolerance.
- §180.1259 *Reynoutria sachalinensis* extract; exemption from the requirement of a tolerance.
- §180.1260 *Muscodor albus* QST 20799 and the volatiles produced on rehydration; exemption from the requirement of a tolerance.
- §180.1261 *Xanthomonas campestris* pv. *vesicatoria* and *Pseudomonas syringae* pv. *tomato* specific Bacteriophages.
- §180.1262 Sorbitol octanoate; exemption from the requirement of a tolerance.
- §180.1263 Tetrahydrofurfuryl alcohol; exemption from the requirement of a tolerance.
- §180.1267 *Pantoea agglomerans* strain C9-1; exemption from the requirement of a tolerance.
- §180.1268 Potassium silicate; exemption from the requirement of a tolerance.

- §180.1269 *Bacillus mycoides* isolate J; exemption from the requirement of a tolerance.
- §180.1270 Isophorone; exemption from the requirement of a tolerance.
- §180.1271 Eucalyptus oil; exemption from the requirement of a tolerance.
- §180.1272 *Pantoea agglomerans* strain E325; exemption from the requirement of a tolerance.
- §180.1273 *Beauveria bassiana* HF23; exemption from the requirement of a tolerance.
- §180.1274 Tris (2-ethylhexyl) phosphate; exemption from the requirement of a tolerance.
- §180.1275 *Pythium oligandrum* DV 74; exemption from the requirement of a tolerance.
- §180.1276 Tobacco mild green mosaic tobamovirus strain U2; exemption from the requirement of a tolerance.
- §180.1277 Dibasic esters; exemption from the requirement of a tolerance.
- §180.1278 *Quillaja saponaria* extract (saponins); exemption from the requirement of a tolerance.
- §180.1280 Poly(hexamethylenebiguanide) hydrochloride (PHMB); exemption from the requirement of a tolerance.
- §180.1281 S-Abcsicic Acid, (S)-5-(1-hydroxy-2,6,6-trimethyl-4-oxo-1-cyclohex-2-enyl)-3-methyl-penta-(2Z,4E)-dienoic Acid; exemption from the requirement of a tolerance.
- §180.1282 *Bacillus firmus* I-1582; exemption from the requirement of a tolerance.
- §180.1283 (Z)-7,8-epoxy-2-methyloctadecane (Disparlure); exemption from the requirement of a tolerance.
- §180.1284 Ammonium salts of higher fatty acids (C8-C18 saturated; C8-C12 unsaturated); exemption from the requirement of a tolerance.
- §180.1285 Polyoxin D zinc salt; exemption from the requirement of a tolerance.
- §180.1287 Extract of *Chenopodium ambrosioides* near *ambrosioides*; exemption from the requirement of a tolerance.
- §180.1288 Tristyrylphenol ethoxylates; exemption from the requirement of a tolerance.
- §180.1289 *Candida oleophila* Strain O; exemption from the requirement of a tolerance.
- §180.1290 *Pasteuria usgae*; exemption from the requirement of a tolerance.
- §180.1291 Cold pressed neem oil; exemption from the requirement of a tolerance.
- §180.1292 *Ulocladium oudemansii* (U3 Strain); exemption from the requirement of a tolerance.
- §180.1293 *Trichoderma gamsii* strain ICC 080; exemption from the requirement of a tolerance.
- §180.1294 *Trichoderma asperellum* strain ICC 012; exemption from the requirement of a tolerance.
- §180.1295 Laminarin; exemption from the requirement of a tolerance.
- §180.1296 Terpene Constituents  $\alpha$ -terpinene, d-limonene and p-cymene, of the Extract of *Chenopodium ambrosioides* near *ambrosioides* as Synthetically Manufactured; exemption from the requirement of a tolerance.
- §180.1297 Homobrassinolide; exemption from the requirement of a tolerance.
- §180.1298 *Trichoderma hamatum* isolate 382; exemption from the requirement of a tolerance.
- §180.1299 Prohydrojasmon; exemption from the requirement of a tolerance.
- §180.1300 Potassium hypochlorite; exemption from the requirement of a tolerance.
- §180.1301 *Escherichia coli* O157:H7 specific bacteriophages; temporary exemption from the requirement of a tolerance.
- §180.1302 Sodium Ferric Ethylenediaminetetraacetate (EDTA); exemption from the requirement of a tolerance.
- §180.1303 *Metarhizium anisopliae* strain F52; exemption from the requirement of a tolerance.
- §180.1304 *Pseudomonas fluorescens* strain CL145A; exemption from the requirement of a tolerance.
- §180.1305 *Chromobacterium subtsugae* strain PRAA4-1; exemption from the requirement of a tolerance.
- §180.1306 *Isaria fumosorosea* (formerly *Paecilomyces fumosoroseus*) Apopka strain 97; exemption from the requirement of a tolerance.
- §180.1307 Bacteriophage of *Clavibacter michiganensis* subspecies *michiganensis*; exemption from the requirement of a tolerance.
- §180.1308 *Bacillus amyloliquefaciens* strain D747; exemption from the requirement of a tolerance.
- §180.1309 *Bacillus subtilis* strain CX-9060; exemption from the requirement of a tolerance.
- §180.1310 *Trichoderma virens* strain G-41; exemption from the requirement of a tolerance.
- §180.1311 *Pasteuria nishizawae*—Pn1; exemption from the requirement of a tolerance.
- §180.1312 *Aureobasidium pullulans* strains DSM 14940 and DSM 14941; exemption from the requirement of a tolerance.
- §180.1313 *Bacillus pumilus* strain GHA 180; exemption from the requirement of a tolerance.
- §180.1314 Killed, nonviable *Streptomyces acidiscabies* strain RL-110; exemption from the requirement of a tolerance.
- §180.1315 Natamycin; exemption from the requirement of a tolerance.
- §180.1316 *Pasteuria* spp. (*Rotylenchulus reniformis* nematode)—Pr3; exemption from the requirement of a tolerance.
- §180.1317 Pesticide chemicals; exemption from the requirements of a tolerance.
- §180.1318 3-decen-2-one; exemption from the requirement of a tolerance.
- §180.1319 Banda de *Lupinus albus* doce (BLAD); exemption from the requirement of a tolerance.
- §180.1320 Methyl jasmonate; exemption from the requirement of a tolerance.
- §180.1321 Complex Polymeric Polyhydroxy Acids; exemption from the requirement of a tolerance.
- §180.1322 *Bacillus pumilus* strain BU F-33; exemption from the requirement of a tolerance.
- §180.1323 Ethyl-2E,4Z-decadienoate (Pear Ester); exemption from the requirement of a tolerance.
- §180.1324 GS-omega/kappa-Hxtx-Hv1a; exemption from the requirement of a tolerance.
- §180.1325 Heat-killed *Burkholderia* spp. strain A396 cells and spent fermentation media exemption from the requirement of a tolerance.
- §180.1326 *Pseudomonas fluorescens* strain D7; exemption from the requirement of a tolerance.

- §180.1327 Tetraacetythylenediamine (TAED) and its metabolite Diacetythylenediamine (DAED); exemption from the requirement of a tolerance.
- §180.1328 *Beauveria bassiana* strain ANT-03; exemption from the requirement of a tolerance.
- §180.1329 *Bacillus subtilis* strain IAB/BS03, exemption from the requirement of a tolerance.
- §180.1330 1-Octanol; exemption from the requirement of a tolerance.
- §180.1331 *Trichoderma asperelloides* strain JM41R; exemption from the requirement of a tolerance.
- §180.1332 Lavandulyl senecioate; exemption from the requirement of a tolerance.
- §180.1333 Potassium Salts of Hops Beta acids; exemption from the requirement of a tolerance.
- §180.1334 Choline Chloride; Exemption from the Requirement of a Tolerance.
- §180.1335 *Isaria fumosorosea* strain FE 9901; exemption from the requirement of a tolerance.
- §180.1336 *Bacillus amyloliquefaciens* strain PTA-4838; exemption from the requirement of a tolerance.
- §180.1337 Citrus tristeza virus expressing spinach defensin proteins 2, 7, and 8; exemption from the requirement of a tolerance.
- §180.1338 *Aspergillus flavus* strains TC16F, TC35C, TC38B, and TC46G; temporary exemptions from the requirement of a tolerance.
- §180.1339 *Spodoptera frugiperda* multiple nucleopolyhedrovirus strain 3AP2; exemption from the requirement of a tolerance.
- §180.1340 *Muscodor albus* strain SA-13 and the volatiles produced on rehydration; exemption from the requirement of a tolerance.
- §180.1341 *Pseudomonas chlororaphis* strain AFS009; exemption from the requirement of a tolerance.
- §180.1344 Cyclaniliprole; exemption from the requirement of a tolerance.
- §180.1345 1-Triacontanol; exemption from the requirement of a tolerance.
- §180.1346 1,3-Dibromo-5,5-Dimethylhydantoin; exemption from the requirement of a tolerance.
- §180.1347 *Bacillus amyloliquefaciens* strain F727; exemption from the requirement of a tolerance.
- §180.1348 *Bacillus subtilis* strain BU1814; exemption from the requirement of a tolerance.
- §180.1350 *Bacillus licheniformis* strain FMCH001; exemption from the requirement of a tolerance.
- §180.1351 *Bacillus subtilis* strain FMCH002; exemption from the requirement of a tolerance.
- §180.1352 Methyl-alpha-D-mannopyranoside (Alpha methyl mannoside); exemption from the requirement of a tolerance.
- §180.1353 Lipochitooligosaccharide (LCO) SP104; exemption from the requirement of a tolerance.
- §180.1354 Flutianil; exemption from the requirement of a tolerance.
- §180.1355 *Duddingtonia flagrans* strain IAH 1297; exemption from the requirement of a tolerance.
- §180.1356 Extract of *Swinglea glutinosa*; exemption from the requirement of a tolerance.
- §180.1357 Cerevisane (cell walls of *Saccharomyces cerevisiae* strain LAS117); exemption from the requirement of a tolerance.
- §180.1358 *Metschnikowia fructicola* strain NRRL Y-27328; exemption from the requirement of a tolerance.
- §180.1359 Bacteriophage active against *Erwinia amylovora*; exemption from the requirement of a tolerance.
- §180.1360 Bacteriophage active against *Xanthomonas citri* subsp. *citri*; exemption from the requirement of a tolerance.
- §180.1361 *Pepino mosaic virus*, strain CH2, isolate 1906; exemption from the requirement of a tolerance.
- §180.1362 *Beauveria bassiana* strain PPRI 5339; exemption from the requirement of a tolerance.
- §180.1363 *Bacillus amyloliquefaciens* strain ENV503; exemption from the requirement of a tolerance.
- §180.1364 Chlorate; exemption from the requirement of a tolerance.
- §180.1365 Bacteriophage active against *Xylella fastidiosa*; exemption from the requirement of a tolerance.
- §180.1366 24-Epibrassinolide; exemption from the requirement of a tolerance.
- §180.1367 *Bacillus amyloliquefaciens* subspecies *plantarum* strain FZB42; exemption from the requirement of a tolerance.
- §180.1368 *Clonostachys rosea* strain CR-7; exemption from the requirement of a tolerance.
- §180.1369 *Autographa californica* multiple nucleopolyhedrovirus strain FV#11; exemption from the requirement of a tolerance.
- §180.1370 Lipochitoolgiosaccharide (LCO) MOR116; exemption from the requirement of a tolerance.
- §180.1371 Florpyrauxifen-benzyl; exemption from the requirement of a tolerance.
- §180.1372 Sodium lauryl sulfate; exemption from the requirement of a tolerance.

### Subpart E—Pesticide Chemicals Not Requiring a Tolerance or an Exemption From a Tolerance

- §180.2000 Scope.
- §180.2003 Definitions.
- §180.2010 [Reserved]
- §180.2020 Non-food determinations.

AUTHORITY: 21 U.S.C. 321(q), 346a and 371.

SOURCE: 36 FR 22540, Nov. 25, 1971, unless otherwise noted.

EDITORIAL NOTE: Nomenclature changes to part 180 appear at 62 FR 66023, Dec. 17, 1997.

### GLOSSARY



NOTE: The items in this glossary were compiled as an aid to the users of the Code of Federal Regulations. Inclusion or exclusion from this glossary has no legal significance.

APPLI = APPLICATION

C-I MET = CHOLINESTERASE-INHIBITING METABOLITES

CARB = CARBAMATES

EPWRR = EDIBLE PORTION WITH RIND REMOVED

EXC = EXCEPT

I (IN PPM COLUMN) = INTERIM TOLERANCE

INC = INCLUDING

K = CWHR = KERNEL PLUS COB WITH HUSK REMOVED

MBYP = MEAT BYPRODUCTS

MIN = MINIMUM

N (IN PPM COLUMN) = NEGLIGIBLE RESIDUES

NMT = NOT MORE THAN

NON-PER BAG/PKGD RAC = NON-PERISHABLE PACKAGED OR BAGGED RAW AGRICULTURAL COMMODITY

PPM = PART(S) PER MILLION

POST-H = POSTHARVEST APPLICATION

PRE-H = PREHARVEST APPLICATION

PRE-S = PRESLAUGHTER APPLICATION

PRODS = PRODUCTS rollert

T (IN PPM COLUMN) = TEMPORARY TOLERANCE

[41 FR 4537, Jan. 30, 1976]

[↑ Back to Top](#)

## Subpart A—Definitions and Interpretative Regulations

[↑ Back to Top](#)

### §180.1 Definitions and interpretations.

(a) *Administrator*, without qualification, means the Administrator of the Environmental Protection Agency.

(b) *Agency*, without qualification, means the Environmental Protection Agency.

(c) *FFDCA* means the Federal Food, Drug, and Cosmetic Act, as amended, 21 U.S.C. 301-392.

(d) Raw agricultural commodities include, among other things, fresh fruits, whether or not they have been washed and colored or otherwise treated in their unpeeled natural form; vegetables in their raw or natural state, whether or not they have been stripped of their outer leaves, waxed, prepared into fresh green salads, etc.; grains, nuts, eggs, raw milk, meats, and similar agricultural produce. It does not include foods that have been processed, fabricated, or manufactured by cooking, freezing, dehydrating, or milling.

(e) Where a raw agricultural commodity bearing a pesticide chemical residue that has been exempted from the requirement of a tolerance, or which is within a tolerance permitted under FFDCA section 408, is used in preparing a processed food, the processed food will not be considered unsafe within the meaning of FFDCA sections 402 and 408(a), despite the lack of a tolerance or exemption for the pesticide chemical residue in the processed food, if:

(1) The pesticide chemical has been used in (or on) the raw agricultural commodity in conformity with a tolerance under this section;

(2) The pesticide chemical residue has been removed to the extent possible in good manufacturing practice; and

(3) The concentration of the pesticide chemical residue in the processed food is not greater than the tolerance prescribed for the pesticide chemical residue on the raw agricultural commodity.



(f) For the purpose of computing fees as required by §180.33, each group of related crops listed in §180.34(e) and each crop group or subgroup listed in §180.41 is counted as a single raw agricultural commodity in a petition or request for tolerances or exemption from the requirement of a tolerance.

(g) Tolerances and exemptions established for pesticide chemicals in or on the general category of raw agricultural commodities listed in column A apply to the corresponding specific raw agricultural commodities listed in column B. However, a tolerance or exemption for a specific commodity in column B does not apply to the general category in column A.

A	B
Alfalfa	<i>Medicago sativa</i> L. Subsp. <i>sativa</i> , (alfalfa, lucerne); <i>Onobrychis viciifolia</i> Scop. (sainfoin, holy clover, esparcet); and <i>Lotus corniculatus</i> L. (trefoil); and varieties and/or hybrids of these.
Banana	Banana, plantain.
Bean	<i>Cicer arietinum</i> (chickpea, garbanzo bean); <i>Lupinus</i> spp. (including sweet lupine, white sweet lupine, white lupine, and grain lupine). <i>Phaseolus</i> spp. (including kidney bean, lima bean, mung bean, navy bean, pinto bean, snap bean, and waxbean; <i>Vicia faba</i> (broad bean, fava bean); <i>Vigna</i> spp. (including asparagus bean, blackeyed pea and cowpea).
Bean, dry	All beans above in dry form only.
Bean, succulent	All beans above in succulent form only.
Blackberry	<i>Rubus eubatus</i> (including bingleberry, black satin berry, boysenberry Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangerberry, ravenberry, rossberry, Shawnee blackberry, and varieties and/or hybrids of these).
Broccoli	Broccoli, Chinese broccoli (gai lon, white flowering broccoli).
Cabbage	Cabbage, Chinese cabbage (tight-heading varieties only).
Caneberry	<i>Rubus</i> spp. (including blackberry); <i>Rubus caesius</i> (youngberry); <i>Rubus loganbaccus</i> (loganberry); <i>Rubus idaeus</i> (red and black raspberry); cultivars, varieties, and/or hybrids of these.
Celery	Celery, Florence fennel (sweet anise, sweet fennel, finocchio) (fresh leaves and stalks only).
Cherry	Cherry, sweet, and cherry, tart.
Endive	Endive, escarole.
Fern, edible, fiddlehead	Fern, edible, fiddlehead including: Black lady fern, <i>Deparia japonica</i> (Thunb.) M. Kato; Bracken fern, <i>Pteridium aquilinum</i> (L.) Kuhn; Broad buckler fern, <i>Dryopteris dilatata</i> (Hoffm.) A. Gray; Cinnamon fern, <i>Osmundastrum cinnamomeum</i> (L.) C. Presl; Lady fern, <i>Athyrium filix-femina</i> (L.) Roth ex Mert.; Leather fern, <i>Acrostichum aureum</i> L.; Mother fern, <i>Diplazium proliferum</i> (Lam.) Thouars; Ostrich fern, <i>Matteuccia struthiopteris</i> (L.) Tod.; Vegetable fern, <i>Diplazium esculentum</i> (Retz.) Sw.; Zenmai fern, <i>Osmunda japonica</i> Thunb.
Fruit, citrus	Grapefruit, lemon, lime, orange, tangelo, tangerine, citrus citron, kumquat, and hybrids of these.
Garlic	Garlic, great headed; garlic, and serpent garlic.
Guava	Guava ( <i>Psidium guajava</i> L.); Guava, cattley ( <i>Psidium cattleianum</i> Sabine); Guava, Para ( <i>Psidium acutangulum</i> DC.); Guava, purple strawberry ( <i>Psidium cattleianum</i> Sabine var. <i>cattleianum</i> ); Guava, strawberry ( <i>Psidium cattleianum</i> Sabine var. <i>littorale</i> (Raddi) Fosberg); Guava, yellow strawberry ( <i>Psidium cattleianum</i> Sabine var. <i>cattleianum</i> forma <i>lucidum</i> O. Deg.)
Lettuce	Lettuce, head; and lettuce, leaf
Lettuce, head	Lettuce, head; crisphead varieties only
Lettuce, leaf	Lettuce, leaf; cos (romaine), butterhead varieties
Marjoram	<i>Origanum</i> spp. (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram).
Melon	Muskmelon, including hybrids and/or varieties of <i>Cucumis melo</i> (including true cantaloupe, cantaloupe, casaba, Santa Claus melon, crenshaw melon, honeydew melon, honey balls, Persian melon, golden pershaw melon, mango melon, pineapple melon, snake melon); and watermelon, including hybrids and/or varieties of ( <i>Citrullus</i> spp.).
Muskmelon	<i>Cucumis melo</i> (includes true cantaloupe, cantaloupe, casaba, Santa Claus melon, crenshaw melon, honeydew melon, honey balls, Persian melon, golden pershaw melon, mango melon, pineapple melon, snake melon, and other varieties and/or hybrids of these.)
Onion	Bulb onion; green onion; and garlic.
Onion, bulb	Bulb onion; garlic; great headed garlic; serpent garlic; Chinese onion; pearl onion; potato onion; and shallot, bulb.
Onion, green	Green onion; lady's leek; leek; wild leek; Beltsville bunching onion; fresh onion; tree onion, tops; Welsh onion; and shallot, fresh leaves.
Palm hearts	Palm hearts, various species, including: African fan palm, <i>Borassus aethiopum</i> Mart.; Cabbage palm, <i>Euterpe oleracea</i> Mart.; Cabbage palmetto, <i>Sabal palmetto</i> (Walter) Schult. & Schult. f.; Coconut, <i>Cocos nucifera</i> L.; Palmyra palm, <i>Borassus flabellifera</i> L.; Peach Palm, <i>Bactris gasipaes</i> Kunth; Royal palm, <i>Roystonea oleracea</i> (Jacq.) O.F. Cook; Salak palm, <i>Salacca zalacca</i> (Gaertn.) Voss; Saw palmetto, <i>Serenoa repens</i> (W. Bartram) Small; Wine palm, <i>Raphia</i> spp.
Peach	Peach, nectarine
Pea	<i>Cajanus cajan</i> (includes pigeon pea); <i>Cicer</i> spp. (includes chickpea and garbanzo bean); <i>Lens culinaris</i> (lentil); <i>Pisum</i> spp. (includes dwarf pea, garden pea, green pea, English pea, field pea, and edible pod pea). [Note: A variety of pesticide tolerances have been previously established for pea and/or bean. Chickpea/garbanzo bean is now classified in both the bean and the pea categories. For garbanzo bean/chickpea only, the highest established pea or bean tolerance will apply to pesticide residues found in this commodity.]
Pea, dry	All peas in dry form only.
Pea, succulent	All peas in succulent form only.
Pepper	All varieties of pepper including pimento and bell, hot, and sweet pepper.
Radish, oriental, roots	<i>Raphanus sativus</i> var. <i>longipinnatus</i> (roots and tops), including Chinese or Japanese radish (both white and red), winter radish, daikon, lobok, lo pak, and other cultivars and/or hybrids of these.
Radish, oriental, tops)	<i>Raphanus sativus</i> var. <i>longipinnatus</i> (roots and tops), including Chinese or Japanese radish (both white and red), winter radish, daikon, lobok, lo pak, and other cultivars and/or hybrids of these.
Rapeseed	<i>Brassica napus</i> , <i>B. campestris</i> , and <i>Crambe abyssinica</i> (oilseed-producing varieties only which include canola and crambe.)
Raspberry	<i>Rubus</i> spp. (including bababerry; black raspberry; blackcap; caneberry; framboise; frambueso; himbeere; keriberry; mayberry; red raspberry; thimbleberry; tulameen; yellow raspberry; and cultivars, varieties, and/or hybrids of these).
Sorghum	<i>Sorghum</i> spp. [sorghum, grain, sudangrass (seed crop), and hybrids of these grown for its seed].

grain, grain	
Sorghum, forage, stover	<i>Sorghum</i> spp. [sorghum, forage; sorghum, stover; sudangrass, and hybrids of these grown for forage and/or stover.
Squash	Pumpkin, summer squash, and winter squash.
Sugar apple	<i>Annona squamosa</i> L. and its hybrid atemoya ( <i>Annona cherimola</i> Mill X <i>A. squamosa</i> L.) Also includes true custard apple ( <i>Annona reticulata</i> L.).
Squash, summer	Fruits of the gourd ( <i>Cucurbitaceae</i> ) family that are consumed when immature, 100% of the fruit is edible either cooked or raw, once picked it cannot be stored, has a soft rind which is easily penetrated, and if seeds were harvested they would not germinate; e.g., <i>Cucurbita pepo</i> (i.e., crookneck squash, straightneck squash, scallop squash, and vegetable marrow); <i>Lagenaria</i> spp. (i.e., spaghetti squash, hyotan, cucuzza); <i>Luffa</i> spp. (i.e., hechima, Chinese okra); <i>Momordica</i> spp. (i.e., bitter melon, balsam pear, balsam apple, Chinese cucumber); <i>Sechium edule</i> (chayote); and other cultivars and/or hybrids of these.
Sweet potato	Sweet potato, yam.
Tangerine	Tangerine (mandarin or mandarin orange); clementine; Mediterranean mandarin; satsuma mandarin; tangelo; tangor; cultivars, varieties, and/or hybrids of these.
Tomato	Tomato, tomatillo.
Turnip tops or turnip greens	Broccoli raab (raab, raab salad), hanover salad, turnip tops (turnip greens).
Wheat	Wheat, triticale.

(h) Unless otherwise specified in this paragraph or in tolerance regulations prescribed in this part for specific pesticide chemicals, the raw agricultural commodity or processed food to be examined for pesticide residues, shall consist of the whole raw agricultural commodity or processed food.

(1) The raw agricultural commodity bananas, when examined for pesticide residues, shall not include any crown tissue or stalk.

(2) Shell shall be removed and discarded from nuts before examination for pesticide residues.

(3) Caps (hulls) shall be removed and discarded from strawberries before examination for pesticide residues.

(4) Stems shall be removed and discarded from melons before examination for pesticide residues.

(5) Roots, stems, and outer sheaths (or husks) shall be removed and discarded from garlic bulbs and dry bulb onions, and only the garlic cloves and onion bulbs shall be examined for pesticide residues.

(6) Where a tolerance is established on a root vegetable including tops and/or with tops, and the tops and the roots are marketed together, they shall be analyzed separately and neither the pesticide residue on the roots nor the pesticide residue on the tops shall exceed the tolerance level, except that in the case of carrots, parsnips, and rutabagas, the tops shall be removed and discarded before analyzing roots for pesticide residues.

(7) The crowns (leaves at the top of the fruit) shall be removed and discarded from pineapples before examination for pesticide residues.

(8) The term *lima beans* means the beans and the pod.

(9) The term *peanuts* means the peanut meat after removal of the hulls.

(10) For processed foods consisting primarily of one ingredient and sold in a form requiring further preparation prior to consumption (e.g., fruit juice concentrates, dehydrated vegetables, and powdered potatoes), the processed food to be examined for residues shall be the whole processed commodity after compensating for or reconstituting to the commodity's normal moisture content, unless a tolerance for the concentrated or dehydrated food form is included in this part. If there exists a tolerance for a specific pesticide on the processed food in its concentrated or dehydrated food form, for the purpose of determining whether the food is in compliance with that tolerance, the processed food to be examined for residues shall be the whole processed commodity on an "as is" basis.

(i) The term *pesticide chemical* shall have the meaning specified in FFDC section 201(q)(1), as amended, except as provided in §180.4.

(j) The term *negligible residue* means any amount of a pesticide chemical remaining in or on a raw agricultural commodity or group of raw agricultural commodities that would result in a daily intake regarded as toxicologically insignificant on the basis of scientific judgment of adequate safety data. Ordinarily this will add to the diet an amount which will be less than 1/2,000th of the amount that has been demonstrated to have no effect from feeding studies on the most sensitive animal species tested. Such toxicity studies shall usually include at least 90-day feeding studies in two species of mammals.

(k) The term *nonperishable raw agricultural commodity* means any raw agricultural commodity not subject to rapid decay or deterioration that would render it unfit for consumption. Examples are cocoa beans, coffee beans, field-dried beans, field-dried

peas, grains, and nuts. Not included are eggs, milk, meat, poultry, fresh fruits, and vegetables such as onions, parsnips, potatoes, and carrots.

(l) The term *tolerance with regional registration* means any tolerance which is established for pesticide residues resulting from the use of the pesticide pursuant to a regional registration. Such a tolerance is supported by residue data from specific growing regions for a raw agricultural commodity. Individual tolerances with regional registration are designated in separate subsections in 40 CFR 180.101 through 180.999, as appropriate. Additional residue data which are representative of the proposed use area are required to expand the geographical area of usage of a pesticide on a raw agricultural commodity having an established “tolerance with regional registration.” Persons seeking geographically broader registration of a crop having a “tolerance with regional registration” should contact the appropriate EPA product manager concerning additional residue data required to expand the use area.

(m) The term *pesticide chemical residue* shall have the meaning specified in FFDCA section 201(q)(2), as amended, except as provided in §180.4.

(n) The term *food commodity* means:

(1) Any raw agricultural commodity (food or feed) as defined in section 201(r) of the Federal Food, Drug, and Cosmetic Act (FFDCA); and

(2) Any processed food or feed as defined in section 201(gg) of the FFDCA.

[36 FR 22540, Nov. 25, 1971]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.1, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.3 Tolerances for related pesticide chemicals.

(a) Pesticide chemicals that cause related pharmacological effects will be regarded, in the absence of evidence to the contrary, as having an additive deleterious action. (For example, many pesticide chemicals within each of the following groups have related pharmacological effects: Chlorinated organic pesticides, arsenic-containing chemicals, metallic dithiocarbamates, cholinesterase-inhibiting pesticides.)

(b) Tolerances established for such related pesticide chemicals may limit the amount of a common component (such as  $As_2O_3$ ) that may be present, or may limit the amount of biological activity (such as cholinesterase inhibition) that may be present, or may limit the total amount of related pesticide chemicals (such as chlorinated organic pesticides) that may be present.

(c)(1) Where tolerances for inorganic bromide in or on the same raw agricultural commodity are set in two or more sections in this part (example: §§180.123 and 180.199), the overall quantity of inorganic bromide to be tolerated from use of the same pesticide in different modes of application or from two or more pesticide chemicals for which tolerances are established is the highest of the separate applicable tolerances. For example, where the bromide tolerance on asparagus from methyl bromide commodity fumigation is 100 parts per million (40 CFR 180.123) and on asparagus from methyl bromide soil treatment is 300 parts per million (40 CFR 180.199), the overall inorganic bromide tolerance for asparagus grown on methyl bromide-treated soil and also fumigated with methyl bromide after harvest is 300 parts per million.

(2) Where tolerances are established in terms of inorganic bromide residues only from use of organic bromide fumigants on raw agricultural commodities, such tolerances are sufficient to protect the public health, and no additional concurrent tolerances for the organic pesticide chemicals from such use are necessary. This conclusion is based on evidence of the dissipation of the organic pesticide or its conversion to inorganic bromide residues in the food when ready to eat.

(d)(1) Where tolerances are established for both calcium cyanide and hydrogen cyanide on the same raw agricultural commodity, the total amount of such pesticides shall not yield more residue than that permitted by the larger of the two tolerances, calculated as hydrogen cyanide.

(2) Where tolerances are established for residues of both *O,O*-diethyl *S*-[2-(ethylthio)ethyl] phosphorodithioate and demeton (a mixture of *O,O*-diethyl *O*-(and *S*-) [2-(ethylthio)ethyl] phosphorothioates) on the same raw agricultural commodity, the total amount of such pesticides shall not yield more residue than that permitted by the larger of the two tolerances, calculated as demeton.

(3) Where tolerances are established for both terpene polychlorinates (chlorinated mixture of camphene, pinene, and related terpenes, containing 65-66 percent chlorine) and toxaphene (chlorinated camphene containing 67-69 percent chlorine) on the same raw agricultural commodities, the total amount of such pesticides shall not yield more residue than that permitted

by the larger of the two tolerances, calculated as a chlorinated terpene of molecular weight 396.6 containing 67 percent chlorine.

(4) Where a tolerance is established for more than one pesticide containing arsenic found in, or on a raw agricultural commodity, the total amount of such pesticide shall not exceed the highest established tolerance calculated as  $As_2O_3$ .

(5) Where tolerances are established for more than one member of the class of dithiocarbamates listed in paragraph (e)(3) of this section on the same raw agricultural commodity, the total residue of such pesticides shall not exceed that permitted by the highest tolerance established for any one member of the class, calculated both as zinc ethylenebisdithiocarbamate and carbon disulfide. The tolerance based on zinc ethylenebisdithiocarbamate shall first be multiplied by 0.6 to convert it to the equivalent carbon disulfide tolerance, and then the carbon disulfide tolerance levels will be compared to determine the highest tolerance level per raw agricultural commodity.

(6) Where tolerances are established for residues of both *S,S,S*-tributyl phosphorotrithioate and tributyl phosphorotrithioate in or on the same raw agricultural commodity, the total amount of such pesticides shall not yield more residue than that permitted by the higher of the two tolerances, calculated as *S,S,S*-tributyl phosphorotrithioate.

(7) Where tolerances are established for residues of *O,S*-dimethyl phosphoramidothioate, resulting from the use of acephate (*O,S*-dimethyl acetylphosphoramidothioate) and/or *O,S*-dimethylphosphoramidothioate on the same agricultural commodity, the total amount of *O,S*-dimethyl-phosphoramidothioate shall not yield more residue than that permitted by the higher of the two tolerances.

(8) Where a tolerance is established for more than one pesticide having the metabolites 1-(3,4-dichlorophenyl)-3-methylurea (DCPMU) and 3,4-dichlorophenylurea (DCPU) found in or on a raw agricultural commodity, the total amount of such residues shall not exceed the highest established tolerance for a pesticide having these metabolites.

(9) Where a tolerance is established for more than one pesticide having as metabolites compounds containing the benzimidazole moiety found in or on a raw agricultural commodity, the total amount of such residues shall not exceed the highest established tolerance for a pesticide having these metabolites.

(10) Where a tolerance is established for triclopyr, chlorpyrifos, and chlorpyrifos-methyl having the common metabolite 3,5,6-trichloro-2-pyridinol on the same raw agricultural commodity, the total amount of such residues shall not exceed the highest established tolerance for any of the pesticides having the metabolites.

(11) Where tolerances are established for more than one pesticide having the metabolite 3,5,6-trichloro-2-pyridinol found in or on the raw agricultural commodity, the total amount of such residues shall not exceed the highest established tolerance for a pesticide having this metabolite.

(12) Where tolerances are established for residues of methomyl, resulting from the use of thiodicarb and/or methomyl on the same raw agricultural commodity, the total amount of methomyl shall not yield more residue than that permitted by the higher of the two tolerances.

(e) Except as noted in paragraphs (e)(1) and (2) of this section, where residues from two or more chemicals in the same class are present in or on a raw agricultural commodity the tolerance for the total of such residues shall be the same as that for the chemical having the lowest numerical tolerance in this class, unless a higher tolerance level is specifically provided for the combined residues by a regulation in this part.

(1) Where residues from two or more chemicals in the same class are present in or on a raw agricultural commodity and there are available methods that permit quantitative determination of each residue, the quantity of combined residues that are within the tolerance may be determined as follows:

(i) Determine the quantity of each residue present.

(ii) Divide the quantity of each residue by the tolerance that would apply if it occurred alone, and multiply by 100 to determine the percentage of the permitted amount of residue present.

(iii) Add the percentages so obtained for all residues present.

(iv) The sum of the percentages shall not exceed 100 percent.

(2) Where residues from two or more chemicals in the same class are present in or on a raw agricultural commodity and there are available methods that permit quantitative determinations of one or more, but not all, of the residues, the amounts of such residues as may be determinable shall be deducted from the total amount of residues present and the remainder shall have the same tolerance as that for the chemical having the lowest numerical tolerance in that class. The quantity of combined residues that are within the tolerance may be determined as follows:

(i) Determine the quantity of each determinable residue present.

(ii) Deduct the amounts of such residues from the total amount of residues present and consider the remainder to have the same tolerance as that for the chemical having the lowest numerical tolerance in that class.

(iii) Divide the quantity of each determinable residue by the tolerance that would apply if it occurred alone and the quantity of the remaining residue by the tolerance for the chemical having the lowest numerical tolerance in that class and multiply by 100 to determine the percentage of the permitted amount of residue present.

(iv) Add the percentages so obtained for all residues present.

(v) The sum of the percentages shall not exceed 100 percent.

(3) The following pesticides are members of the class of dithiocarbamates:

A mixture of 5.2 parts by weight of ammoniates of [ethylenebis (dithiocarbamate)] zinc with 1 part by weight ethylenebis [dithiocarbamic acid] bimolecular and trimolecular cyclic anhydrosulfides and disulfides.

2-Chloroallyl diethyldithiocarbamate.

Coordination product of zinc ion and maneb containing 20 percent manganese, 2.5 percent zinc, and 77.5 percent ethylenebisdithiocarbamate.

Ferbam.

Maneb.

Manganous dimethyldithiocarbamate.

Sodium dimethyldithiocarbamate.

Thiram.

Zineb.

Ziram.

(4) The following are members of the class of chlorinated organic pesticides:

Aldrin.

BHC (benzene hexachloride).

1,1-Bis(*p*-chlorophenyl)-2,2,2-trichloroethanol.

Chlorbenside (*p*-chlorobenzyl *p*-chlorophenyl sulfide).

Chlordane.

Chlorobenzilate (ethyl 4,4'-dichlorobenzilate).

*p*-Chlorophenoxyacetic acid.

*p*-Chlorophenyl-2,4,5-trichlorophenyl sulfide.

2,4-D (2,4-dichlorophenoxyacetic acid).

DDD (TDE).

DDT.

1,1-Dichloro-2,2-bis(*p*-ethylphenyl) ethane.

2,6-Dichloro-4-nitroaniline.

2,4-Dichlorophenyl *p*-nitrophenyl ether.

Dieldrin.

Dodecachlorooctahydro-1,3,4-metheno-2*H*-cyclobuta[*cd*]pentalene.

Endosulfan (6,7,8,9,10,10-hexachloro-1,5,5a, 6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide).

Endosulfan sulfate (6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3,3-dioxide).

Heptachlor (1,4,5,6,7,8,8-heptachlor-3a,4,7, 7a-tetrahydro-4,7-methanoindene).

Heptachlor epoxide (1,4,5,6,7,8,8-heptachloro-2,3-epoxy-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene).

Hexachlorophene (2,2'-methylenebis(3,4,6-trichlorophenol) and its monosodium salt.

Isopropyl 4,4'-dichlorobenzilate.

Lindane.



Methoxychlor.

Ovex (*p*-chlorophenyl *p*-chlorobenzenesulfonate).

Sesone (sodium 2,4-dichlorophenoxyethyl sulfate, SES).

Sodium 2,4-dichlorophenoxyacetate.

Sodium trichloroacetate.

Sulphenone (*p*-chlorophenyl phenyl sulfone).

Terpene polychlorinates (chlorinated mixture of camphene, pinene, and related terpenes 65-66 percent chlorine).

2,3,5,6-Tetrachloronitrobenzene.

Tetradifon (2,4,5,4'-tetrachlorodiphenyl sulfone).

Toxaphene (chlorinated camphene).

Trichlorobenzoic acid.

Trichlorobenzyl chloride.

(5) The following are members of the class of cholinesterase-inhibiting pesticides:

Acephate (*O,S*-dimethyl acetyl-phosphoramidothioate) and its cholinesterase-inhibiting metabolite *O,S*-dimethyl phosphoramidothioate.

Aldicarb (2-methyl-2-(methylthio) propionaldehyde *O*-(methylcarbamoyl)oxime) and its cholinesterase-inhibiting metabolites 2-methyl-2-(methylsulfanyl)propionaldehyde *O*-(methylcarbamoyl) oxime and 2-methyl-2-(methylsulfanyl)propionaldehyde *O*-(methylcarbamoyl)oxime.

4-*tert*-Butyl-2-chlorophenyl methyl methyl phosphoramidate.

S-[(*tert*-Butylthio)methyl] *O,O*-diethyl phosphorodithioate and its cholinesterase-inhibiting metabolites.

Carbaryl (1-naphthyl *N*-methylcarbamate).

Carbofuran (2,3,-dihydro-2,2-dimethyl-7-benzofuranyl-*N*-methylcarbamate).

Carbofuran metabolite (2,3-dihydro-2,2-dimethyl-3-hydroxy-7-benzofuranyl *N*-methylcarbamate).

Carbophenothion (S-[(*p*-chlorophenyl) thiomethyl] *O,O*-diethyl phosphorodithioate) and its cholinesterase-inhibiting metabolites.

Chlorpyrifos (*O,O*-diethyl *O*-(3,5,6-trichloro-2-pyridyl)phosphorothioate).

Chlorpyrifos-methyl (*O,O*-dimethyl-*O*-(3,5,6-trichloro-2-pyridyl) phosphorothioate).

2-Chloro-1-(2,4,5-trichlorophenyl)vinyl dimethyl phosphate.

2-Chloro-1-(2,4-dichlorophenyl) vinyl diethyl phosphate.

Coumaphos (*O,O*-diethyl *O*-3-chloro-4-methyl-2-oxo-2*H*-1-benzopyran-7-yl phosran-7-yl phosphate).

Coumaphos oxygen analog (*O,O*-diethyl *O*-3-chloro-4-methyl-2-oxo-2*H*-1-benzopyrophorothioate).

Dialifor (S-(2-chloro-1-phthalimidoethyl) *O,O*-diethyl phosphorodithioate).

Dialifor oxygen analog (S-(2-chloro-1-phthalimidoethyl) *O,O*-diethyl phosphorothioate).

Demeton (a mixture of *O,O*-diethyl *O*-(and S) [2-ethylthio)ethyl] phosphorothioates).

Ethiolate (S-ethyl diethylthiocarbamate).

2,2-Dichlorovinyl dimethyl phosphate.

*O,O*-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate and its cholinesterase-inhibiting metabolites.

*O,O*-Diethyl *O*-(2-diethylamino-6-methyl-4-pyrimidinyl) phosphorothioate and its oxygen analog diethyl 2-diethylamino-6-methyl-4-pyrimidinyl phosphate.

*O,O*-Diethyl *O*-(2-isopropyl-4-methyl-6-pyrimidinyl) phosphorothioate.

*O,O*-Diethyl *O*-[*p*-(methylsulfanyl)phenyl] phosphorothioate and its cholinesterase-inhibiting metabolites.

Diethyl 2-pyrazinyl phosphate.

*O,O*-Diethyl *O*-2-pyrazinyl phosphorothioate.

S-(*O,O*-Diisopropyl phosphorodithioate) of *N*-(2-mercaptoethyl) benzenesulfonamide

S-(*O,O*-Diisopropyl phosphorodithioate) of *N*-(2-mercaptoethyl) benzenesulfonamide

2-(Dimethylamino)-5,6-dimethyl-4-pyrimidinyl dimethylcarbamate and its metabolites 5,6-dimethyl-2-(formylmethylamino)-4-pyrimidinyl dimethylcarbamate and 5,6-dimethyl-2-(methylamino)-4-pyrimidinyl dimethylcarbamate (both calculated as parent).

Dimethoate (*O,O*-dimethyl S-(*N*-methyl-carbamoylmethyl) phosphorodithioate).

Dimethoate oxygen analog (*O,O*-dimethyl S-(*N*-methylcarbamoylmethyl) phosphorothioate).

O,O-Dimethyl O-*p*-(dimethylsulfamoyl) phenyl phosphate.

O,O-Dimethyl O-*p*-(dimethylsulfamoyl) phenyl phosphorothioate.

3,5-Dimethyl-4-(methylthio) phenyl methylcarbamate.

O,O-Dimethyl S-[4-oxo-1,2,3-benzotriazin-3-(4*H*)-ylmethyl] phosphorodithioate.

Dimethyl phosphate of 3-hydroxy-*N,N*-dimethyl-*cis*-crotonamide.

Dimethyl phosphate of 3-hydroxy-*N*-methyl-*cis*-crotonamide.

Dimethyl phosphate of  $\alpha$ -methylbenzyl 3-hydroxy-*cis*-crotonate.

O,O-Dimethyl 2,2,2-trichloro-1-hydroxyethyl phosphonate.

O,O-Dimethyl phosphorodithioate, S-ester with 4-(mercaptomethyl)-2-methoxy- $\Delta$ 2-1,3,4-thiadiazolin-5-one.

Dioxathion (2,3-*p*-dioxanedithiol S,S-bis (O,O-diethylphosphorodithioate)) containing approximately 70 percent *cis* and *trans* isomers and approximately 30 percent related compounds.

EPN.

Ethephon ((2- - chloroethyl) phosphonic acid).

Ethion.

Ethion oxygen analog (S-[[diethoxyphosphinothioyl]thio] methyl] O,O-diethyl phosphorothioate).

O-Ethyl O-[4-(methylthio) phenyl] S-propyl phosphorodithioate and its cholinesterase-inhibiting metabolites.

O-Ethyl S,S-dipropylphosphorodithioate.

Ethyl 3-methyl-4-(methylthio)phenyl (1-methylethyl) phosphoramidate and its cholinesterase-inhibiting metabolites.

O-Ethyl S-phenyl ethylphosphonodithioate.

O-Ethyl S-phenyl ethylphosphonothiolate.

*m*-(1-Ethylpropyl)phenyl methylcarbamate.

S-[2-Ethylsulfanyl]ethyl] O,O-dimethyl phosphorothioate and its cholinesterase-inhibiting metabolites, (primarily S-[2-(ethyl-sulfonyl)ethyl] O,O-dimethyl phosphorothioate).

Fenthion (O,O-dimethyl O-[3-methyl-4-(methylthio)phenyl]phosphorothioate and its cholinesterase-inhibiting metabolites.

Malathion.

*N*-(Mercaptomethyl)phthalimide S-(O,O-dimethyl phosphorodithioate).

*N*-(Mercaptomethyl)phthalimide S-(O,O-dimethyl phosphorothioate).

Methomyl (S-methyl *N*-[(methylcarbamoyl)oxy]thioacetimidate).

1-Methoxycarbonyl-1-propen-2-yl dimethyl phosphate and its beta isomer.

*m*-(1-Methylbutyl)phenyl methylcarbamate.

Methyl parathion.

Naled (1,2-dibromo-2,2-dichloroethyl dimethyl phosphate).

Oxamyl (methyl *N,N'*-dimethyl-*N*-[(methylcarbamoyl)oxy]-1-thiooxamimidate)

Parathion.

Phorate (O,O-diethyl S-(ethylthio)methyl phosphorodithioate) and its cholinesterase-inhibiting metabolites.

Phosalone (S-(6-chloro-3-mercaptomethyl)-2-benzoxazolinone) O,O-diethyl phosphorodithioate).

Phosphamidon (2-chloro-2-diethylcarbamoyl-1-methylvinyl dimethyl phosphate) including all of its related cholinesterase-inhibiting compounds.

Pirimiphos-methyl O-[2-diethylamino-6-methyl-pyrimidinyl] O,O-dimethyl phosphorothioate

Ronnel.

Schradan (octamethylpyrophosphoramidate).

Tetraethyl pyrophosphate.

O,O,O',O'-Tetramethyl O,O'-sulfinyldi-*p*-phenylene phosphorothioate.

O,O,O',O'-Tetramethyl O,O'-thiodi-*p*-phenylene phosphorothioate.

Tributyl phosphorotritlioite.

S,S,S-Tributyl phosphorothrithioate.

3,4,5-Trimethylphenyl methylcarbamate and its isomer 2,3,5-trimethylphenyl methylcarbamate.

(6) The following pesticides are members of the class of dinitrophenols:

2,4-Dinitro-6-octylphenyl crotonate and 2,6-dinitro-4-octylphenyl crotonate, mixture of.

4,6-Dinitro-*o*-cresol and its sodium salt.

Dinoseb (2-*sec*-butyl-4,6-dinitrophenol) and its alkanolamine, ammonium, and sodium salts.

[41 FR 8969, Mar. 2, 1976]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.3, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

#### §180.4 Exceptions.

The substances listed in this section are excepted from the definitions of “pesticide chemical” and “pesticide chemical residue” under FFDCA section 201(q)(3) and are therefore exempt from regulation under FFDCA section 402(a)(2)(B) and 408. These substances are subject to regulation by the Food and Drug Administration as food additives under FFDCA section 409.

(a) Inert ingredients in food packaging treated with a pesticide, when such inert ingredients are the components of the food packaging material (e.g. paper and paperboard, coatings, adhesives, and polymers).

(b) [Reserved]

[63 FR 10720, Mar. 4, 1998, as amended at 73 FR 54976, Sept. 24, 2008]

[↑ Back to Top](#)

#### §180.5 Zero tolerances.

A zero tolerance means that no amount of the pesticide chemical may remain on the raw agricultural commodity when it is offered for shipment. A zero tolerance for a pesticide chemical in or on a raw agricultural commodity may be established because, among other reasons:

(a) A safe level of the pesticide chemical in the diet of two different species of warm-blooded animals has not been reliably determined.

(b) The chemical is carcinogenic to or has other alarming physiological effects upon one or more of the species of the test animals used, when fed in the diet of such animals.

(c) The pesticide chemical is toxic, but is normally used at times when, or in such manner that, fruit, vegetables, or other raw agricultural commodities will not bear or contain it.

(d) All residue of the pesticide chemical is normally removed through good agricultural practice such as washing or brushing or through weathering or other changes in the chemical itself, prior to introduction of the raw agricultural commodity into interstate commerce.

[↑ Back to Top](#)

#### §180.6 Pesticide tolerances regarding milk, eggs, meat, and/or poultry; statement of policy.

(a) When establishing tolerances for pesticide residues in or on raw agricultural commodities, consideration is always given to possible residues of those pesticide chemicals or their conversion products entering the diet of man through the ingestion of milk, eggs, meat, and/or poultry produced by animals fed agricultural products bearing such pesticide residues. In each instance an evaluation of all available data will result in a conclusion either:

(1) That finite residues will actually be incurred in these foods from feed use of the raw agricultural commodity including its byproducts; or

(2) That it is not possible to establish with certainty whether finite residues will be incurred, but there is a reasonable expectation of finite residues; or

(3) That it is not possible to establish with certainty whether finite residues will be incurred, but there is no reasonable expectation of finite residues.

(b) When the data show that finite residues will actually be incurred in milk, eggs, meat, and/or poultry, a tolerance will be established on the raw agricultural commodity used as feed provided that tolerances can be established at the same time, on

the basis of the toxicological and other data available, for the finite residues incurred in milk, eggs, meat, and/or poultry. When it is not possible to determine with certainty whether finite residues will be incurred in milk, eggs, meat, and/or poultry but there is a reasonable expectation of finite residues in light of data reflecting exaggerated pesticides levels in feeding studies, a tolerance will be established on the raw agricultural commodity provided that appropriate tolerances can be established at the same time, on the basis of the toxicological and other data available, for the finite residues likely to be incurred in these foods through the feed use of the raw agricultural commodity or its byproducts. When it is not possible to determine with certainty whether finite residues will be incurred in milk, eggs, meat, and/or poultry but there is no reasonable expectation of finite residues in light of data such as those reflecting exaggerated pesticide levels in feeding studies and those elucidating the biochemistry of the pesticide chemical in the animal, a tolerance may be established on the raw agricultural commodity without the necessity of a tolerance on food products derived from the animal.

(c) The principles outlined in paragraphs (a) and (b) of this section will also be followed with respect to tolerances for residues which will actually be incurred or are reasonably to be expected in milk, eggs, meat, and/or poultry by the use of pesticides directly on the animal or administered purposely in the feed or drinking water.

(d) Tolerances contemplated by paragraphs (a) and (b) of this section will in addition to toxicological considerations be conditioned on the availability of a practicable analytical method to determine the pesticide residue; that is, the method must be sensitive and reliable at the tolerance level or in special cases at a higher level where such level is deemed satisfactory and safe in light of the toxicity of the pesticide residue and of the unlikelihood of such residue exceeding the tolerance. The analytical methods to be used for enforcement purposes will be those set forth in the "Pesticide Analytical Manual" (see §180.101(c)). The sensitivities of these methods are expressed in that manual.

[↑ Back to Top](#)

## Subpart B—Procedural Regulations

[↑ Back to Top](#)

### §180.7 Petitions proposing tolerances or exemptions for pesticide residues in or on raw agricultural commodities or processed foods.

(a) Petitions to be filed with the Agency under the provisions of FFDCa section 408(d) shall be submitted in duplicate. If any part of the material submitted is in a foreign language, it shall be accompanied by an accurate and complete English translation. The petition shall be accompanied by an advance deposit for fees described in §180.33. The petition shall state the petitioner's mail address to which notice of objection under FFDCa section 408(g)(2) may be sent. The petition must be signed by the petitioner or by his attorney or agent, or (if a corporation) by an authorized official.

(b) Petitions shall include the following information:

(1) An informative summary of the petition and of the data, information, and arguments submitted or cited in support of the petition. Both a paper and electronic copy of the summary should be submitted. The electronic copy should be formatted according to the Office of Pesticide Programs' current standard for electronic data submission as specified at <http://www.epa.gov/pesticides/regulating/registering/submissions/index.htm>.

(2) A statement that the petitioner agrees that such summary or any information it contains may be published as a part of the notice of filing of the petition to be published under FFDCa section 408(d)(3) and as a part of a proposed or final regulation issued under FFDCa section 408.

(3) The name, chemical identity, and composition of the pesticide chemical residue and of the pesticide chemical that produces the residue.

(4) Data showing the recommended amount, frequency, method, and time of application of the pesticide chemical.

(5) Full reports of tests and investigations made with respect to the safety of the pesticide chemical, including full information as to the methods and controls used in conducting those tests and investigations.

(6) Full reports of tests and investigations made with respect to the nature and amount of the pesticide chemical residue that is likely to remain in or on the food, including a description of the analytical methods used. (See §180.34 for further information about residue tests.)

(7) Proposed tolerances for the pesticide chemical residue if tolerances are proposed.

(8) Practicable methods for removing any amount of the residue that would exceed any proposed tolerance.

(9) A practical method for detecting and measuring the levels of the pesticide chemical residue in or on the food, or for exemptions, a statement why such a method is not needed.

(10) If the petition relates to a tolerance for a processed food, reports of investigations conducted using the processing method(s) used to produce that food.

(11) Such information as the Administrator may require to make the determination under FFDCA section 408(b)(2)(C).

(12) Such information as the Administrator may require on whether the pesticide chemical may have an effect in humans that is similar to an effect produced by a naturally occurring estrogen or other endocrine effects.

(13) Information regarding exposure to the pesticide chemical residue due to any tolerance or exemption already granted for such residue.

(14) Information concerning any maximum residue level established by the Codex Alimentarius Commission for the pesticide chemical residue addressed in the petition. If a Codex maximum residue level has been established for the pesticide chemical residue and the petitioner does not propose that this level be adopted, a statement explaining the reasons for this departure from the Codex level.

(15) Such other data and information as the Administrator requires by regulation to support the petition.

(16) Reasonable grounds in support of the petition.

(c) The data specified under paragraphs (b)(1) through (b)(16) of this section should be on separate sheets or sets of sheets, suitably identified. If such data have already been submitted with an earlier application, the present petition may incorporate it by reference to the earlier one.

(d) Except as noted in paragraph (e) of this section, a petition shall not be accepted for filing if any of the data prescribed by FFDCA section 408(d) are lacking or are not set forth so as to be readily understood. The availability to the public of information provided to, or otherwise obtained by, the Agency under this part shall be governed by part 2 of this chapter. The Administrator shall make the full text of the summary referenced in paragraph (b)(1) of this section available to the public in the public docket at <http://www.regulations.gov> no later than publication in the FEDERAL REGISTER of the notice of the petition filing.

(e) The Administrator shall notify the petitioner within 15 days after its receipt of acceptance or nonacceptance of a petition, and if not accepted the reasons therefor. If petitioner desires, the petitioner may supplement a deficient petition after notification as to deficiencies. If the petitioner does not wish to supplement or explain the petition and requests in writing that it be filed as submitted, the petition shall be filed and the petitioner so notified.

(f) A notice of the filing of a petition for a pesticide chemical residue tolerance that the Administrator determines has met the requirements of paragraph (b) of this section shall be published in the FEDERAL REGISTER by the Administrator within 30 days after such determination. The notice shall state the name of the pesticide chemical residue and the commodities for which a tolerance is sought and announce the availability of a description of the analytical methods available to the Administrator for the detection and measurement of the pesticide chemical residue with respect to which the petition is filed or shall set forth the petitioner's statement of why such a method is not needed. The notice shall explicitly reference the specific docket identification number in the public docket at <http://www.regulations.gov> where the full text of the summary required in paragraph (b) of this section is located, and refer interested parties to this document for further information on the petition. The full text of the summary may be omitted from the notice.

(g) The Administrator may request a sample of the pesticide chemical at any time while a petition is under consideration. The Administrator shall specify in its request for a sample of the pesticide chemical, a quantity which it deems adequate to permit tests of analytical methods used to determine residues of the pesticide chemical and of methods proposed by the petitioner for removing any residues of the chemical that exceed the tolerance proposed.

(h) The Administrator shall determine, in accordance with the Act, whether to issue an order that establishes, modifies, or revokes a tolerance regulation (whether or not in accord with the action proposed by the petitioner), whether to publish a proposed tolerance regulation and request public comment thereon under §180.29, or whether to deny the petition. The Administrator shall publish in the FEDERAL REGISTER such order or proposed regulation. After receiving comments on any proposed regulation, the Administrator may issue an order that establishes, modifies, or revokes a tolerance regulation. An order published under this section shall describe briefly how to submit objections and requests for a hearing under part 178 of this chapter. A regulation issued under this section shall be effective on the date of publication in the FEDERAL REGISTER unless otherwise provided in the regulation.

[70 FR 33360, June 8, 2005, as amended at 73 FR 75600, Dec. 12, 2008]

[↑ Back to Top](#)



### §180.8 Withdrawal of petitions without prejudice.

In some cases the Administrator will notify the petitioner that the petition, while technically complete, is inadequate to justify the establishment of a tolerance or the tolerance requested by petitioner. This may be due to the fact that the data are not sufficiently clear or complete. In such cases, the petitioner may withdraw the petition pending its clarification or the obtaining of additional data. This withdrawal may be without prejudice to a future filing. A deposit for fees as specified in §180.33 shall accompany the resubmission of the petition.

[70 FR 33361, June 8, 2005]

[↑ Back to Top](#)

### §180.9 Substantive amendments to petitions.

After a petition has been filed, the petitioner may submit additional information or data in support thereof, but in such cases the petition will be given a new filing date.

[70 FR 33361, June 8, 2005]

[↑ Back to Top](#)

### §180.29 Establishment, modification, and revocation of tolerance on initiative of Administrator.

(a) Upon the Administrator's own initiative, the Administrator may propose, under FFDCa section 408(e), the issuance of a regulation establishing a tolerance for a pesticide chemical or exempting it from the necessity of a tolerance, or a regulation modifying or revoking an existing tolerance or exemption.

(b) The Administrator shall provide a period of not less than 60 days for persons to comment on the proposed regulation, except that a shorter period for comment may be provided if the Administrator for good cause finds that it would be in the public interest to do so and states the reasons for the finding in the notice of proposed rulemaking.

(c) After reviewing any timely comments received, the Administrator may by order establish, modify, or revoke a tolerance regulation, which order and regulation shall be published in the FEDERAL REGISTER. An order published under this section shall state that persons may submit objections and requests for a hearing in the manner described in part 178 of this chapter.

(d) Any final regulation issued under this section shall be effective on the date of publication in the FEDERAL REGISTER unless otherwise provided in the regulation.

[70 FR 33361, June 8, 2005]

[↑ Back to Top](#)

### §180.30 Judicial review.

(a) Under FFDCa section 408(h), judicial review is available in the United States Courts of Appeal as to the following actions:

(1) Regulations establishing general procedures and requirements under FFDCa section 408(e)(1)(C).

(2) Orders issued under FFDCa section 408(f)(1)(C) requiring the submission of data.

(3) Orders issued under FFDCa section 408(g)(2)(C) ruling on objections to establishment, modification, or revocation of a tolerance or exemption under FFDCa section 408(d)(4), or any regulation that is the subject of such an order. The underlying action here is Agency disposition of a petition seeking the establishment, modification, or revocation of a tolerance or exemption.

(4) Orders issued under FFDCa section 408(g)(2)(C) ruling on objections to the denial of a petition under FFDCa section 408(d)(4).

(5) Orders issued under FFDCa section 408(g)(2)(C) ruling on objections to the establishment, modification, suspension, or revocation of a tolerance or exemption under FFDCa section 408(e)(1)(A) or (e)(1)(B). The underlying action here is the establishment, modification, suspension, or revocation of a tolerance or exemption upon the initiative of EPA including EPA actions pursuant to FFDCa sections 408(b)(2)(B)(v), 408(b)(2)(E)(ii), 408(d)(4)(C)(ii), 408(l)(4), and 408(q)(1).

(6) Orders issued under FFDCa section 408(g)(2)(C) ruling on objections to the revocation or modification of a tolerance or exemption under FFDCa section 408(f)(2) for noncompliance with requirements for the submission of data.

(7) Orders issued under FFDCa section 408(g)(2)(C) ruling on objections to rules issued under FFDCa sections 408(n)(3) and 408(d) or (e) regarding determinations pertaining to State authority to establish regulatory limits on pesticide chemical residues.

(8) Orders issued under FFDCa section 408(g)(2)(C) ruling on objections to orders issued under FFDCa section 408(n)(5) (C) authorizing States to establish regulatory limits not identical to certain tolerances or exemptions.

(b) Any issue as to which review is or was obtainable under paragraph (a) of this section shall not be the subject of judicial review under any other provision of law. In part, this means that, for the Agency actions subject to the objection procedure in FFDCa section 408(g)(2), judicial review is not available unless an adversely affected party exhausts these objection procedures, and any petition procedures preliminary thereto.

[70 FR 33362, June 8, 2005]

[↑ Back to Top](#)

### **§180.31 Temporary tolerances.**

(a) A temporary tolerance (or exemption from a tolerance) established under the authority of FFDCa section 408(r) shall be deemed to be a tolerance (or exemption from the requirement of a tolerance) for the purposes of FFDCa section 408(a)(1) or (a)(2) and for the purposes of §180.30.

(b) A request for a temporary tolerance or a temporary exemption from a tolerance by a person who has obtained or is seeking an experimental permit for a pesticide chemical under the Federal Insecticide, Fungicide, and Rodenticide Act shall be accompanied by such data as are available on subjects outlined in §180.7(b) and an advance deposit to cover fees as provided in §180.33.

(c) To obtain a temporary tolerance, a requestor must comply with the petition procedures specified in FFDCa section 408(d) and §180.7 except as provided in this section.

(d) A temporary tolerance or exemption from a tolerance may be issued for a period designed to allow the orderly marketing of the raw agricultural commodities produced while testing a pesticide chemical under an experimental permit issued under authority of the Federal Insecticide, Fungicide, and Rodenticide Act if the Administrator concludes that the safety standard in FFDCa section 408(b)(2) or (c), as applicable, is met. Subject to the requirements of FFDCa section 408(e), a temporary tolerance or exemption from a tolerance may be revoked if the experimental permit is revoked, or may be revoked at any time if it develops that the application for a temporary tolerance contains a misstatement of a material fact or that new scientific data or experience with the pesticide chemical indicates that it does not meet the safety standard in FFDCa section 408(b)(2) or (c), as applicable.

(e) Conditions under which a temporary tolerance is established shall include:

(1) A limitation on the amount of the chemical to be used on the designated crops permitted under the experimental permit.

(2) A limitation for the use of the chemical on the designated crops to bona fide experimental use by qualified persons as indicated in the experimental permit.

(3) A requirement that the person or firm which obtains the experimental permit for which the temporary tolerance is established will immediately inform the Environmental Protection Agency of any reports on findings from the experimental use that have a bearing on safety.

(4) A requirement that the person or firm which obtained the experimental permit for which the temporary tolerance is established will keep records of production, distribution, and performance for a period of 2 years and, on request, at any reasonable time, make these records available to any authorized officer or employee of the Environmental Protection Agency.

[70 FR 33362, June 8, 2005]

[↑ Back to Top](#)

### **§180.32 Procedure for modifying and revoking tolerances or exemptions from tolerances.**

(a) The Administrator on his/her own initiative may propose the issuance of a regulation modifying or revoking a tolerance for a pesticide chemical residue on raw agricultural commodities or processed foods or modifying or revoking an exemption from tolerance for such residue.

(b) Any person may file with the Administrator a petition proposing the issuance of a regulation modifying or revoking a tolerance or exemption from a tolerance for a pesticide chemical residue. The petition shall furnish reasonable grounds for the

action sought. Reasonable grounds shall include an explanation showing wherein the person has a substantial interest in such tolerance or exemption from tolerance and an assertion of facts (supported by data if available) showing that new uses for the pesticide chemical have been developed or old uses abandoned, that new data are available as to toxicity of the chemical, or that experience with the application of the tolerance or exemption from tolerance may justify its modification or revocation. Evidence that a person has registered or has submitted an application for the registration of a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act will be regarded as evidence that the person has a substantial interest in a tolerance or exemption from the requirement of a tolerance for a pesticide chemical that consists in whole or in part of the pesticide. New data should be furnished in the form specified in §180.7(b) for submitting petitions, as applicable.

(c) The procedures for completing action on an Administrator initiated proposal or a petition shall be those specified in §§180.29 and 180.7, as applicable.

[70 FR 33362, June 8, 2005]

[↑ Back to Top](#)

### §180.33 Fees.

(a) Each petition for the establishment of a new tolerance or a tolerance higher than already established, shall be accompanied by a fee of \$80,950, plus \$2,025 for each raw agricultural commodity more than nine on which the establishment of a tolerance is requested, except as provided in paragraphs (b), (d), and (h) of this section.

(b) Each petition for the establishment of a tolerance at a lower numerical level or levels than a tolerance already established for the same pesticide chemical, or for the establishment of a tolerance on additional raw agricultural commodities at the same numerical level as a tolerance already established for the same pesticide chemical, shall be accompanied by a fee of \$18,500 plus \$1,225 for each raw agricultural commodity on which a tolerance is requested.

(c) Each petition for an exemption from the requirement of a tolerance or repeal of an exemption shall be accompanied by a fee of \$14,925.

(d) Each petition or request for a temporary tolerance or a temporary exemption from the requirement of a tolerance shall be accompanied by a fee of \$32,325 except as provided in paragraph (e) of this section. A petition or request to renew or extend such temporary tolerance or temporary exemption shall be accompanied by a fee of \$4,600.

(e) A petition or request for a temporary tolerance for a pesticide chemical which has a tolerance for other uses at the same numerical level or a higher numerical level shall be accompanied by a fee of \$16,075, plus \$1,225 for each raw agricultural commodity on which the temporary tolerance is sought.

(f) Each petition for revocation of a tolerance shall be accompanied by a fee of \$10,125. Such fee is not required when, in connection with the change sought under this paragraph, a petition is filed for the establishment of new tolerances to take the place of those sought to be revoked and a fee is paid as required by paragraph (a) of this section.

(g) If a petition or a request is not accepted for processing because it is technically incomplete, the fee, less \$2,025 for handling and initial review, shall be returned. If a petition is withdrawn by the petitioner after initial processing, but before significant Agency scientific review has begun, the fee, less \$2,025 for handling and initial review, shall be returned. If an unacceptable or withdrawn petition is resubmitted, it shall be accompanied by the fee that would be required if it were being submitted for the first time.

(h) Each petition for a crop group tolerance, regardless of the number of raw agricultural commodities involved, shall be accompanied by a fee equal to the fee required by the analogous category for a single tolerance that is not a crop group tolerance, *i.e.*, paragraphs (a) through (f) of this section, without a charge for each commodity where that would otherwise apply.

(i) Objections under section 408(d)(5) of the Act shall be accompanied by a filing fee of \$4,050.

(j) The person who files a petition for judicial review of an order under section 408(h) of the Act shall pay the costs of preparing the record on which the order is based unless the person has no financial interest in the petition for judicial review.

(k) No fee under this section will be imposed on the Interregional Research Project Number 4 (IR-4 Program).

(l) The Administrator may waive or refund part or all of any fee imposed by this section if the Administrator determines in his or her sole discretion that such a waiver or refund will promote the public interest or that payment of the fee would work an unreasonable hardship on the person on whom the fee is imposed. A request for waiver or refund of a fee shall be submitted to the Office of Pesticide Programs' Document Processing Desk at the appropriate address as set forth in 40 CFR 150.17(a) or (b). A fee of \$2,025 shall accompany every request for a waiver or refund, as specified in paragraph (m) of this section, except

that the fee under this paragraph shall not be imposed on any person who has no financial interest in any action requested by such person under paragraphs (a) through (j) of this section. The fee for requesting a waiver or refund shall be refunded if the request is granted.

(m) All deposits and fees required by the regulations in this part shall be paid by money order, bank draft, or certified check drawn to the order of the Environmental Protection Agency. All deposits and fees shall be forwarded to the Environmental Protection Agency, Headquarters Accounting Operations Branch, Office of Pesticide Programs (Tolerance Fees), P.O. Box 360277M, Pittsburgh, PA 15251. The payments should be specifically labeled "Tolerance Petition Fees" and should be accompanied only by a copy of the letter or petition requesting the tolerance. The actual letter or petition, along with supporting data, shall be forwarded within 30 days of payment to the Office of Pesticide Programs' Document Processing Desk at the appropriate address as set forth in 40 CFR 150.17(a) or (b). A petition will not be accepted for processing until the required fees have been submitted. A petition for which a waiver of fees has been requested will not be accepted for processing until the fee has been waived or, if the waiver has been denied, the proper fee is submitted after notice of denial. A request for waiver or refund will not be accepted after scientific review has begun on a petition.

(n) This fee schedule will be changed annually by the same percentage as the percent change in the Federal General Schedule (GS) pay scale. In addition, processing costs and fees will periodically be reviewed and changes will be made to the schedule as necessary. When automatic adjustments are made based on the GS pay scale, the new fee schedule will be published in the FEDERAL REGISTER as a final rule to become effective 30 days or more after publication, as specified in the rule. When changes are made based on periodic reviews, the changes will be subject to public comment.

(o) No fee required by this section shall be levied during the period beginning on October 1, 2003, and ending September 30, 2008.

[68 FR 24371, May 7, 2003, as amended at 69 FR 12544, Mar. 17, 2004; 70 FR 33363, June 8, 2005; 71 FR 35547, June 21, 2006]

[↑ Back to Top](#)

#### **§180.34 Tests on the amount of residue remaining.**

(a) Data in a petition on the amount of residue remaining in or on a raw agricultural commodity should establish the residue that may remain when the pesticide chemical is applied according to directions registered under the Federal Insecticide, Fungicide, and Rodenticide Act, or according to directions contained in an application for registration. These data should establish the residues that may remain under conditions most likely to result in high residues on the commodity.

(b) The petition should establish the reliability of the residue data reported in it. Sufficient information should be submitted about the analytical method to permit competent analysts to apply it successfully.

(c) If the pesticide chemical is absorbed into a living plant or animal when applied (is systemic), residue data may be needed on each plant or animal on which a tolerance or exemption is requested.

(d) If the pesticide chemical is not absorbed into the living plant or animal when applied (is not systemic), it may be possible to make a reliable estimate of the residues to be expected on each commodity in a group of related commodities on the basis of less data than would be required for each commodity in the group, considered separately.

(e) Each of the following groups of crops lists raw agricultural commodities that are considered to be related for the purpose of paragraph (d) of this section. Commodities not listed in this paragraph are not considered to be related for the purpose of paragraph (d) of this section.

- (1) Apples, crabapples, pears, quinces.
- (2) Avocados, papayas.
- (3) Blackberries, boysenberries, dewberries, loganberries, raspberries.
- (4) Blueberries, currants, gooseberries, huckleberries.
- (5) Cherries, plums, prunes.
- (6) Oranges, citrus citron, grapefruit, kumquats, lemons, limes, tangelos, tangerines.
- (7) Mangoes, persimmons.
- (8) Peaches, apricots, nectarines.
- (9) Beans, peas, soybeans (each in dry form).

- (10) Beans, peas, soybeans (each in succulent form).
- (11) Broccoli, brussels sprouts, cauliflower, kohlrabi.
- (12) Cantaloups, honeydew melons, muskmelons, pumpkins, watermelons, winter squash.
- (13) Carrots, garden beets, sugar beets, horseradish, parsnips, radishes, rutabagas, salsify roots, turnips.
- (14) Celery, fennel.
- (15) Cucumbers, summer squash.
- (16) Lettuce, endive (escarole), Chinese cabbage, salsify tops.
- (17) Onions, garlic, leeks, shallots (green, or in dry bulb form).
- (18) Potatoes, Jerusalem-artichokes, sweetpotatoes, yams.
- (19) Spinach, beet tops, collards, dandelion, kale, mustard greens, parsley, Swiss chard, turnip tops, watercress.
- (20) Tomatoes, eggplants, peppers, pimentos.
- (21) Pecans, almonds, brazil nuts, bush nuts, butternuts, chestnuts, filberts, hazelnuts, hickory nuts, walnuts.
- (22) Field corn, popcorn, sweet corn (each in grain form).
- (23) Milo, sorghum (each in grain form).
- (24) Wheat, barley, oats, rice, rye (each in grain form).
- (25) Alfalfa, Bermuda grass, bluegrass, brome grass, clovers, cowpea hay, fescue, lespedeza, lupines, orchard grass, peanut hay, peavine hay, rye grass, soybean hay, sudan grass, timothy, and vetch.
- (26) Corn forage, sorghum forage.
- (27) Sugarcane, cane sorghum.

[36 FR 22540, Nov. 25, 1971, as amended at 39 FR 28286, Aug. 6, 1974; 39 FR 28977, Aug. 13, 1974; 40 FR 6972, Feb. 18, 1975; 45 FR 82928, Dec. 17, 1980; 48 FR 29860, June 29, 1983; 60 FR 26635, May 17, 1995; 73 FR 75600, Dec. 12, 2008]

[↑ Back to Top](#)

### **§180.35 Tests for potentiation.**

Experiments have shown that certain cholinesterase-inhibiting pesticides when fed together to test animals are more toxic than the sum of their individual toxicities when fed separately. One substance potentiates the toxicity of the other. Important toxicological interactions also have been observed between pesticides and other substances. Wherever there is reason to believe that a pesticide chemical for which a tolerance is proposed may interact with other pesticide chemicals or other substances to which man is exposed, it may be necessary to require special experimental data regarding potentiation capacities to evaluate the safety of the proposed tolerance. This necessarily will be determined on a case-by-case basis.

[↑ Back to Top](#)

### **§180.40 Tolerances for crop groups.**

(a) Group or subgroup tolerances may be established as a result of:

(1) A petition from a person who has submitted an application for the registration of a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act.

(2) On the initiative of the Administrator.

(3) A petition by an interested person.

(b) The tables in §180.41 are to be used in conjunction with this section for the establishment of crop group tolerances. Each table in §180.41 lists a group of raw agricultural commodities that are considered to be related for the purposes of this

section. Refer also to §180.1(g) for a listing of commodities for which established tolerances may be applied to certain other related and similar commodities.

(c) When there is an established or proposed tolerance for all of the representative commodities for a specific group or subgroup of related commodities, a tolerance may be established for all commodities in the associated group or subgroup. Tolerances may be established for a crop group or, alternatively, tolerances may be established for one or more of the subgroups of a crop group.

(d) The representative crops are given as an indication of the minimum residue chemistry data base acceptable to the Agency for the purposes of establishing a group tolerance. The Agency may, at its discretion, allow group tolerances when data on suitable substitutes for the representative crops are available (e.g., limes instead of lemons).

(e) Since a group tolerance reflects maximum residues likely to occur on all individual crops within a group, the proposed or registered patterns of use for all crops in the group or subgroup must be similar before a group tolerance is established. The pattern of use consists of the amount of pesticide applied, the number of times applied, the timing of the first application, the interval between applications, and the interval between the last application and harvest. The pattern of use will also include the type of application; for example, soil or foliar application, or application by ground or aerial equipment. Additionally, since a group tolerance reflects maximum residues likely to occur on all individual foods within a group, food processing practices must be similar for all crops in the group or subgroup if the processing practice has the potential to result in residues in a processed commodity at a higher concentration than the raw agricultural commodity.

(f)(1) *General.* EPA will not establish a crop group for a pesticide unless all tolerances made necessary by the presence of pesticide residues in the crop group commodities have been issued or are being issued simultaneously with the crop group tolerance. For purposes of paragraph (f)(1):

(i) Necessary tolerances for residues resulting from crop group tolerances include:

(A) Tolerances for processed food, including processed animal feed, to the extent needed under FFDCa section 408(a)(2).

(B) Tolerances for raw commodities not covered by the crop group tolerance that are derivative of commodities in the group.

(C) Tolerances for meat, milk, or egg products that may contain residues as a result of livestock's consumption of animal feed containing pesticide residues to the extent needed under §180.6(b).

(ii) Notwithstanding the foregoing, a tolerance is not considered necessary for processed food, derivative raw commodities, or meat, milk, and eggs if the precursor raw commodities are grown solely for sale as raw commodities and are completely segregated from commodities grown for the purpose of producing processed foods, derivative raw commodities, and commodities, or fractions thereof, that are used as animal feed.

(2) *Processed commodity and related raw commodity crop group tolerances.* EPA may establish crop group tolerances for processed commodities or fractions of commodities (e.g., bran and flour from the Cereal Grains Group), including processed fractions used as animal feed (e.g., pomace from the Pome Fruit Group), produced from crops in the crop groups in §180.41. EPA may establish crop group tolerances for raw commodities or fractions of commodities, including fractions used as animal feed, derived from commodities covered by the crop groups in §180.41 (e.g., aspirated grain dust associated with the Cereal Grains Group). Crop group tolerances on processed foods and derivative raw commodities may be based on data on representative commodities for associated crop group. Paragraphs (c), (d), (e), (g), and (h) of §180.40 apply to group tolerances authorized by paragraph (f)(2).

(3) *Representative crops.* Unless indicated otherwise in §§180.40 and 180.41, the processed food and feed forms of the representative crops for a crop group are considered to be representative of the processed food and feed forms and any derivative raw commodities not covered by the crop group, that are produced from any of the raw agricultural commodities covered by the crop group tolerance. Additionally, unless indicated otherwise in §§180.40 and 180.41, representative commodities for such crop groups are selected taking into consideration whether their use as animal feed will result in residues in or on meat, milk, and/or eggs at a level representative of the residues that would result from use of the other commodities or byproducts in the crop group as an animal feed.

(4) *Data.* Processing data on representative crops are required prior to establishment of a group tolerance if the processing of the representative commodity has the potential to result in residues in a processed commodity at a higher concentration than in the representative commodity. Residue data are required on raw commodities derived from the crops in the crop group tolerance but not directly covered by the tolerance. Animal feeding studies with a representative crop are required if the representative crop is used as a significant animal feed.



(g) If maximum residues (tolerances) for the representative crops vary by more than a factor of 5 from the maximum value observed for any crop in the group, a group or subgroup tolerance will ordinarily not be established. In this case individual crop tolerances, rather than group tolerances, will normally be established.

(h) Alternatively, a commodity with a residue level significantly higher or lower than the other commodities in a group may be excluded from the group tolerance (e.g., cereal grains, except corn). In this case an individual tolerance at the appropriate level for the unique commodity would be established, if necessary. The alternative approach of excluding a commodity with a significantly higher or lower residue level will not be used to establish a tolerance for a commodity subgroup. Most subgroups have only two representative commodities; to exclude one such commodity and its related residue data would likely provide insufficient residue information to support the remainder of the subgroup. Residue data from crops additional to those representative crops in a grouping may be required for systemic pesticides.

(i) The commodities included in the groups will be updated periodically either at the initiative of the Agency or at the request of an interested party. Persons interested in updating this section should contact the Registration Division of the Office of Pesticide Programs.

(j) When EPA amends a crop group in a manner that expands or contracts the commodities that are covered by the group, EPA will initially retain the pre-existing as well as the revised crop group in the CFR. The revised crop group will have the same number as the pre-existing crop group; however, the revised crop group number will be followed by a hyphen and the final two digits of the year in which it was established (e.g., if Crop Group 1 is amended in 2007, the revised group will be designated as Crop Group 1-07). If the pre-existing crop group had crop subgroups, these subgroups will be numbered in a similar fashion in the revised crop group. The name of the revised crop group will not be changed from the pre-existing crop group unless the revision so changes the composition of the crop group that the pre-existing name is no longer accurate. Once a revised crop group is established, EPA will no longer establish tolerances under the pre-existing crop group. At appropriate times, EPA will amend tolerances for crop groups that have been superseded by revised crop groups to conform the pre-existing crop group to the revised crop group. Once all of the tolerances for the pre-existing crop group have been updated, the pre-existing crop group will be removed from the CFR.

(k) Establishment of a tolerance does not substitute for the additional need to register the pesticide under a companion law, the Federal Insecticide, Fungicide, and Rodenticide Act. The Registration Division of the Office of Pesticide Programs should be contacted concerning procedures for registration of new uses of a pesticide.

[60 FR 26635, May 17, 1995, as amended at 70 FR 33363, June 8, 2005; 72 FR 69155, Dec. 7, 2007; 75 FR 56014, Sept. 15, 2010; 81 FR 26476, May 3, 2016]

[↑ Back to Top](#)

#### §180.41 Crop group tables.

(a) The tables in this section are to be used in conjunction with §180.40 to establish crop group tolerances.

(b) Commodities not listed are not considered as included in the groups for the purposes of paragraph (b), and individual tolerances must be established. Miscellaneous commodities intentionally not included in any group include globe artichoke, hops, peanut, and water chestnut.

(c) Each group is identified by a group name and consists of a list of representative commodities followed by a list of all commodity members for the group. If the group includes subgroups, each subgroup lists the subgroup name, the representative commodity or commodities, and the member commodities for the subgroup. Subgroups, which are a subset of their associated crop group, are established for some but not all crops groups.

(1) *Crop Group 1: Root and Tuber Vegetables Group.*

(i) *Representative commodities.* Carrot, potato, radish, and sugar beet.

(ii) *Table.* The following table 1 lists all the commodities included in Crop Group 1 and identifies the related crop subgroups.

**TABLE 1—CROP GROUP 1: ROOT AND TUBER VEGETABLES**

Commodities	Related crop subgroups
Arracacha ( <i>Arracacia xanthorrhiza</i> )	1C, 1D
Arrowroot ( <i>Maranta arundinacea</i> )	1C, 1D
Artichoke, Chinese ( <i>Stachys affinis</i> )	1C, 1D
Artichoke, Jerusalem ( <i>Helianthus tuberosus</i> )	1C, 1D
Beet, garden ( <i>Beta vulgaris</i> )	1A, 1B
Beet, sugar ( <i>Beta vulgaris</i> )	1A
Burdock, edible ( <i>Arctium lappa</i> )	1A, 1B

Canna, edible (Queensland arrowroot) ( <i>Canna indica</i> )	1C, 1D
Carrot ( <i>Daucus carota</i> )	1A, 1B
Cassava, bitter and sweet ( <i>Manihot esculenta</i> )	1C, 1D
Celeriac (celery root) ( <i>Apium graveolens</i> var. <i>rapaceum</i> )	1A, 1B
Chayote (root) ( <i>Sechium edule</i> )	1C, 1D
Chervil, turnip-rooted ( <i>Chaerophyllum bulbosum</i> )	1A, 1B
Chicory ( <i>Cichorium intybus</i> )	1A, 1B
Chufa ( <i>Cyperus esculentus</i> )	1C, 1D
Dasheen (taro) ( <i>Colocasia esculenta</i> )	1C, 1D
Ginger ( <i>Zingiber officinale</i> )	1C, 1D
Ginseng ( <i>Panax quinquefolius</i> )	1A, 1B
Horseradish ( <i>Armoracia rusticana</i> )	1A, 1B
Leren ( <i>Calathea allouia</i> )	1C, 1D
Parsley, turnip-rooted ( <i>Petroselinum crispum</i> var. <i>tuberosum</i> )	1A, 1B
Parsnip ( <i>Pastinaca sativa</i> )	1A, 1B
Potato ( <i>Solanum tuberosum</i> )	1C
Radish ( <i>Raphanus sativus</i> )	1A, 1B
Radish, oriental (daikon) ( <i>Raphanus sativus</i> subvar. <i>longipinnatus</i> )	1A, 1B
Rutabaga ( <i>Brassica campestris</i> var. <i>napobrassica</i> )	1A, 1B
Salsify (oyster plant) ( <i>Tragopogon porrifolius</i> )	1A, 1B
Salsify, black ( <i>Scorzonera hispanica</i> )	1A, 1B
Salsify, Spanish ( <i>Scolymus hispanicus</i> )	1A, 1B
Skirret ( <i>Sium sisarum</i> )	1A, 1B
Sweet potato ( <i>Ipomoea batatas</i> )	1C, 1D
Tanier (cocoyam) ( <i>Xanthosoma sagittifolium</i> )	1C, 1D
Turmeric ( <i>Curcuma longa</i> )	1C, 1D
Turnip ( <i>Brassica rapa</i> var. <i>rapa</i> )	1A, 1B
Yam bean (jicama, manioc pea) ( <i>Pachyrhizus</i> spp.)	1C, 1D
Yam, true ( <i>Dioscorea</i> spp.)	1C, 1D

(iii) *Table*. The following table 2 identifies the crop subgroups for Crop Group 1, specifies the representative commodity(ies) for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 1 SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 1A.</b> Root vegetables subgroup.	
Carrot, radish, and sugar beet.	Beet, garden; beet, sugar; burdock, edible; carrot; celeriac; chervil, turnip-rooted; chicory; ginseng; horseradish; parsley, turnip-rooted; parsnip; radish; radish, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret; turnip.
<b>Crop Subgroup 1B.</b> Root vegetables (except sugar beet) subgroup.	
Carrot and radish.	Beet, garden; burdock, edible; carrot; celeriac; chervil, turnip-rooted; chicory; ginseng; horseradish; parsley, turnip-rooted; parsnip; radish; radish, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret; turnip.
<b>Crop Subgroup 1C.</b> Tuberous and corm vegetables subgroup.	
Potato.	Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava, bitter and sweet; chayote (root); chufa; dasheen; ginger; leren; potato; sweet potato; tanier; turmeric; yam bean; yam, true.
<b>Crop Subgroup 1D.</b> Tuberous and corm vegetables (except potato) subgroup.	
Sweet potato.	Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava, bitter and sweet; chayote (root); chufa; dasheen; ginger; leren; sweet potato; tanier; turmeric; yam bean; yam, true.

(2) *Crop Group 2.* Leaves of Root and Tuber Vegetables (Human Food or Animal Feed) Group (Human Food or Animal Feed) Group.

(i) *Representative commodities.* Turnip and garden beet or sugar beet.

(ii) *Commodities.* The following is a list of all the commodities included in Crop Group 2:

**CROP GROUP 2: LEAVES OF ROOT AND TUBER VEGETABLES (HUMAN FOOD OR ANIMAL FEED) GROUP—COMMODITIES**

Beet, garden (*Beta vulgaris*)

Beet, sugar (*Beta vulgaris*)

Burdock, edible (*Arctium lappa*)

Carrot (*Daucus carota*)

Cassava, bitter and sweet (*Manihot esculenta*)

Celeriac (celery root) (*Apium graveolens* var. *rapaceum*)

Chervil, turnip-rooted (*Chaerophyllum bulbosum*)

Chicory (*Cichorium intybus*)  
 Dasheen (taro) (*Colocasia esculenta*)  
 Parsnip (*Pastinaca sativa*)  
 Radish (*Raphanus sativus*)  
 Radish, oriental (daikon) (*Raphanus sativus* subvar. *longipinnatus*)  
 Rutabaga (*Brassica campestris* var. *napobrassica*)  
 Salsify, black (*Scorzonera hispanica*)  
 Sweet potato (*Ipomoea batatas*)  
 Tanier (cocoyam) (*Xanthosoma sagittifolium*)  
 Turnip (*Brassica rapa* var. *rapa*)  
 Yam, true (*Dioscorea* spp.)

(3) *Crop Group 3. Bulb Vegetables (Allium spp.) Group.*

(i) *Representative commodities.* Onion, green; and onion, dry bulb.

(ii) *Commodities.* The following is a list of all the commodities in Crop Group 3.

### CROP GROUP 3: BULB VEGETABLE (*ALLIUM* SPP.) GROUP—COMMODITIES

Garlic, bulb ( <i>Allium sativum</i> )
Garlic, great headed, (elephant) ( <i>Allium ampeloprasum</i> var. <i>ampeloprasum</i> )
Leek ( <i>Allium ampeloprasum</i> , <i>A. porrum</i> , <i>A. tricoccum</i> )
Onion, dry bulb and green ( <i>Allium cepa</i> , <i>A. fistulosum</i> )
Onion, Welsh, ( <i>Allium fistulosum</i> )
Shallot ( <i>Allium cepa</i> var. <i>cepa</i> )

(4) *Crop Group 3-07. Bulb Vegetable Group.*

(i) *Representative Commodities.* Onion, bulb and onion, green.

(ii) *Table.* The following Table 1 lists all the commodities listed in Crop Group 3-07 and identifies the related crop subgroups.

**TABLE 1—CROP GROUP 3-07: BULB VEGETABLE GROUP**

Commodities	Related crop subgroups
Chive, fresh leaves ( <i>Allium schoenoprasum</i> L.)	3-07B
Chive, Chinese, fresh leaves ( <i>Allium tuberosum</i> Rottler ex Spreng)	3-07B
Daylily, bulb ( <i>Hemerocallis fulva</i> (L.) L. var. <i>fulva</i> )	3-07A
Elegans hosta ( <i>Hosta Sieboldiana</i> (Hook.) Engl)	3-07B
Fritillaria, bulb ( <i>Fritillaria</i> L. <i>fritillary</i> )	3-07A
Fritillaria, leaves ( <i>Fritillaria</i> L. <i>fritillary</i> )	3-07B
Garlic, bulb ( <i>Allium sativum</i> L. var. <i>sativum</i> ) ( <i>A. sativum</i> Common Garlic Group)	3-07A
Garlic, great headed, bulb ( <i>Allium ampeloprasum</i> L. var. <i>ampeloprasum</i> ) ( <i>A. ampeloprasum</i> Great Headed Garlic Group)	3-07A
Garlic, Serpent, bulb ( <i>Allium sativum</i> var. <i>ophioscorodon</i> or <i>A. sativum</i> Ophioscorodon Group)	3-07A
Kurrat ( <i>Allium kurrat</i> Schweinf. Ex. K. Krause or <i>A. ampeloprasum</i> Kurrat Group)	3-07B
Lady's leek ( <i>Allium cernuum</i> Roth)	3-07B
Leek <i>Allium porrum</i> L. (syn: <i>A. ampeloprasum</i> L. var. <i>porrum</i> (L.) J. Gay) ( <i>A. ampeloprasum</i> Leek Group)	3-07B
Leek, wild ( <i>Allium tricoccum</i> Aiton)	3-07B
Lily, bulb ( <i>Lilium</i> spp. ( <i>Lilium Leichtlinii</i> var. <i>maximowiczii</i> , <i>Lilium lancifolium</i> ))	3-07A
Onion, Beltsville bunching ( <i>Allium x proliferum</i> (Moench) Schrad.) (syn: <i>Allium fistulosum</i> L. x <i>A. cepa</i> L.)	3-07B
Onion, bulb ( <i>Allium cepa</i> L. var. <i>cepa</i> ) ( <i>A. cepa</i> Common Onion Group)	3-07A
Onion, Chinese, bulb ( <i>Allium chinense</i> G. Don.) (syn: <i>A. bakeri</i> Regel)	3-07A
Onion, fresh ( <i>Allium fistulosum</i> L. var. <i>caespitosum</i> Makino)	3-07B
Onion, green ( <i>Allium cepa</i> L. var. <i>cepa</i> ) ( <i>A. cepa</i> Common Onion Group)	3-07B
Onion, macrostem ( <i>Allium macrostemom</i> Bunge)	3-07B
Onion, pearl ( <i>Allium porrum</i> var. <i>sectivum</i> or <i>A. ampeloprasum</i> Pearl Onion Group)	3-07A
Onion, potato, bulb ( <i>Allium cepa</i> L. var. <i>aggregatum</i> G. Don.) ( <i>A. cepa</i> Aggregatum Group)	3-07A
Onion, tree, tops ( <i>Allium x proliferum</i> (Moench) Schrad. ex Willd.) (syn: <i>A. cepa</i> var. <i>proliferum</i> (Moench) Regel; <i>A. cepa</i> L. var. <i>bulbiferum</i> L.H. Bailey; <i>A. cepa</i> L. var. <i>viviparum</i> (Metz.) Alef.)	3-07B
Onion, Welsh, tops ( <i>Allium fistulosum</i> L.)	3-07B
Shallot, bulb ( <i>Allium cepa</i> var. <i>aggregatum</i> G. Don.)	3-07A
Shallot, fresh leaves ( <i>Allium cepa</i> var. <i>aggregatum</i> G. Don.)	3-07B

Cultivars, varieties, and/or hybrids of these.	
--	--

(iii) *Table*. The following Table 2 identifies the crop subgroups for Crop Group 3-07, specifies the representative commodities for each subgroup and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 3-07: SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop subgroup 3-07A.</b> Onion, bulb, subgroup. Onion, bulb.	Daylily, bulb; fritillaria, bulb; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; lily, bulb; onion, bulb; onion, Chinese, bulb; onion, pearl; onion, potato, bulb; shallot, bulb; cultivars, varieties, and/or hybrids of these.
<b>Crop subgroup 3-07B.</b> Onion, green, subgroup. Onion, green.	Chive, fresh leaves; chive, Chinese, fresh leaves; elegans hosta; fritillaria, leaves; kurrat; lady's leek; leek; leek, wild; Onion, Beltsville bunching; onion, fresh; onion, green; onion, macrostem; onion, tree, tops; onion, Welsh, tops; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these.

(5) *Crop Group 4.* Leafy Vegetables (Except *Brassica* Vegetables) Group.

(i) *Representative commodities.* Celery, head lettuce, leaf lettuce, and spinach (*Spinacia oleracea*).

(ii) *Table*. The following table 1 lists all the commodities included in Crop Group 4 and identifies the related crop subgroups.

**TABLE 1—CROP GROUP 4: LEAFY VEGETABLES (EXCEPT BRASSICA VEGETABLES) GROUP**

Commodities	Related crop subgroups
Amaranth (leafy amaranth, Chinese spinach, tampala) ( <i>Amaranthus</i> spp.)	4A
Arugula (Roquette) ( <i>Eruca sativa</i> )	4A
Cardoon ( <i>Cynara cardunculus</i> )	4B
Celery ( <i>Apium graveolens</i> var. <i>dulce</i> )	4B
Celery, Chinese ( <i>Apium graveolens</i> var. <i>secalinum</i> )	4B
Celtuce ( <i>Lactuca sativa</i> var. <i>angustana</i> )	4B
Chervil ( <i>Anthriscus cerefolium</i> )	4A
Chrysanthemum, edible-leaved ( <i>Chrysanthemum coronarium</i> var. <i>coronarium</i> )	4A
Chrysanthemum, garland ( <i>Chrysanthemum coronarium</i> var. <i>spatosum</i> )	4A
Corn salad ( <i>Valerianella locusta</i> )	4A
Cress, garden ( <i>Lepidium sativum</i> )	4A
Cress, upland (yellow rocket, winter cress) ( <i>Barbarea vulgaris</i> )	4A
Dandelion ( <i>Taraxacum officinale</i> )	4A
Dock (sorrel) ( <i>Rumex</i> spp.)	4A
Endive (escarole) ( <i>Cichorium endivia</i> )	4A
Fennel, Florence (finocchio) ( <i>Foeniculum vulgare</i> Azoricum Group)	4B
Lettuce, head and leaf ( <i>Lactuca sativa</i> )	4A
Orach ( <i>Atriplex hortensis</i> )	4A
Parsley ( <i>Petroselinum crispum</i> )	4A
Purslane, garden ( <i>Portulaca oleracea</i> )	4A
Purslane, winter ( <i>Montia perfoliata</i> )	4A
Radicchio (red chicory) ( <i>Cichorium intybus</i> )	4A
Rhubarb ( <i>Rheum rhabarbarum</i> )	4B
Spinach ( <i>Spinacia oleracea</i> )	4A
Spinach, New Zealand ( <i>Tetragonia tetragonioides</i> , <i>T. expansa</i> )	4A
Spinach, vine (Malabar spinach, Indian spinach) ( <i>Basella alba</i> )	4A
Swiss chard ( <i>Beta vulgaris</i> var. <i>cicla</i> )	4B

(iii) *Table*. The following table 2 identifies the crop subgroups for Crop Group 4, specifies the representative commodities for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 4 SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 4A.</b> Leafy greens subgroup.	
Head lettuce and leaf lettuce, and spinach ( <i>Spinacia oleracea</i> )	Amaranth; arugula; chervil; chrysanthemum, edible-leaved; chrysanthemum, garland; corn salad; cress, garden; cress, upland; dandelion; dock; endive; lettuce; orach; parsley; purslane, garden; purslane, winter; radicchio (red chicory); spinach; spinach, New Zealand; spinach, vine.
<b>Crop Subgroup 4B.</b> Leaf petioles subgroup.	
Celery.	Cardoon; celery; celery, Chinese; celtuce; fennel, Florence; rhubarb; Swiss chard.

## (6) Crop Group 4-16. Leafy Vegetable Group.

(i) *Representative commodities*. Head lettuce, leaf lettuce, mustard greens, and spinach.(ii) *Commodities*. The following Table 1 lists all commodities included in Crop Group 4-16.**TABLE 1—CROP GROUP 4-16: LEAFY VEGETABLE GROUP**

Commodities	Related crop subgroups
Amaranth, Chinese ( <i>Amaranthus tricolor</i> L.)	4-16A
Amaranth, leafy ( <i>Amaranthus</i> spp.)	4-16A
Arugula ( <i>Eruca sativa</i> Mill.)	4-16B
Aster, Indian ( <i>Kalimeris indica</i> (L.) Sch. Bip.)	4-16A
Blackjack ( <i>Bidens pilosa</i> L.)	4-16A
Broccoli, Chinese ( <i>Brassica oleracea</i> var. <i>alboglabra</i> (L.H. Bailey) Musil)	4-16B
Broccoli raab ( <i>Brassica ruvo</i> L.H. Bailey)	4-16B
Cabbage, abyssinian ( <i>Brassica carinata</i> A. Braun)	4-16B
Cabbage, Chinese, bok choy ( <i>Brassica rapa</i> subsp. <i>chinensis</i> (L.) Hanelt)	4-16B
Cabbage, seakale ( <i>Brassica oleracea</i> L. var. <i>costata</i> DC.)	4-16B
Cat's whiskers ( <i>Cleome gynandra</i> L.)	4-16A
Cham-chwi ( <i>Doellingeria scabra</i> (Thunb.) Nees)	4-16A
Cham-na-mul ( <i>Pimpinella calycina</i> Maxim)	4-16A
Chervil, fresh leaves ( <i>Anthriscus cerefolium</i> (L.) Hoffm.)	4-16A
Chipilin ( <i>Crotalaria longirostrata</i> Hook & Arn)	4-16A
Chrysanthemum, garland ( <i>Glebionis coronaria</i> (L.) Cass. ex Spach. <i>Glebionis</i> spp.)	4-16A
Cilantro, fresh leaves ( <i>Coriandrum sativum</i> L.)	4-16A
Collards ( <i>Brassica oleracea</i> L. var. <i>viridis</i> L.)	4-16B
Corn salad ( <i>Valerianella</i> spp.)	4-16A
Cosmos ( <i>Cosmos caudatus</i> Kunth)	4-16A
Cress, garden ( <i>Lepidium sativum</i> L.)	4-16B
Cress, upland ( <i>Barbarea vulgaris</i> W.T. Aiton)	4-16B
Dandelion, leaves ( <i>Taraxacum officinale</i> F.H. Wigg. Aggr.)	4-16A
Dang-gwi, leaves ( <i>Angelica gigas</i> Nakai)	4-16A
Dillweed ( <i>Anethum graveolens</i> L.)	4-16A
Dock ( <i>Rumex patientia</i> L.)	4-16A
Dol-nam-mul ( <i>Sedum sarmentosum</i> Bunge)	4-16A
Ebolo ( <i>Crassocephalum crepidioides</i> (Benth.) S. Moore)	4-16A
Endive ( <i>Cichorium endivia</i> L.)	4-16A
Escarole ( <i>Cichorium endivia</i> L.)	4-16A
Fameflower ( <i>Talinum fruticosum</i> (L.) Juss.)	4-16A
Feather cockscomb ( <i>Glinus oppositifolius</i> (L.) Aug. DC.)	4-16A
Good King Henry ( <i>Chenopodium bonus-henricus</i> L.)	4-16A
Hanover salad ( <i>Brassica napus</i> var. <i>pabularia</i> (DC.) Rchb.)	4-16B
Huauzontle ( <i>Chenopodium berlandieri</i> Moq.)	4-16A
Jute, leaves ( <i>Corchorus</i> spp.)	4-16A
Kale ( <i>Brassica oleracea</i> L. var. <i>Sabellica</i> L.)	4-16B
Lettuce, bitter ( <i>Launaea cornuta</i> (Hochst. ex Oliv. & Hiern) C. Jeffrey)	4-16A
Lettuce, head ( <i>Lactuca sativa</i> L.; including <i>Lactuca sativa</i> var. <i>capitata</i> L.)	4-16A
Lettuce, leaf ( <i>Lactuca sativa</i> L.; including <i>Lactuca sativa</i> var. <i>longifolia</i> Lam.; <i>Lactuca sativa</i> var. <i>crispa</i> L.)	4-16A
Maca, leaves ( <i>Lepidium meyenii</i> Walp.)	4-16B
Mizuna ( <i>Brassica rapa</i> L. subsp. <i>nipposinica</i> (L.H. Bailey) Hanelt)	4-16B
Mustard greens ( <i>Brassica juncea</i> subsp., including <i>Brassica juncea</i> (L.) Czern. subsp. <i>integrifolia</i> (H. West) Thell., <i>Brassica juncea</i> (L.) Czern. var. <i>tsatsai</i> (T.L. Mao) Gladis)	4-16B
Orach ( <i>Atriplex hortensis</i> L.)	4-16A
Parsley, fresh leaves ( <i>Petroselinum crispum</i> (Mill.) Fuss; <i>Petroselinum crispum</i> var. <i>neapolitanum</i> Danert)	4-16A
Plantain, buckthorn ( <i>Plantago lanceolata</i> L.)	4-16A
Primrose, English ( <i>Primula vulgaris</i> Huds.)	4-16A
Purslane, garden ( <i>Portulaca oleracea</i> L.)	4-16A
Purslane, winter ( <i>Claytonia perfoliata</i> Donn ex Willd.)	4-16A
Radicchio ( <i>Cichorium intybus</i> L.)	4-16A
Radish, leaves ( <i>Raphanus sativus</i> L. var. <i>sativus</i> , including <i>Raphanus sativus</i> L. var. <i>mougrii</i> H. W. J. Helm ( <i>Raphanus sativus</i> L. var. <i>oleiformis</i> Pers)	4-16B
Rape greens ( <i>Brassica napus</i> L. var. <i>napus</i> , including <i>Brassica rapa</i> subsp. <i>trilocularis</i> (Roxb.) Hanelt; <i>Brassica rapa</i> subsp. <i>dichotoma</i> (Roxb.) Hanelt; <i>Brassica rapa</i> subsp. <i>oleifera</i> Met)	4-16B
Rocket, wild ( <i>Diptaxis tenuifolia</i> (L.) DC.)	4-16B
Shepherd's purse ( <i>Capsella bursa-pastoris</i> (L.) Medik)	4-16B
Spinach ( <i>Spinacia oleracea</i> L.)	4-16A
Spinach, Malabar ( <i>Basella alba</i> L.)	4-16A
Spinach, New Zealand ( <i>Tetragonia tetragonioides</i> (Pall.) Kuntze)	4-16A
Spinach, tanier ( <i>Xanthosoma brasiliense</i> (Desf.) Engl.)	4-16A
Swiss chard ( <i>Beta vulgaris</i> L. ssp. <i>vulgaris</i> )	4-16A

Turnip greens ( <i>Brassica rapa</i> L. ssp. <i>rapa</i> )	4-16B
Violet, Chinese, leaves ( <i>Asystasia gangetica</i> (L.) T. Anderson)	4-16A
Watercress ( <i>Nasturtium officinale</i> W.T. Aiton)	4-16B
Cultivars, varieties, and hybrids of these commodities	

(iii) *Crop subgroups*. The following Table 2 identifies the crop subgroups for Crop Group 4-16, specifies the representative commodities for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 4-16: SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 4-16A. Leafy greens subgroup</b>	
Head lettuce, leaf lettuce, and spinach	Amaranth, Chinese; amaranth, leafy; aster, Indian; blackjack; cat's whiskers; cham-chwi; cham-na-mul; chervil, fresh leaves; chipilin; chrysanthemum, garland; cilantro, fresh leaves; corn salad; cosmos; dandelion, leaves; dang-gwi, leaves; dillweed; dock; dol-nam-mul; ebolo; endive; escarole; farnflower; feather cockscomb; Good King Henry; huauzontle; jute, leaves; lettuce, bitter; lettuce, head; lettuce, leaf; orach; parsley, fresh leaves; plantain, buckhorn; primrose, English; purslane, garden; purslane, winter; radicchio; spinach; spinach, Malabar; spinach, New Zealand; spinach, tanier; Swiss chard; violet, Chinese, leaves; cultivars, varieties, and hybrids of these commodities.
<b>Crop Subgroup 4-16B. <i>Brassica</i> leafy greens subgroup</b>	
Mustard greens	Arugula; broccoli, Chinese; broccoli raab; cabbage, abyssinian; cabbage, Chinese, bok choy; cabbage, seakale; collards; cress, garden; cress, upland; hanover salad; kale; maca, leaves; mizuna; mustard greens; radish, leaves; rape greens; rocket, wild; shepherd's purse; turnip greens; watercress; cultivars, varieties, and hybrids of these commodities.

(7) *Crop Group 5. Brassica (Cole) Leafy Vegetables Group*.

(i) *Representative commodities*. Broccoli or cauliflower; cabbage; and mustard greens.

(ii) *Table*. The following table 1 lists all the commodities included in Crop Group 5 and identifies the related crop subgroups.

**TABLE 1—CROP GROUP 5: BRASSICA (COLE) LEAFY VEGETABLES**

Commodities	Related crop subgroups
Broccoli ( <i>Brassica oleracea</i> var. <i>botrytis</i> )	5A
Broccoli, Chinese (gai lon) ( <i>Brassica alboglabra</i> )	5A
Broccoli raab (rapini) ( <i>Brassica campestris</i> )	5B
Brussels sprouts ( <i>Brassica oleracea</i> var. <i>gemmifera</i> )	5A
Cabbage ( <i>Brassica oleracea</i> )	5A
Cabbage, Chinese (bok choy) ( <i>Brassica chinensis</i> )	5B
Cabbage, Chinese (napa) ( <i>Brassica pekinensis</i> )	5A
Cabbage, Chinese mustard (gai choy) ( <i>Brassica campestris</i> )	5A
Cauliflower ( <i>Brassica oleracea</i> var. <i>botrytis</i> )	5A
Cavalo broccolo ( <i>Brassica oleracea</i> var. <i>botrytis</i> )	5A
Collards ( <i>Brassica oleracea</i> var. <i>acephala</i> )	5B
Kale ( <i>Brassica oleracea</i> var. <i>acephala</i> )	5B
Kohlrabi ( <i>Brassica oleracea</i> var. <i>gongylodes</i> )	5A
Mizuna ( <i>Brassica rapa</i> Japonica Group)	5B
Mustard greens ( <i>Brassica juncea</i> )	5B
Mustard spinach ( <i>Brassica rapa</i> Perviridis Group)	5B
Rape greens ( <i>Brassica napus</i> )	5B

(iii) *Table*. The following table 2 identifies the crop subgroups for Crop Group 5, specifies the representative commodity(ies) for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 5 SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 5A. Head and stem <i>Brassica</i> subgroup</b>	
Broccoli or cauliflower; and cabbage	Broccoli; broccoli, Chinese; brussels sprouts; cabbage; cabbage, Chinese (napa); cabbage, Chinese mustard; cauliflower; cavalo broccolo; kohlrabi
<b>Crop Subgroup 5B. Leafy <i>Brassica</i> greens subgroup.</b>	
Mustard greens	Broccoli raab; cabbage, Chinese (bok choy); collards; kale; mizuna; mustard greens; mustard spinach; rape greens

(8) *Crop Group 5-16. Brassica Head and Stem Vegetable Group*.

(i) *Representative commodities*. Broccoli or cauliflower and cabbage.

(ii) *Commodities*. The following List 1 contains all commodities included in Crop Group 5-16.

**LIST 1—CROP GROUP 5-16: BRASSICA HEAD AND STEM VEGETABLE GROUP**



<b>Commodities</b>	
Broccoli ( <i>Brassica oleracea</i> L. var. <i>italica</i> Plenck)	
Brussels sprouts ( <i>Brassica oleracea</i> L. var. <i>gemmifera</i> (DC.) Zenker)	
Cabbage ( <i>Brassica oleracea</i> L. var. <i>capitata</i> L.)	
Cabbage, Chinese, napa ( <i>Brassica rapa</i> L. subsp. <i>pekinensis</i> (Lour.) Hanelt)	
Cauliflower ( <i>Brassica oleracea</i> L. var. <i>capitata</i> L.)	
Cultivars, varieties, and hybrids of these commodities.	

(9) *Crop Group 6*. Legume Vegetables (Succulent or Dried) Group.

(i) *Representative commodities*. Bean (*Phaseolus* spp.; one succulent cultivar and one dried cultivar); pea (*Pisum* spp.; one succulent cultivar and one dried cultivar); and soybean.

(ii) *Table*. The following table 1 lists all the commodities included in Crop Group 6 and identifies the related crop subgroups.

**TABLE 1—CROP GROUP 6: LEGUME VEGETABLES (SUCCULENT OR DRIED)**

Commodities	Related crop subgroups
Bean ( <i>Lupinus</i> spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin)	6C
Bean ( <i>Phaseolus</i> spp.) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)	6A, 6B, 6C
Bean ( <i>Vigna</i> spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean)	6A, 6B, 6C
Broad bean (fava bean) ( <i>Vicia faba</i> )	6B, 6C
Chickpea (garbanzo bean) ( <i>Cicer arietinum</i> )	6C
Guar ( <i>Cyamopsis tetragonoloba</i> )	6C
Jackbean ( <i>Canavalia ensiformis</i> )	6A
Lablab bean (hyacinth bean) ( <i>Lablab purpureus</i> )	6C
Lentil ( <i>Lens esculenta</i> )	6C
Pea ( <i>Pisum</i> spp.) (includes dwarf pea, edible-pod pea, En glish pea, field pea, garden pea, green pea, snow pea, sugar snap pea)	6A, 6B, 6C
Pigeon pea ( <i>Cajanus cajan</i> )	6A, 6B, 6C
Soybean ( <i>Glycine max</i> )	N/A
Soybean (immature seed) ( <i>Glycine max</i> )	6A
Sword bean ( <i>Canavalia gladiata</i> )	6A

(iii) *Table*. The following table 2 identifies the crop subgroups for Crop Group 6, specifies the representative commodities for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 6 SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 6A.</b> Edible-podded legume vegetables subgroup.	
Any one succulent cultivar of edible-podded bean ( <i>Phaseolus</i> spp.) and any one succulent cultivar of edible-podded pea ( <i>Pisum</i> spp.).	Bean ( <i>Phaseolus</i> spp.) (includes runner bean, snap bean, wax bean); bean ( <i>Vigna</i> spp.) (includes asparagus bean, Chinese longbean, moth bean, yardlong bean); jackbean; pea ( <i>Pisum</i> spp.) (includes dwarf pea, edible-pod pea, snow pea, sugar snap pea); pigeon pea; soybean (immature seed); sword bean.
<b>Crop Subgroup 6B.</b> Succulent shelled pea and bean subgroup.	
Any succulent shelled cultivar of bean ( <i>Phaseolus</i> spp.) and garden pea ( <i>Pisum</i> spp.).	Bean ( <i>Phaseolus</i> spp.) (includes lima bean (green)); broad bean (succulent); bean ( <i>Vigna</i> spp.) (includes blackeyed pea, cowpea, southern pea); pea ( <i>Pisum</i> spp.) (includes English pea, garden pea, green pea); pigeon pea.
<b>Crop Subgroup 6C.</b> Dried shelled pea and bean (except soybean) subgroup.	
Any one dried cultivar of bean ( <i>Phaseolus</i> spp.); and any one dried cultivar of pea ( <i>Pisum</i> spp.).	Dried cultivars of bean ( <i>Lupinus</i> spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); ( <i>Phaseolus</i> spp.) (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean; tepary bean; bean ( <i>Vigna</i> spp.) (includes adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean); broad bean (dry); chickpea; guar; lablab bean; lentil; pea ( <i>Pisum</i> spp.) (includes field pea); pigeon pea.

(10) *Crop Group 7*. Foliage of Legume Vegetables Group.

(i) *Representative commodities*. Any cultivar of bean (*Phaseolus* spp.), field pea (*Pisum* spp.), and soybean.

(ii) *Table*. The following table 1 lists the commodities included in Crop Group 7.

**TABLE 1—CROP GROUP 7: FOLIAGE OF LEGUME VEGETABLES GROUP**

Representative commodities	Commodities
Any cultivar of bean ( <i>Phaseolus</i> spp.) and field pea ( <i>Pisum</i> spp.), and	Plant parts of any legume vegetable included in the legume vegetables that will be

soybean (*Glycine max*)

used as animal feed.

(iii) *Table*. The following table 2 identifies the crop subgroup for Crop Group 7 and specifies the representative commodities for the subgroup, and lists all the commodities included in the subgroup.

**TABLE 2—CROP GROUP 7 SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 7A.</b> Foliage of legume vegetables (except soybeans) subgroup	
Any cultivar of bean ( <i>Phaseolus</i> spp.), and field pea ( <i>Pisum</i> spp.)	Plant parts of any legume vegetable (except soybeans) included in the legume vegetables group that will be used as animal feed.

(11) *Crop Group 8.* Fruiting Vegetables Group.

(i) *Representative commodities.* Tomato, bell pepper, and one cultivar of non-bell pepper.

(ii) *Commodities.* The following is a list of all the commodities included in Crop Group 8:

**CROP GROUP 8: FRUITING VEGETABLES (EXCEPT CUCURBITS)—COMMODITIES**Eggplant (*Solanum melongena*)Groundcherry (*Physalis* spp.)Pepino (*Solanum muricatum*)Pepper (*Capsicum* spp.) (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper)Tomatillo (*Physalis ixocarpa*)Tomato (*Lycopersicon esculentum*)

(12) *Crop Group 8-10.* Fruiting Vegetable Group.

(i) *Representative commodities.* Tomato, standard size, and one cultivar of small tomato; bell pepper and one cultivar of small nonbell pepper.

(ii) *Commodities.* The following is a list of all commodities included in the Crop group 8-10.

**TABLE 1—CROP GROUP 8-10: FRUITING VEGETABLE GROUP**

Commodities	Related crop subgroups
African eggplant, <i>Solanum macrocarpon</i> L	8-10B, 8-10C
Bush tomato, <i>Solanum centrale</i> J.M. Black	8-10A
Cocona, <i>Solanum sessiliflorum</i> Dunal	8-10A
Currant tomato, <i>Lycopersicon pimpinellifolium</i> L	8-10A
Eggplant, <i>Solanum melongena</i> L	8-10B, 8-10C
Garden huckleberry, <i>Solanum scabrum</i> Mill	8-10A
Goji berry, <i>Lycium barbarum</i> L	8-10A
Groundcherry, <i>Physalis alkekengi</i> L., <i>P. grisea</i> (Waterf.) M. Martinez, <i>P. peruviana</i> L., <i>P. pubescens</i> L	8-10A
Martynia, <i>Probooscidea louisianica</i> (Mill.) Thell	8-10B, 8-10C
Naranjilla, <i>Solanum quitoense</i> Lam	8-10A
Okra, <i>Abelmoschus esculentus</i> (L.) Moench	8-10B, 8-10C
Pea eggplant, <i>Solanum torvum</i> Sw.	8-10B, 8-10C
Pepino, <i>Solanum muricatum</i> Aiton	8-10B, 8-10C
Pepper, bell, <i>Capsicum annuum</i> L. var. <i>annuum</i> , <i>Capsicum</i> spp	8-10B
Pepper, nonbell, <i>Capsicum chinese</i> Jacq., <i>C. annuum</i> L. var. <i>annuum</i> , <i>C. frutescens</i> L., <i>C. baccatum</i> L., <i>C. pubescens</i> Ruiz & Pav., <i>Capsicum</i> spp	8-10B, 8-10C
Roselle, <i>Hibiscus sabdariffa</i> L	8-10B, 8-10C
Scarlet eggplant, <i>Solanum aethiopicum</i> L	8-10B, 8-10C
Sunberry, <i>Solanum retroflexum</i> Dunal	8-10A
Tomatillo, <i>Physalis philadelphica</i> Lam	8-10A
Tomato, <i>Solanum lycopersicum</i> L., <i>Solanum lycopersicum</i> L. var. <i>lycopersicum</i>	8-10A
Tree tomato, <i>Solanum betaceum</i> Cav	8-10A
Cultivars, varieties and/or hybrids of these	

(iii) *Table*. The following Table 2 identifies the crop subgroups for Crop Group 8-10, specifies the representative commodities for each subgroup and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 8-10. SUBGROUP LISTING**

Representative commodities	Commodities
Crop subgroup 8-10A. Tomato subgroup	
Tomato, standard size, and one cultivar of small tomato	Bush tomato; cocona; currant tomato; garden huckleberry; goji berry; groundcherry; naranjilla; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.
Crop subgroup 8-10B. Pepper/Eggplant subgroup	
Bell pepper and one cultivar of small nonbell pepper	African eggplant; bell pepper; eggplant; Martynia; nonbell pepper; okra; pea eggplant; pepino; roselle; scarlet eggplant; cultivars, varieties, and/or hybrids of these.
Crop subgroup 8-10C. Nonbell pepper/Eggplant subgroup	
One cultivar of small nonbell pepper or one cultivar of small eggplant	African eggplant; eggplant; martynia; nonbell pepper; okra; pea eggplant; pepino; roselle; scarlet eggplant; cultivars, varieties, and/or hybrids of these.

(13) *Crop Group 9. Cucurbit Vegetables Group.*

(i) *Representative commodities.* Cucumber, muskmelon, and summer squash.

(ii) *Table.* The following table 1 lists all the commodities included in Crop Group 9 and identifies the related subgroups.

**TABLE 1—CROP GROUP 9: CUCURBIT VEGETABLES**

Commodities	Related crop subgroups
Chayote (fruit) ( <i>Sechium edule</i> )	9B
Chinese waxgourd (Chinese preserving melon) ( <i>Benincasa hispida</i> )	9B
Citron melon ( <i>Citrullus lanatus</i> var. <i>citroides</i> )	9A
Cucumber ( <i>Cucumis sativus</i> )	9B
Gherkin ( <i>Cucumis anguria</i> )	9B
Gourd, edible ( <i>Lagenaria</i> spp.) (includes hyotan, cucuzza); ( <i>Luffa acutangula</i> , <i>L. cylindrica</i> ) (includes hechima, Chinese okra)	9B
<i>Momordica</i> spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber)	9B
Muskmelon (hybrids and/or cultivars of <i>Cucumis melo</i> ) (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon)	9A
Pumpkin ( <i>Cucurbita</i> spp.)	9B
Squash, summer ( <i>Cucurbita pepo</i> var. <i>meloepo</i> ) (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini)	9B
Squash, winter ( <i>Cucurbita maxima</i> ; <i>C. moschata</i> ) (includes butternut squash, calabaza, hubbard squash); ( <i>C. mixta</i> ; <i>C. pepo</i> ) (includes acorn squash, spaghetti squash)	9B
Watermelon (includes hybrids and/or varieties of <i>Citrullus lanatus</i> )	9A

(iii) *Table.* The following table 2 identifies the crop subgroups for Crop Group 9, specifies the representative commodities for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 9 SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 9A.</b> Melon subgroup	
Cantaloupes	Citron melon; muskmelon; watermelon
<b>Crop Subgroup 9B.</b> Squash/cucumber subgroup	
One cultivar of summer squash and cucumber.	Chayote (fruit); Chinese waxgourd; cucumber; gherkin; gourd, edible; <i>Momordica</i> spp.; pumpkin; squash, summer; squash, winter.

(14) *Crop Group 10. Citrus Fruit Group.*

(i) *Representative commodities.* Sweet orange; lemon and grapefruit.

(ii) *Commodities.* The following is a list of all the commodities in Crop Group 10:

**CROP GROUP 10: CITRUS FRUITS (CITRUS SPP., FORTUNELLA SPP.) GROUP—COMMODITIES**

Calamondin (*Citrus mitis* × *Citrofortunella mitis*)

Citrus citron (*Citrus medica*)

Citrus hybrids (*Citrus* spp.) (includes chironja, tangelo, tangor)

Grapefruit (*Citrus paradisi*)

Kumquat (*Fortunella* spp.)

Lemon (*Citrus jambhiri*, *Citrus limon*)

Lime (*Citrus aurantiifolia*)

Mandarin (tangerine) (*Citrus reticulata*)

Orange, sour (*Citrus aurantium*)

Orange, sweet (*Citrus sinensis*)

Pummelo (*Citrus grandis*, *Citrus maxima*)

Satsuma mandarin (*Citrus unshiu*)

(15) *Crop Group 10-10*. Citrus Fruit Group.

(i) *Representative commodities*. Orange or Tangerine/Mandarin, Lemon or Lime, and Grapefruit.

(ii) *Commodities*. The following is a list of all the commodities in Crop Group 10-10.

**TABLE 1—CROP GROUP 10-10: CITRUS FRUIT GROUP**

Commodities	Related crop subgroups
Australian desert lime, <i>Eremocitrus glauca</i> (Lindl.) Swingle	10-10B
Australian finger lime, <i>Microcitrus australasica</i> (F. Muell.) Swingle	10-10B
Australian round lime, <i>Microcitrus australis</i> (A. Cunn. Ex Mudie) Swingle	10-10B
Brown River finger lime, <i>Microcitrus papuana</i> Winters	10-10B
Calamondin, <i>Citrofortunella microcarpa</i> (Bunge) Wijnands	10-10A
Citron, <i>Citrus medica</i> L.	10-10A
Citrus hybrids, <i>Citrus spp.</i> , <i>Eremocitrus spp.</i> , <i>Fortunella spp.</i> , <i>Microcitrus spp.</i> , and <i>Poncirus spp.</i>	10-10A
Grapefruit, <i>Citrus paradisi</i> Macfad	10-10C
Japanese summer grapefruit, <i>Citrus natsudaidai</i> Hayata	10-10C
Kumquat, <i>Fortunella spp.</i>	10-10B
Lemon, <i>Citrus limon</i> (L.) Burm. f.	10-10B
Lime, <i>Citrus aurantiifolia</i> (Christm.) Swingle	10-10B
Mediterranean mandarin, <i>Citrus deliciosa</i> Ten	10-10A
Mount White lime, <i>Microcitrus garrowayae</i> (F.M. Bailey) Swingle	10-10B
New Guinea wild lime, <i>Microcitrus warburgiana</i> (F.M. Bailey) Tanaka	10-10B
Orange, sour, <i>Citrus aurantium</i> L.	10-10A
Orange, sweet, <i>Citrus sinensis</i> (L.) Osbeck	10-10A
Pummelo, <i>Citrus maxima</i> (Burm.) Merr	10-10C
Russell River lime, <i>Microcitrus inodora</i> (F.M. Bailey) Swingle	10-10B
Satsuma mandarin, <i>Citrus unshiu</i> Marcow	10-10A
Sweet lime, <i>Citrus limetta</i> Risso	10-10B
Tachibana orange, <i>Citrus tachibana</i> (Makino) Tanaka	10-10A
Tahiti lime, <i>Citrus latifolia</i> (Yu. Tanaka) Tanaka	10-10B
Tangelo, <i>Citrus xangelo</i> J.W. Ingram & H.E. Moore	10-10A, 10-10C
Tangerine (Mandarin), <i>Citrus reticulata</i> Blanco	10-10A
Tangor, <i>Citrus nobilis</i> Lour	10-10A
Trifoliolate orange, <i>Poncirus trifoliata</i> (L.) Raf	10-10A
Uniq fruit, <i>Citrus aurantium</i> Tangelo group	10-10C
Cultivars, varieties and/or hybrids of these	

(iii) *Table*. The following Table 2 identifies the crop subgroups for Crop Group 10-10, specifies the representative commodities for each subgroup and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 10-10: SUBGROUP LISTING**

Representative commodities	Commodities
Crop Subgroup 10-10A. Orange subgroup	
Orange or tangerine/mandarin	Calamondin; citron; citrus hybrids; mediterranean mandarin; orange, sour; orange, sweet; satsuma mandarin; tachibana orange; tangerine (mandarin); tangelo; tangor; trifoliolate orange; cultivars, varieties, and/or hybrids of these.
Crop Subgroup 10-10B. Lemon/Lime subgroup	
Lemon or lime	Australian desert lime; Australian finger lime; Australian round lime; brown river finger lime; kumquat; lemon; lime; mount white lime; New Guinea wild lime; Russell River lime; sweet lime; Tahiti lime; cultivars, varieties, and/or hybrids of these.
Crop Subgroup 10-10C. Grapefruit subgroup	
Grapefruit	Grapefruit; Japanese summer grapefruit; pummelo; tangelo; uniq fruit; cultivars, varieties, and/or hybrids of these.

(16) *Crop Group 11*: Pome Fruits Group.

(i) *Representative commodities*. Apple and pear.

(ii) *Commodities*. The following is a list of all the commodities included in Crop Group 11:

## CROP GROUP 11: POME FRUITS GROUP—COMMODITIES

Apple (*Malus domestica*)  
 Crabapple (*Malus* spp.)  
 Loquat (*Eriobotrya japonica*)  
 Mayhaw (*Crataegus aestivalis*, *C. opaca*, and *C. rufula*)  
 Pear (*Pyrus communis*)  
 Pear, oriental (*Pyrus pyrifolia*)  
 Quince (*Cydonia oblonga*)

(17) *Crop group 11-10*. Pome Fruit Group.

(i) *Representative commodities*. Apple and Pear

(ii) *Commodities*. The following is a list of all the commodities in Crop Group 11-10.

## CROP GROUP 11-10: POME FRUIT GROUP—COMMODITIES

Apple, *Malus domestica* Borkh.  
 Azarole, *Crataegus azarolus* L.  
 Crabapple, *Malus sylvestris* (L.) Mill., *M. prunifolia* (Willd.) Borkh.  
 Loquat, *Eriobotrya japonica* (Thunb.) Lindl.  
 Mayhaw, *Crataegus aestivalis* (Walter) Torr. & A. Gray, *C. opaca*  
 Hook. & Arn., and *C. rufula* Sarg.  
 Medlar, *Mespilus germanica* L.  
 Pear, *Pyrus communis* L.  
 Pear, Asian, *Pyrus pyrifolia* (Burm. f.) Nakai var. *culta* (Makino) Nakai  
*Pseudocydonia sinensis* (Thouin) C.K. Schneid.  
 Quince, *Cydonia oblonga* Mill.  
 Quince, Chinese, *Chaenomeles speciosa* (Sweet) Nakai,  
 Quince, Japanese, *Chaenomeles japonica* (Thunb.) Lindl. ex Spach  
 Tejocote, *Crataegus mexicana* DC.  
 Cultivars, varieties and/or hybrids of these.

(18) *Crop Group 12*. Stone Fruits Group.

(i) *Representative commodities*. Sweet cherry or tart cherry; peach; and plum or fresh prune (*Prunus domestica*, *Prunus* spp.)

(ii) *Commodities*. The following is a list of all the commodities included in Crop Group 12:

## CROP GROUP 12: STONE FRUITS GROUP—COMMODITIES

Apricot (*Prunus armeniaca*)  
 Cherry, sweet (*Prunus avium*),  
 Cherry, tart (*Prunus cerasus*)  
 Nectarine (*Prunus persica*)  
 Peach (*Prunus persica*)  
 Plum (*Prunus domestica*, *Prunus* spp.)  
 Plum, Chickasaw (*Prunus angustifolia*)  
 Plum, Damson (*Prunus domestica* spp. *insititia*)  
 Plum, Japanese (*Prunus salicina*)  
 Plumcot (*Prunus. armeniaca* × *P. domestica*)

Prune (fresh) (*Prunus domestica*, *Prunus* spp.)

(19) *Crop Group 12-12: Stone Fruit Group.*

(i) *Representative commodities.* Sweet cherry or Tart cherry; Peach; and Plum or Prune plum.

(ii) *Commodities.* The following Table 1 is a list of all commodities included in Crop Group 12-12.

**TABLE 1—CROP GROUP 12-12: STONE FRUIT GROUP**

Commodities	Related crop subgroup
Apricot ( <i>Prunus armeniaca</i> L.)	12-12C
Apricot, Japanese ( <i>Prunus mume</i> Siebold & Zucc.)	12-12C
Capulin ( <i>Prunus serotina</i> Ehrh. var. <i>salicifolia</i> (Kunth) Koehne)	12-12A
Cherry, black ( <i>Prunus serotina</i> Ehrh.)	12-12A
Cherry, Nanking ( <i>Prunus tomentosa</i> Thunb.)	12-12A
Cherry, sweet ( <i>Prunus avium</i> (L.) L.)	12-12A
Cherry, tart ( <i>Prunus cerasus</i> L.)	12-12A
Jujube, Chinese ( <i>Ziziphus jujuba</i> Mill.)	12-12C
Nectarine ( <i>Prunus persica</i> (L.) Batsch var. <i>nucipersica</i> (Suckow) C.K. Schneid)	12-12B
Peach ( <i>Prunus persica</i> (L.) Batsch var. <i>persica</i> )	12-12B
Plum ( <i>Prunus domestica</i> L. subsp. <i>domestica</i> )	12-12C
Plum, American ( <i>Prunus americana</i> Marshall)	12-12C
Plum, beach ( <i>Prunus maritima</i> Marshall)	12-12C
Plum, Canada ( <i>Prunus nigra</i> Aiton)	12-12C
Plum, cherry ( <i>Prunus cerasifera</i> Ehrh.)	12-12C
Plum, Chickasaw ( <i>Prunus angustifolia</i> Marshall)	12-12C
Plum, Damson ( <i>Prunus domestica</i> L. subsp. <i>insititia</i> (L.) C.K. Schneid.)	12-12C
Plum, Japanese ( <i>Prunus salicina</i> Lindl.; <i>P. salicina</i> Lindl. var. <i>salicina</i> )	12-12C
Plum, Klamath ( <i>Prunus subcordata</i> Benth.)	12-12C
Plum, prune ( <i>Prunus domestica</i> L. subsp. <i>domestica</i> )	12-12C
Plumcot ( <i>Prunus</i> hybr.)	12-12C
Sloe ( <i>Prunus spinosa</i> L.)	12-12C
Cultivars, varieties, and/or hybrids of these	

(iii) *Crop subgroups.* The following Table 2 identifies the crop subgroups for Crop Group 12-12, specifies the representative commodities for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 12-12: SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop subgroup 12-12A. Cherry subgroup</b>	
Cherry, sweet or Cherry, tart	Capulin; Cherry, black; Cherry, Nanking; Cherry, sweet; Cherry, tart; cultivars, varieties, and/or hybrids of these.
<b>Crop subgroup 12-12B. Peach subgroup</b>	
Peach	Peach; Nectarine; cultivars, varieties, and/or hybrids of these.
<b>Crop subgroup 12-12C. Plum subgroup</b>	
Plum or Prune plum	Apricot; Apricot, Japanese; Jujube, Chinese; Plum; Plum, American; Plum, beach; Plum, Canada; Plum, cherry; Plum, Chickasaw; Plum, Damson; Plum, Japanese; Plum, Klamath; Plumcot; Plum, prune; Sloe; cultivars, varieties, and/or hybrids of these.

(20) *Crop Group 13. Berries Group.*

(i) *Representative commodities.* Any one blackberry or any one raspberry; and blueberry.

(ii) *Table.* The following table 1 lists all the commodities included in Crop Group 13 and identifies the related subgroups.

**TABLE 1—CROP GROUP 13: BERRIES GROUP**

Commodities	Related crop subgroups
Blackberry ( <i>Rubus eubatus</i> ) (including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these)	13A
Blueberry ( <i>Vaccinium</i> spp.)	13B
Currant ( <i>Ribes</i> spp.)	13B
Elderberry ( <i>Sambucus</i> spp.)	13B
Gooseberry ( <i>Ribes</i> spp.)	13B
Huckleberry ( <i>Gaylussacia</i> spp.)	13B



Loganberry ( <i>Rubus loganobaccus</i> )	13A
Raspberry, black and red ( <i>Rubus occidentalis</i> , <i>Rubus strigosus</i> , <i>Rubus idaeus</i> )	13A

(iii) *Table*. The following table 2 identifies the crop subgroups for Crop Group 13, specifies the representative commodities for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 13 SUBGROUPS LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 13A.</b> Caneberry (blackberry and raspberry) subgroup.	
Any one blackberry or any one raspberry.	Blackberry; loganberry; red and black raspberry; cultivars and/or hybrids of these.
<b>Crop Subgroup 13B.</b> Bushberry subgroup.	
Blueberry, highbush.	Blueberry, highbush and lowbush; currant; elderberry; gooseberry; huckleberry.

(21) *Crop Group 13-07*. Berry and Small Fruit Crop Group

(i) *Representative commodities*. Any one blackberry or any one raspberry; highbush blueberry; elderberry or mulberry; grape; fuzzy kiwifruit, and strawberry.

(ii) *Table*. The following Table 1 lists all the commodities listed in Crop Group 13-07 and identifies the related crop subgroups.

**TABLE 1—CROP GROUP 13-07: BERRY AND SMALL FRUIT CROP GROUP**

Commodities	Related crop subgroups
Amur river grape ( <i>Vitis amurensis</i> Rupr)	13-07D, 13-07E, 13-07F
Aronia berry ( <i>Aronia</i> spp.)	13-07B
Bayberry ( <i>Myrica</i> spp.)	13-07C
Bearberry ( <i>Arctostaphylos uva-ursi</i> )	13-07G, 13-07H
Bilberry ( <i>Vaccinium myrtillus</i> L.)	13-07G, 13-07H
Blackberry ( <i>Rubus</i> spp.) (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora, and cultivars, varieties and/or hybrids of these.)	13-07A
Blueberry, highbush ( <i>Vaccinium</i> spp.)	13-07B
Blueberry, lowbush ( <i>Vaccinium angustifolium</i> Aiton)	13-07B
Buffalo currant ( <i>Ribes aureum</i> Pursh)	13-07B
Buffaloberry ( <i>Shepherdia argentea</i> (Pursh) Nutt.)	13-07C
Che ( <i>Cudrania tricuspidata</i> Bur. Ex Lavallee)	13-07C
Chilean guava ( <i>Myrtus ugni</i> Mol.)	13-07B
Chokecherry ( <i>Prunus virginiana</i> L.)	13-07C
Cloudberry ( <i>Rubus chamaemorus</i> L.)	13-07G, 13-07H
Cranberry ( <i>Vaccinium macrocarpon</i> Aiton)	13-07G, 13-07H
Currant, black ( <i>Ribes nigrum</i> L.)	13-07B
Currant, red ( <i>Ribes rubrum</i> L.)	13-07B
Elderberry ( <i>Sambucus</i> spp.)	13-07B, 13-07C
European barberry ( <i>Berberis vulgaris</i> L.)	13-07B
Gooseberry ( <i>Ribes</i> spp.)	13-07B, 13-07D, 13-07E, 13-07F
Grape ( <i>Vitis</i> spp.)	13-07D, 13-07F
Highbush cranberry ( <i>Viburnum opulus</i> L. var. <i>Americanum</i> Aiton)	13-07B
Honeysuckle, edible ( <i>Lonicera caerulea</i> L. var. <i>emphylocalyx</i> Nakai, <i>Lonicera caerulea</i> L var . <i>edulis</i> Turcz. ex herder)	13-07B
Huckleberry ( <i>Gaylussacia</i> spp.)	13-07B
Jostaberry ( <i>Ribes x nidigrolaria</i> Rud. Bauer and A. Bauer)	13-07B
Juneberry (Saskatoon berry) ( <i>Amelanchier</i> spp.)	13-07B, 13-07C
Kiwifruit, fuzzy ( <i>Actinidia deliciosa</i> A. Chev.) (C.F. Liang and A.R. Fergusons, <i>Actinida chinensis</i> Planch.)	13-07D, 13-07E
Kiwifruit, hardy ( <i>Actinidia arguta</i> (Siebold and Zucc.) Planch. ex Miq)	13-07D, 13-07E, 13-07F

Lingonberry ( <i>Vaccinium vitis-idaea</i> L.)	13-07B, 13-07G 13-07H
Maypop ( <i>Passiflora incarnata</i> L.)	13-07E, 13-07F
Mountain pepper berries ( <i>Tasmannia lanceolata</i> )(Poir.) A.C.Sm.	13-07C
Mulberry ( <i>Morus</i> spp.)	13-07C
Muntries ( <i>Kunzea pomifera</i> F. Muell.)	13-07G, 13-07H
Native currant ( <i>Acrotriche depressa</i> R. BR.)	13-07B
Partridgeberry ( <i>Mitchella repens</i> L.)	13-07G, 13-07H
Phalsa ( <i>Grewia subinaequalis</i> DC.)	13-07C
Pincherry ( <i>Prunus pennsylvanica</i> L.f.)	13-07C
Raspberry, black and red ( <i>Rubus</i> spp.)	13-07A
Riberry ( <i>Syzygium luehmannii</i> )	13-07C
Salal ( <i>Gaultheria shallon</i> Pursh.)	13-07B, 13-07C
Schisandra berry ( <i>Schisandra chinensis</i> (Turcz.) Baill.)	13-07D, 13-07E, 13-07F
Sea buckthorn ( <i>Hippophae rhamnoides</i> L.)	13-07B
Serviceberry ( <i>Sorbus</i> spp.)	13-07C
Strawberry ( <i>Fragaria x ananassa</i> Duchesne)	13-07G
Wild raspberry ( <i>Rubus muelleri</i> Lefevre ex P.J. Mull)	13-07A
Cultivars, varieties, and/or hybrids of these.	

(iii) *Table.* The following Table 2 identifies the crop subgroups for Crop Group 13-07, specifies the representative commodities for each subgroup and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 13-07: SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 13-07A.</b> Caneberry subgroup	
Any one blackberry or any one raspberry.	Blackberry; loganberry; raspberry, red and black; wild raspberry; cultivars, varieties, and/or hybrids of these.
<b>Crop Subgroup 13-07B.</b> Bushberry subgroup.	
Blueberry, highbush.	Aronia berry; blueberry, highbush; blueberry, lowbush; buffalo currant; Chilean guava; currant, black; currant, red; elderberry; European, barberry; gooseberry; cranberry, highbush; honeysuckle, edible; huckleberry; jostaberry; Juneberry; lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these.
<b>Crop Subgroup 13-07C.</b> Large shrub/tree berry subgroup.	
Elderberry or mulberry.	Bayberry; buffaloberry; che; chokecherry; elderberry; Juneberry; mountain pepper berries; mulberry; phalsa; pincherry; riberry; salal; serviceberry; cultivars, varieties, and/or hybrids of these.
<b>Crop Subgroup 13-07D.</b> Small fruit vine climbing subgroup.	
Grape and fuzzy kiwifruit.	Amur river grape; gooseberry; grape; kiwifruit, fuzzy; kiwifruit, hardy; Maypop; schisandra berry; cultivars, varieties, and /or hybrids of these.
<b>Crop Subgroup 13-07E.</b> Small fruit vine climbing subgroup, except grape.	
Fuzzy kiwifruit.	Amur river grape; gooseberry; kiwifruit, fuzzy; kiwifruit, hardy; Maypop; schisandra berry; cultivars, varieties, and/or hybrids of these.
<b>Crop Subgroup 13-07F.</b> Small fruit vine climbing subgroup except fuzzy kiwifruit.	
Grape.	Amur river grape; gooseberry; grape; kiwifruit, hardy; Maypop; schisandra berry; cultivars varieties, and/or hybrids of these.
<b>Crop Subgroup 13-07G.</b> Low growing berry subgroup.	
Strawberry.	Bearberry; bilberry; blueberry, lowbush; cloudberry; cranberry; lingonberry; muntries; partridgeberry; strawberry; cultivars, varieties, and/or hybrids of these.
<b>Crop Subgroup 13-07H.</b> Low growing berry subgroup, except strawberry.	
Cranberry	Bearberry; bilberry; blueberry, lowbush; cloudberry; cranberry; lingonberry; muntries; partridgeberry; cultivars, varieties, and/or cultivars of these.

(22) *Crop Group 14.* Tree Nuts Group.

(i) *Representative commodities.* Almond and pecan.

(ii) *Commodities.* The following is a list of all the commodities included in Crop Group 14:

**CROP GROUP 14: TREE NUTS—COMMODITIES**

Almond (*Prunus dulcis*)  
 Beech nut (*Fagus* spp.)  
 Brazil nut (*Bertholletia excelsa*)  
 Butternut (*Juglans cinerea*)  
 Cashew (*Anacardium occidentale*)  
 Chestnut (*Castanea* spp.)  
 Chinquapin (*Castanea pumila*)  
 Filbert (hazelnut) (*Corylus* spp.)  
 Hickory nut (*Carya* spp.)  
 Macadamia nut (bush nut) (*Macadamia* spp.)  
 Pecan (*Carya illinoensis*)  
 Walnut, black and English (Persian) (*Juglans* spp.)

(23) *Crop Group 14-12. Tree Nut Group.*

(i) *Representative commodities.* Almond and Pecan.

(ii) *Commodities.* The following is a list of all commodities included in Crop Group 14-12.

CROP GROUP 14-12: TREE NUT GROUP

African nut-tree (*Ricinodendron heudelotii* (Baill.) Heckel)  
 Almond (*Prunus dulcis* (Mill.) D.A. Webb)  
 Beechnut (*Fagus grandifolia* Ehrh.; *F. sylvatica* L.)  
 Brazil nut (*Bertholletia excelsa* Humb. & Bonpl.)  
 Brazilian pine (*Araucaria angustifolia* (Bertol.) Kuntze)  
 Bunya (*Araucaria bidwillii* Hook.)  
 Bur oak (*Quercus macrocarpa* Michx.)  
 Butternut (*Juglans cinerea* L.)  
 Cajou nut (*Anacardium giganteum* Hance ex Engl.)  
 Candlenut (*Aleurites moluccanus* (L.) Willd.)  
 Cashew (*Anacardium occidentale* L.)  
 Chestnut (*Castanea crenata* Siebold & Zucc.; *C. dentata* (Marshall) Borkh.; *C. mollissima* Blume; *C. sativa* Mill.)  
 Chinquapin (*Castaneapumila* (L.) Mill.)  
 Coconut (*Cocos nucifera* L.)  
 Coquito nut (*Jubaea chilensis* (Molina) Baill.)  
 Dika nut (*Irvingia gabonensis* (Aubry-Lecomte ex O'Rorke) Baill.)  
 Ginkgo (*Ginkgo biloba* L.)  
 Guiana chestnut (*Pachira aquatica* Aubl.)  
 Hazelnut (Filbert) (*Corylus americana* Marshall; *C. avellana* L.; *C. californica* (A. DC.) Rose; *C. chinensis* Franch.)  
 Heartnut (*Juglans ailantifolia* Carrière var. *cordiformis* (Makino) Rehder)  
 Hickory nut (*Carya cathayensis* Sarg.; *C. glabra* (Mill.) Sweet; *C. laciniosa* (F. Michx.) W. P. C. Barton; *C. myristiciformis* (F. Michx.) Elliott; *C. ovata* (Mill.) K. Koch; *C. tomentosa* (Lam.) Nutt.)  
 Japanese horse-chestnut (*Aesculus turbinata* Blume)  
 Macadamia nut (*Macadamia integrifolia* Maiden & Betche; *M. tetraphylla* L.A.S. Johnson)  
 Mongongo nut (*Schinziophyton rautanenii* (Schinz) Radcl.-Sm.)  
 Monkey-pot (*Lecythis pisonis* Cambess.)  
 Monkey puzzle nut (*Araucaria araucana* (Molina) K. Koch)  
 Okari nut (*Terminalia kaernbachii* Warb.)

Pachira nut (*Pachira insignis* (Sw.) Savigny)

Peach palm nut (*Bactris gasipaes* Kunth var. *gasipaes*)

Pecan (*Carya illinoensis* (Wangenh.) K. Koch)

Pequi (*Caryocar brasiliense* Cambess.; *C. villosum* (Aubl.) Pers.; *C. nuciferum* L.)

Pili nut (*Canarium ovatum* Engl.; *C. vulgare* Leenh.)

Pine nut (*Pinus edulis* Engelm.; *P. koraiensis* Siebold & Zucc.; *P. sibirica* Du Tour; *P. pumila* (Pall.) Regel; *P. gerardiana* Wall. ex D. Don; *P. monophylla* Torr. & Frém.; *P. quadrifolia* Parl. ex Sudw.; *P. pinea* L.)

Pistachio (*Pistacia vera* L.)

Sapucaia nut (*Lecythis zabucaja* Aubl.)

Tropical almond (*Terminalia catappa* L.)

Walnut, black (*Juglans nigra* L.; *J. hindsii* Jeps. ex R. E. Sm.; *J. microcarpa* Berland.)

Walnut, English (*Juglans regia* L.)

Yellowhorn (*Xanthoceras sorbifolium* Bunge)

Cultivars, varieties, and/or hybrids of these

(24) *Crop Group 15. Cereal Grains Group.*

(i) *Representative commodities.* Corn (fresh sweet corn and dried field corn), rice, sorghum, and wheat.

(ii) *Commodities.* The following is a list of all the commodities included in Crop Group 15:

CROP GROUP 15: CEREAL GRAINS—COMMODITIES

Barley (*Hordeum* spp.)

Buckwheat (*Fagopyrum esculentum*)

Corn (*Zea mays*)

Millet, pearl (*Pennisetum glaucum*)

Millet, proso (*Panicum milliaceum*)

Oats (*Avena* spp.)

Popcorn (*Zea mays* var. *everta*)

Rice (*Oryza sativa*)

Rye (*Secale cereale*)

Sorghum (milo) (*Sorghum* spp.)

Teosinte (*Euchlaena mexicana*)

Triticale (*Triticum-Secale* hybrids)

Wheat (*Triticum* spp.)

Wild rice (*Zizania aquatica*)

(25) *Crop Group 16. Forage, Fodder and Straw of Cereal Grains Group.*

(i) *Representative commodities.* Corn, wheat, and any other cereal grain crop.

(ii) *Commodities.* The commodities included in Crop Group 16 are: Forage, fodder, stover, and straw of all commodities included in the group cereal grains group. EPA may establish separate group tolerances on forage, fodder, hay, stover, or straw, if data on the representative commodities indicate differences in the levels of residues on forage, fodder, stover, or straw.

(26) *Crop Group 17. Grass Forage, Fodder, and Hay Group.*

(i) *Representative commodities.* Bermuda grass; bluegrass; and bromegrass or fescue.

(ii) *Commodities.* The commodities included in Crop Group 17 are: Forage, fodder, stover, and hay of any grass, *Gramineae/Poaceae* family (either green or cured) except sugarcane and those included in the cereal grains group, that will be fed to or grazed by livestock, all pasture and range grasses and grasses grown for hay or silage. EPA may establish separate group tolerances on forage, fodder, stover, or hay, if data on the representative commodities indicate differences in the levels of residues on forage, fodder, stover, or hay.

(27) *Crop Group 18. Nongrass Animal Feeds (Forage, Fodder, Straw, and Hay) Group.*(i) *Representative commodities. Alfalfa and clover (Trifolium spp.)*

(ii) *Commodities.* EPA may establish separate group tolerances on forage, fodder, straw, or hay, if data on the representative commodities indicate differences in the levels of residues on forage, fodder, straw, or hay. The following is a list of all the commodities included in Crop Group 18:

## CROP GROUP 18: NONGRASS ANIMAL FEEDS (FORAGE, FODDER, STRAW, AND HAY) GROUP—COMMODITIES

Alfalfa (*Medicago sativa* subsp. *sativa*)

Bean, velvet (*Mucuna pruriens* var. *utilis*)

Clover (*Trifolium* spp., *Melilotus* spp.)

Kudzu (*Pueraria lobata*)

Lespedeza (*Lespedeza* spp.)

Lupin (*Lupinus* spp.)

Sainfoin (*Onobrychis viciifolia*);

Trefoil (*Lotus* spp.)

Vetch (*Vicia* spp.)

Vetch, crown (*Coronilla varia*)

Vetch, milk (*Astragalus* spp.).

(28) *Crop Group 19. Herbs and Spices Group.*

(i) *Representative commodities.* Basil (fresh and dried); black pepper; chive; and celery seed or dill seed.

(ii) *Table.* The following table 1 lists all the commodities included in Crop Group 19 and identifies the related subgroups.

TABLE 1—CROP GROUP 19: HERBS AND SPICES GROUP

Commodities	Related crop subgroups
Allspice ( <i>Pimenta dioica</i> )	19B
Angelica ( <i>Angelica archangelica</i> )	19A
Anise (anise seed) ( <i>Pimpinella anisum</i> )	19B
Anise, star ( <i>Illicium verum</i> )	19B
Annatto (seed)	19B
Balm (lemon balm) ( <i>Melissa officinalis</i> )	19A
Basil ( <i>Ocimum basilicum</i> )	19A
Borage ( <i>Borago officinalis</i> )	19A
Burnet ( <i>Sanguisorba minor</i> )	19A
Camomile ( <i>Anthemis nobilis</i> )	19A
Caper buds ( <i>Capparis spinosa</i> )	19B
Caraway ( <i>Carum carvi</i> )	19B
Caraway, black ( <i>Nigella sativa</i> )	19B
Cardamom ( <i>Elettaria cardamomum</i> )	19B
Cassia bark ( <i>Cinnamomum aromaticum</i> )	19B
Cassia buds ( <i>Cinnamomum aromaticum</i> )	19B
Catnip ( <i>Nepeta cataria</i> )	19A
Celery seed ( <i>Apicum graveolens</i> )	19B
Chervil (dried) ( <i>Anthriscus cerefolium</i> )	19A
Chive ( <i>Allium schoenoprasum</i> )	19A
Chive, Chinese ( <i>Allium tuberosum</i> )	19A
Cinnamon ( <i>Cinnamomum verum</i> )	19B
Clary ( <i>Salvia sclarea</i> )	19A
Clove buds ( <i>Eugenia caryophyllata</i> )	19B
Coriander (cilantro or Chinese parsley) (leaf) ( <i>Coriandrum sativum</i> )	19A
Coriander (cilantro) (seed) ( <i>Coriandrum sativum</i> )	19B
Costmary ( <i>Chrysanthemum balsamita</i> )	19A
Culantro (leaf) ( <i>Eryngium foetidum</i> )	19A
Culantro (seed) ( <i>Eryngium foetidum</i> )	19B
Cumin ( <i>Cuminum cyminum</i> )	19B
Curry (leaf) ( <i>Murraya koenigii</i> )	19A
Dill (dillweed) ( <i>Anethum graveolens</i> )	19A
Dill (seed) ( <i>Anethum graveolens</i> )	19B
Fennel (common) ( <i>Foeniculum vulgare</i> )	19B

Fennel, Florence (seed) ( <i>Foeniculum vulgare</i> Azoricum Group)	19B
Fenugreek ( <i>Trigonella foenumgraecum</i> )	19B
Grains of paradise ( <i>Aframomum melegueta</i> )	19B
Horehound ( <i>Marrubium vulgare</i> )	19A
Hyssop ( <i>Hyssopus officinalis</i> )	19A
Juniper berry ( <i>Juniperus communis</i> )	19B
Lavender ( <i>Lavandula officinalis</i> )	19A
Lemongrass ( <i>Cymbopogon citratus</i> )	19A
Lovage (leaf) ( <i>Levisticum officinale</i> )	19A
Lovage (seed) ( <i>Levisticum officinale</i> )	19B
Mace ( <i>Myristica fragrans</i> )	19B
Marigold ( <i>Calendula officinalis</i> )	19A
Marjoram ( <i>Origanum</i> spp.) (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram)	19A
Mustard (seed) ( <i>Brassica juncea</i> , <i>B. hirta</i> , <i>B. nigra</i> )	19B
Nasturtium ( <i>Tropaeolum majus</i> )	19A
Nutmeg ( <i>Myristica fragrans</i> )	19B
Parsley (dried) ( <i>Petroselinum crispum</i> )	19A
Pennyroyal ( <i>Mentha pulegium</i> )	19A
Pepper, black ( <i>Piper nigrum</i> )	19B
Pepper, white	19B
Poppy (seed) ( <i>Papaver somniferum</i> )	19B
Rosemary ( <i>Rosemarinus officinalis</i> )	19A
Rue ( <i>Ruta graveolens</i> )	19A
Saffron ( <i>Crocus sativus</i> )	19B
Sage ( <i>Salvia officinalis</i> )	19A
Savory, summer and winter ( <i>Satureja</i> spp.)	19A
Sweet bay (bay leaf) ( <i>Laurus nobilis</i> )	19A
Tansy ( <i>Tanacetum vulgare</i> )	19A
Tarragon ( <i>Artemisia dracuncululus</i> )	19A
Thyme ( <i>Thymus</i> spp.)	19A
Vanilla ( <i>Vanilla planifolia</i> )	19B
Wintergreen ( <i>Gaultheria procumbens</i> )	19A
Woodruff ( <i>Galium odorata</i> )	19A
Wormwood ( <i>Artemisia absinthium</i> )	19A

(iii) *Table*. The following table 2 identifies the crop subgroups for Crop Group 19, specifies the representative commodities for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 19 SUBGROUPS**

Representative commodities	Commodities
<b>Crop Subgroup 19A.</b> Herb subgroup.	
Basil (fresh and dried) and chive.	Angelica; balm; basil; borage; burnet; camomile; catnip; chervil (dried); chive; chive, Chinese, clary; coriander (leaf); costmary; culantro (leaf); curry (leaf); dillweed; horehound; hyssop; lavender; lemongrass; lovage (leaf); marigold; marjoram ( <i>Origanum</i> spp.); nasturtium; parsley (dried); pennyroyal; rosemary; rue; sage; savory, summer and winter; sweet bay; tansy; tarragon; thyme; wintergreen; woodruff; and wormwood.
<b>Crop Subgroup 19B.</b> Spice subgroup.	
Black pepper; and celery seed or dill seed.	Allspice; anise (seed); anise, star; annatto (seed); caper (buds); caraway; caraway, black; cardamom; cassia (buds); celery (seed); cinnamon; clove (buds); coriander (seed); culantro (seed); cumin; dill (seed); fennel, common; fennel, Florence (seed); fenugreek; grains of paradise; juniper (berry); lovage (seed); mace; mustard (seed); nutmeg; pepper, black; pepper, white; poppy (seed); saffron; and vanilla.

(29) *Crop Group 20. Oilseed Group.*

(i) *Representative commodities.* Rapeseed (canola varieties only); sunflower, seed and cottonseed.

(ii) *Table.* The following Table 1 lists all the commodities listed in Crop Group 20 and identifies the related crop subgroups and includes cultivars and/or varieties of these commodities.

**TABLE 1—CROP GROUP 20: OILSEED GROUP**

Commodities	Related crop subgroups
Borage, <i>Borago officinalis</i> L	20A
Calendula, <i>Calendula officinalis</i> L	20B
Castor oil plant, <i>Ricinus communis</i> L	20B
Chinese tallowtree, <i>Triadica sebifera</i> (L.) Small	20B
Cottonseed, <i>Gossypium hirsutum</i> L. <i>Gossypium</i> spp	20C
Crambe, <i>Crambe hispanica</i> L.; <i>C. abyssinica</i> Hochst. ex R.E. Fr	20A



Cuphea, <i>Cuphea hyssopifolia</i> Kunth	20A
Echium, <i>Echium plantagineum</i> L	20A
Euphorbia, <i>Euphorbia esula</i> L	20B
Evening primrose, <i>Oenothera biennis</i> L	20B
Flax seed, <i>Linum usitatissimum</i> L	20A
Gold of pleasure, <i>Camelina sativa</i> (L.) Crantz	20A
Hare's ear mustard, <i>Conringia orientalis</i> (L.) Dumort	20A
Jojoba, <i>Simmondsia chinensis</i> (Link) C.K. Schneid	20B
Lesquerella, <i>Lesquerella recurvata</i> (Engelm. ex A. Gray) S. Watson	20A
Lunaria, <i>Lunaria annua</i> L	20A
Meadowfoam, <i>Limnanthes alba</i> Hartw. ex Benth	20A
Milkweed, <i>Asclepias</i> spp	20A
Mustard seed, <i>Brassica hirta</i> Moench, <i>Sinapis alba</i> L. subsp. <i>Alba</i> ..	20A
Niger seed, <i>Guizotia abyssinica</i> (L.f.) Cass	20B
Oil radish, <i>Raphanus sativus</i> L. var. <i>oleiformis</i> Pers	20A
Poppy seed, <i>Papaver somniferum</i> L. subsp. <i>Somniferum</i>	20A
Rapeseed, <i>Brassica</i> spp.; <i>B. napus</i> L	20A
Rose hip, <i>Rosa rubiginosa</i> L	20B
Safflower, <i>Carthamus tinctorious</i> L	20B
Sesame, <i>Sesamum indicum</i> L., <i>S. radiatum</i> Schumach. & honn	20A
Stokes aster, <i>Stokesia laevis</i> (Hill) Greene	20B
Sunflower, <i>Helianthus annuus</i> L	20B
Sweet rocket, <i>Hesperis matronalis</i> L	20A
Tallowwood, <i>Ximenia americana</i> L	20B
Tea oil plant, <i>Camellia oleifera</i> C. Abel	20B
Vernonia, <i>Vernonia galamensis</i> (Cass.) Less	20B
Cultivars, varieties, and/or hybrids of these	

(iii) *Table*. The following Table 2 identifies the crop subgroups for Crop Group 20, specifies the representative commodities for each subgroup and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 20: SUBGROUP LISTING**

Representative commodities	Commodities
Crop subgroup 20A. Rapeseed subgroup	
Rapeseed, canola varieties only	Borage; crambe; cuphea; echium; flax seed; gold of pleasure; hare's ear mustard; lesquerella; lunaria; meadowfoam; milkweed; mustard seed; oil radish; poppy seed; rapeseed; sesame; sweet rocket cultivars, varieties, and/or hybrids of these.
Crop subgroup 20B. Sunflower subgroup	
Sunflower, seed	Calendula; castor oil plant; chinese tallowtree; euphorbia; evening primrose; jojoba; niger seed; rose hip; safflower; stokes aster; sunflower; tallowwood; tea oil plant; vernonia; cultivars, varieties, and/or hybrids of these.
Crop subgroup 20C. Cottonseed subgroup	
Cottonseed	Cottonseed; cultivars, varieties, and/or hybrids of these.

(30) *Crop Group 21*. Edible fungi Group.

(i) *Representative commodities*. White button mushroom and any one oyster mushroom or any Shiitake mushroom.

(ii) *Table*. The following is a list of all the commodities in Crop Group 21. There are no related subgroups.

**CROP GROUP 21—EDIBLE FUNGI GROUP—COMMODITIES**

Blewitt ( <i>Lepista nuda</i> )
Bunashimeji ( <i>Hypsizygus marmoratus</i> )
Chinese mushroom ( <i>Volvariella volvacea</i> ) (Bull.) Singer
Enoki ( <i>Flammulina velutipes</i> ) (Curt.) Singer
Hime-Matsutake ( <i>Agaricus blazei</i> ) Murill
Hirmeola ( <i>Auricularia auricular</i> )
Maitake ( <i>Grifola frondosa</i> )
Morel ( <i>Morchella</i> spp.)
Nameko ( <i>Pholiota nameko</i> )
Net Bearing ( <i>Dictyophora</i> )
Oyster mushroom ( <i>Pleurotus</i> spp.)
Pom Pom ( <i>Hericium erinaceus</i> )
Reishi mushroom ( <i>Ganoderma lucidum</i> (Leyss. Fr.) Karst.)
Rodman's agaricus ( <i>Agaricus bitorquis</i> ) (Quel.) Saccardo
Shiitake mushroom ( <i>Lentinula edodes</i> (Berk.) Pegl.)
Shimeji ( <i>Tricholoma conglobatum</i> )
Stropharia ( <i>Stropharia</i> spp.)

Truffle ( <i>Tuber spp.</i> )
White button mushroom ( <i>Agaricus bisporus</i> (Lange) Imbach)
White Jelly Fungi ( <i>Tremella fuciformis</i> )

(31) *Crop Group 22*. Stalk, Stem and Leaf Petiole Vegetable Group.

(i) *Representative commodities*. Asparagus and celery.

(ii) *Commodities*. The following Table 1 lists all commodities included in Crop Group 22.

**TABLE 1—CROP GROUP 22: STALK, STEM AND LEAF PETIOLE VEGETABLE GROUP**

Commodities	Related crop subgroups
Agave ( <i>Agave spp.</i> )	22A
Aloe vera ( <i>Aloe vera</i> (L.) Burm.f.)	22A
Asparagus ( <i>Asparagus officinalis</i> L.)	22A
Bamboo, shoots ( <i>Arundinaria spp.</i> ; <i>Bambusa spp.</i> , <i>Chimonobambusa spp.</i> ; <i>Dendrocalamus spp.</i> , <i>Fargesia spp.</i> ; <i>Gigantochloa spp.</i> , <i>Nastus elatus</i> ; <i>Phyllostachys spp.</i> ; <i>Thyrsostachys spp.</i> )	22A
Cardoon ( <i>Cynara cardunculus</i> L.)	22B
Celery ( <i>Apium graveolens</i> var. <i>dulce</i> (Mill.) Pers.)	22B
Celery, Chinese ( <i>Apium graveolens</i> L. var. <i>secalinum</i> (Alef.) Mansf.)	22B
Celtuce ( <i>Lactuca sativa</i> var. <i>angustana</i> L.H. Bailey)	22A
Fennel, Florence, fresh leaves and stalk ( <i>Foeniculum vulgare</i> subsp. <i>vulgare</i> var. <i>azoricum</i> (Mill.) Thell.)	22A
Fern, edible, fiddlehead	22A
Fuki ( <i>Petasites japonicus</i> (Siebold & Zucc.) Maxim.)	22B
Kale, sea ( <i>Crambe maritima</i> L.)	22A
Kohlrabi ( <i>Brassica oleracea</i> L. var. <i>gongylodes</i> L.)	22A
Palm hearts (various species)	22A
Prickly pear, pads ( <i>Opuntia ficus-indica</i> (L.) Mill., <i>Opuntia spp.</i> )	22A
Prickly pear, Texas, pads ( <i>Opuntia engelmannii</i> Salm-Dyck ex Engelm. var. <i>lindheimeri</i> (Engelm.) B.D. Parfitt & Pinkav)	22A
Rhubarb ( <i>Rheum x rhabarbarum</i> L.)	22B
Udo ( <i>Aralia cordata</i> Thunb.)	22B
Zuiki ( <i>Colocasia gigantea</i> (Blume) Hook. f.)	22B
Cultivars, varieties, and hybrids of these commodities	

(iii) *Crop subgroups*. The following Table 2 identifies the crop subgroups for Crop Group 22, specifies the representative commodities for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 22: SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 22A. Stalk and stem vegetable subgroup</b>	
Asparagus	Agave; aloe vera; asparagus; bamboo, shoots; celtuce; fennel, florence, fresh leaves and stalk; fern, edible, fiddlehead; kale, sea; kohlrabi; palm hearts; prickly pear, pads; prickly pear, Texas, pads; cultivars, varieties, and hybrids of these commodities.
<b>Crop Subgroup 22B. Leaf petiole vegetable subgroup</b>	
Celery	Cardoon; celery; celery, Chinese; fuki; rhubarb; udo; zuiki; cultivars, varieties, and hybrids of these commodities.

(32) *Crop Group 23*. Tropical and Subtropical Fruit, Edible Peel Group.

(i) *Representative commodities*. Date, fig, guava, and olive.

(ii) *Commodities*. The following Table 1 lists all commodities included in Crop Group 23.

**TABLE 1—CROP GROUP 23: TROPICAL AND SUBTROPICAL FRUIT, EDIBLE PEEL GROUP**

Commodities	Related crop subgroups
Açaí ( <i>Euterpe oleracea</i> Mart.)	23C
Acerola ( <i>Malpighia emarginata</i> DC.)	23A
Achachairú ( <i>Garcinia gardneriana</i> (Planch. & Triana) Zappi)	23B
African plum ( <i>Vitex doniana</i> Sweet)	23A
Agritos ( <i>Berberis trifoliolata</i> Moric.)	23A
Almondette ( <i>Buchanania lanzan</i> Spreng.)	23A
Ambarella ( <i>Spondias dulcis</i> Sol. ex Parkinson)	23B
Apak palm ( <i>Brahea dulcis</i> (Kunth) Mart.)	23C
Appleberry ( <i>Billardiera scandens</i> Sm.)	23A
Arazá ( <i>Eugenia stipitata</i> McVaugh)	23B

Arbutus berry ( <i>Arbutus unedo</i> L.)	23A
Babaco ( <i>Vasconcellea x heilbornii</i> (V.M. Badillo) V.M. Badillo)	23B
Bacaba palm ( <i>Oenocarpus bacaba</i> Mart.)	23C
Bacaba-de-leque ( <i>Oenocarpus distichus</i> Mart.)	23C
Bayberry, red ( <i>Morella rubra</i> Lour.)	23A
Bignay ( <i>Antidesma bunius</i> (L.) Spreng.)	23A
Bilimbi ( <i>Averrhoa bilimbi</i> L.)	23B
Borojó ( <i>Borojoa patinoi</i> Cuatrec.)	23B
Breadnut ( <i>Brosimum alicastrum</i> Sw.)	23A
Cabeluda ( <i>Plinia glomerata</i> (O. Berg) Amshoff)	23A
Cajou, fruit ( <i>Anacardium giganteum</i> Hance ex Engl.)	23B
Cambucá ( <i>Marlierea edulis</i> Nied.)	23B
Carandas-plum ( <i>Carissa edulis</i> Vahl)	23A
Carob ( <i>Ceratonia siliqua</i> L.)	23B
Cashew apple ( <i>Anacardium occidentale</i> L.)	23B
Ceylon iron wood ( <i>Manilkara hexandra</i> (Roxb.) Dubard)	23A
Ceylon olive ( <i>Elaeocarpus serratus</i> L.)	23A
Cherry-of-the-Rio-Grande ( <i>Eugenia aggregata</i> (Vell.) Kiaersk.)	23A
Chinese olive, black ( <i>Canarium tramdenum</i> C.D. Dai & Yakovlev)	23A
Chinese olive, white ( <i>Canarium album</i> (Lour.) Raeusch.)	23A
Chirauli-nut ( <i>Buchanania latifolia</i> Roxb.)	23A
Ciruela verde ( <i>Bunchosia armeniaca</i> (Cav.) DC.)	23B
Cocoplum ( <i>Chrysobalanus icaco</i> L.)	23A
Date ( <i>Phoenix dactylifera</i> L.)	23C
Davidson's plum ( <i>Davidsonia pruriens</i> F. Muell.)	23B
Desert-date ( <i>Balanites aegyptiacus</i> (L.) Delile)	23A
Doum palm coconut ( <i>Hyphaene thebaica</i> (L.) Mart.)	23C
False sandalwood ( <i>Ximenia americana</i> L.)	23A
Feijoa ( <i>Acca sellowiana</i> (O. Berg) Burret)	23B
Fig ( <i>Ficus carica</i> L.)	23B
Fragrant manjack ( <i>Cordia dichotoma</i> G. Forst.)	23A
Gooseberry, abyssinian ( <i>Dovyalis abyssinica</i> (A. Rich.) Warb.)	23A
Gooseberry, Ceylon ( <i>Dovyalis hebecarpa</i> (Gardner) Warb.)	23A
Gooseberry, Indian ( <i>Phyllanthus emblica</i> L.)	23B
Gooseberry, otaheite ( <i>Phyllanthus acidus</i> (L.) Skeels)	23A
Governor's plum ( <i>Flacourtia indica</i> (Burm. F.) Merr.)	23A
Grumichama ( <i>Eugenia brasiliensis</i> Lam)	23A
Guabiroba ( <i>Campomanesia xanthocarpa</i> O. Berg)	23A
Guava ( <i>Psidium guajava</i> L.)	23B
Guava berry ( <i>Myrciaria floribunda</i> (H. West ex Willd.) O. Berg)	23A
Guava, Brazilian ( <i>Psidium guineense</i> Sw.)	23A
Guava, cattley ( <i>Psidium cattleyanum</i> Sabine)	23B
Guava, Costa Rican ( <i>Psidium friedrichsthalianum</i> (O. Berg) Nied.)	23A
Guava, Para ( <i>Psidium acutangulum</i> DC.)	23B
Guava, purple strawberry ( <i>Psidium cattleyanum</i> Sabine var. <i>cattleyanum</i> )	23B
Guava, strawberry ( <i>Psidium cattleyanum</i> Sabine var. <i>littorale</i> (Raddi) Fosberg)	23B
Guava, yellow strawberry ( <i>Psidium cattleyanum</i> Sabine var. <i>cattleyanum</i> forma <i>lucidum</i> O. Deg.)	23B
Guayabillo ( <i>Psidium sartorianum</i> (O. Berg) Nied.)	23A
Illawarra plum ( <i>Podocarpus elatus</i> R. Br. Ex Endl.)	23A
Imbé ( <i>Garcinia livingstonei</i> T. Anderson)	23B
Imbu ( <i>Spondias tuberosa</i> Arruda ex Kost.)	23B
Indian-plum ( <i>Flacourtia jangomas</i> (Lour.) basionym)	23A
Jaboticaba ( <i>Myrciaria cauliflora</i> (Mart.) O. Berg)	23B
Jamaica-cherry ( <i>Muntingia calabura</i> L.)	23A
Jambolan ( <i>Syzygium cumini</i> (L.) Skeels)	23A
Jelly palm ( <i>Butia capitata</i> (Mart.) Becc.)	23C
Jujube, Indian ( <i>Ziziphus mauritiana</i> Lam.)	23B
Kaffir-plum ( <i>Harpephyllum caffrum</i> Bernh. Ex C. Krauss)	23A
Kakadu plum ( <i>Terminalia latipes</i> Benth. subsp. <i>psilocarpa</i> Pedley)	23A
Kapundung ( <i>Baccaurea racemosa</i> (Reinw.) Mull. Arg.)	23A
Karanda ( <i>Carissa carandas</i> L.)	23A
Kwai muk ( <i>Artocarpus hypargyreus</i> Hance ex Benth.)	23B
Lemon aspen ( <i>Acronychia acidula</i> F. Muell)	23A
Mangaba ( <i>Hancornia speciosa</i> Gomes)	23B
Marian plum ( <i>Bouea macrophylla</i> Griff.)	23B
Mombin, malayan ( <i>Spondias pinnata</i> (J. Koenig ex L. f.) Kurz)	23B
Mombin, purple ( <i>Spondias purpurea</i> L.)	23B
Mombin, yellow ( <i>Spondias mombin</i> L.)	23A
Monkeyfruit ( <i>Artocarpus lacucha</i> Buch. Ham.)	23B
Monos plum ( <i>Pseudanannomomis umbellulifera</i> (Kunth) Kausel)	23A
Mountain cherry ( <i>Bunchosia cornifolia</i> Kunth)	23A
Nance ( <i>Byrsonima crassifolia</i> (L.) Kunth)	23B
Natal plum ( <i>Carissa macrocarpa</i> (Eckl.) A. DC.)	23B

Noni ( <i>Morinda citrifolia</i> L.)	23B
Olive ( <i>Olea europaea</i> L. subsp. <i>europaea</i> )	23A
Papaya, mountain ( <i>Vasconcellea pubescens</i> A. DC.)	23B
Pataua ( <i>Oenocarpus bataua</i> Mart.)	23C
Peach palm, fruit ( <i>Bactris gasipaes</i> Kunth var. <i>gasipaes</i> )	23C
Persimmon, black ( <i>Diospyros texana</i> Scheele)	23A
Persimmon, Japanese ( <i>Diospyros kaki</i> Thunb.)	23B
Pitomba ( <i>Eugenia luschnathiana</i> Klotzsch ex O. Berg)	23A
Plum-of-Martinique ( <i>Flacourtia inermis</i> Roxb.)	23A
Pomerac ( <i>Syzygium malaccense</i> (L.) Merr. & L.M. Perry)	23B
Rambai ( <i>Baccaurea motleyana</i> (Mull. Arg.) Mull. Arg.)	23B
Rose apple ( <i>Syzygium jambos</i> (L.) Alston)	23B
Rukam ( <i>Flacourtia rukam</i> Zoll. & Moritzi)	23A
Rumberry ( <i>Myrciaria dubia</i> (Kunth) McVaugh <i>Myrtaceae</i> )	23A
Sea grape ( <i>Coccoloba uvifera</i> (L.) L.)	23A
Sentul ( <i>Sandoricum koetjape</i> (Burm. F.) Merr.)	23B
Sete-capotes ( <i>Campomanesia guazumifolia</i> (Cambess.) O. Berg)	23A
Silver aspen ( <i>Acronychia wilcoxian</i> (F. Muell.) T.G. Hartley)	23A
Starfruit ( <i>Averrhoa carambola</i> L.)	23B
Surinam cherry ( <i>Eugenia uniflora</i> L.)	23B
Tamarind ( <i>Tamarindus indica</i> L.)	23B
Uvalha ( <i>Eugenia pyriformis</i> Cambess )	23B
Water apple ( <i>Syzygium aqueum</i> (Burm. F.) Alston)	23A
Water pear ( <i>Syzygium guineense</i> (Willd.) DC)	23A
Water berry ( <i>Syzygium cordatum</i> Hochst. Ex C. Krauss)	23A
Wax jambu ( <i>Syzygium samarangense</i> (Blume) Merr. & L.M. Perry)	23A
Cultivars, varieties, and hybrids of these commodities	

(iii) *Table*. The following Table 2 identifies the crop subgroups for Crop Group 23, specifies the representative commodities for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 23: SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 23A. Tropical and Subtropical, Small fruit, edible peel subgroup</b>	
Olive	Acerola; African plum; agritos; almondette; appleberry; arbutus berry; bayberry, red; bignay; breadnut; cabeluda; carandas-plum; Ceylon iron wood; Ceylon olive; cherry-of-the-Rio-Grande; Chinese olive, black; Chinese olive, white; chirauli-nut; cocoplum; desert-date; false sandalwood; fragrant manjack; gooseberry, abyssinian; gooseberry, Ceylon; gooseberry, otaheite; governor's plum; grumichama; guabiroba; guava berry; guava, Brazilian; guava, Costa Rican; guayabillo; illawarra plum; Indian-plum; Jamaica-cherry; jambolan; kaffir-plum; kakadu plum; kapundung; karanda; lemon aspen; mombin, yellow; monos plum; mountain cherry; olive; persimmon, black; pitomba; plum-of-Martinique; rukam; rumberry; sea grape; sete-capotes; silver aspen; water apple; water pear; water berry; wax jambu; cultivars, varieties, and hybrids of these commodities.
<b>Crop Subgroup 23B. Tropical and Subtropical, Medium to large fruit, edible peel subgroup</b>	
Fig and guava	Achachairú; ambarella; arazá; babaco; bilimbi; borojó; cajou, fruit; cambucá; carob; cashew apple; ciruela verde; davidson's plum; feijoa; fig; gooseberry, Indian; guava; guava, cattley; guava, Para; guava, purple strawberry; guava, strawberry; guava, yellow strawberry; imbé; imbu; jaboticaba; jujube, Indian; kwai muk; mangaba; Marian plum; mombin, Malayan; mombin, purple; monkeyfruit; nance; natal plum; noni; papaya, mountain; persimmon, Japanese; pomerac; rambai; rose apple; sentul; starfruit; Surinam cherry; tamarind; uvalha; cultivars, varieties, and hybrids of these commodities.
<b>Crop Subgroup 23C. Tropical and Subtropical, Palm fruit, edible peel subgroup</b>	
Date	Açaí; apak palm; bacaba palm; bacaba-de-leque; date; doum palm coconut; jelly palm; pataua; peach palm, fruit; cultivars, varieties, and hybrids of these commodities.

(33) *Crop Group 24. Tropical and Subtropical Fruit, Inedible Peel Group.*

(i) *Representative commodities*. Atemoya or sugar apple, avocado, banana or pomegranate, dragon fruit, lychee, passionfruit, pineapple, and prickly pear, fruit.

(ii) *Commodities*. The following Table 1 lists all commodities included in Crop Group 24.

**TABLE 1—CROP GROUP 24: TROPICAL AND SUBTROPICAL FRUIT, INEDIBLE PEEL GROUP**

Commodities	Related crop subgroups
Abiu ( <i>Pouteria caimito</i> (Ruiz & Pav.) Radlk)	24B
Aisen ( <i>Boscia senegalensis</i> (Pers.) Lam.)	24A
Akee apple ( <i>Blighia sapida</i> K.D. Koenig)	24B
Atemoya ( <i>Annona cherimola</i> Mill. X <i>A. squamosa</i> L.)	24C
Avocado ( <i>Persea americana</i> Mill.)	24B
Avocado, Guatemalan ( <i>Persea americana</i> Mill. var. <i>guatemalensis</i> )	24B
Avocado, Mexican ( <i>Persea americana</i> Mill. var. <i>drymifolia</i> (Schtdl. & Cham.) S.F. Blak)	24B
Avocado, West Indian ( <i>Persea americana</i> var. <i>americana</i> )	24B
Bacury ( <i>Platonia insignis</i> Mart.)	24B
Bael fruit ( <i>Aegle marmelos</i> (L.) Corrêa)	24A

Banana ( <i>Musa</i> spp.)	24B
Banana, dwarf ( <i>Musa</i> hybrids; <i>Musa acuminata</i> Colla)	24B
Binjai ( <i>Mangifera caesia</i> Jack)	24B
Biriba ( <i>Annona mucosa</i> Jacq.)	24C
Breadfruit ( <i>Artocarpus altilis</i> (Parkinson) Fosberg)	24C
Burmese grape ( <i>Baccaurea ramiflora</i> Lour.)	24A
Canistel ( <i>Pouteria campechiana</i> (Kunth) Baehni)	24B
Cat's-eyes ( <i>Dimocarpus longan</i> Lour. subsp. <i>malesianus</i> Leenh.)	24A
Champedak ( <i>Artocarpus integer</i> (Thunb.) Merr.)	24C
Cherimoya ( <i>Annona cherimola</i> Mill.)	24C
Cupuacú ( <i>Theobroma grandiflorum</i> (Willd. Ex Spreng.) K. Schum.)	24B
Custard apple ( <i>Annona reticulata</i> L.)	24C
Dragon fruit ( <i>Hylocereus undatus</i> (Haw.) Britton & Rose)	24D
Durian ( <i>Durio zibethinus</i> L.)	24C
Elephant-apple ( <i>Limonia acidissima</i> L.)	24C
Etambe ( <i>Mangifera zeylanica</i> (Blume) Hook. F.)	24B
Granadilla ( <i>Passiflora ligularis</i> Juss.)	24E
Granadilla, giant ( <i>Passiflora quadrangularis</i> L.)	24E
llama ( <i>Annona macrophyllata</i> Donn. Sm.)	24C
Ingá ( <i>Inga vera</i> Willd. subsp. <i>affinis</i> (DC.) T.D. Penn.)	24A
Jackfruit ( <i>Artocarpus heterophyllus</i> Lam.)	24C
Jatobá ( <i>Hymenaea courbaril</i> L.)	24B
Karuka ( <i>Pandanus julianettii</i> Martelli)	24C
Kei apple ( <i>Dovyalis caffra</i> (Hook. F. & Harv.) Warb.)	24B
Langsat ( <i>Lansium domesticum</i> Corrêa)	24B
Lanjut ( <i>Mangifera lagenifera</i> Griff.)	24B
Longan ( <i>Dimocarpus longan</i> Lour.)	24A
Lucuma ( <i>Pouteria lucuma</i> (Ruiz & Pav.) Kuntze)	24B
Lychee ( <i>Litchi chinensis</i> Sonn.)	24A
Mabolo ( <i>Diospyros blancoi</i> A. DC.)	24B
Madras-thorn ( <i>Pithecellobium dulce</i> (Roxb.) Benth.)	24A
Mammy-apple ( <i>Mammea americana</i> L.)	24C
Manduro ( <i>Balanites maughamii</i> Sprague)	24A
Mango ( <i>Mangifera indica</i> L.)	24B
Mango, horse ( <i>Mangifera foetida</i> Lour.)	24B
Mango, Saipan ( <i>Mangifera odorata</i> Griff.)	24B
Mangosteen ( <i>Garcinia mangostana</i> L.)	24B
Marang ( <i>Artocarpus odoratissimus</i> Blanco)	24C
Marmaladebox ( <i>Genipa americana</i> L.)	24C
Matisia ( <i>Matisia cordata</i> Humb. & Bonpl.)	24A
Mesquite ( <i>Prosopis juliflora</i> (Sw.) DC.)	24A
Mongongo, fruit ( <i>Schinziophyton rautanenii</i> (Schinz) Radcl.-Sm)	24A
Monkey-bread-tree ( <i>Adansonia digitata</i> L.)	24C
Monstera ( <i>Monstera deliciosa</i> Liebm.)	24E
Nicobar-breadfruit ( <i>Pandanus leram</i> Jones ex Fontana)	24C
Paho ( <i>Mangifera altissima</i> Blanco)	24B
Pandanus ( <i>Pandanus utilis</i> Bory)	24C
Papaya ( <i>Carica papaya</i> L.)	24B
Passionflower, winged-stem ( <i>Passiflora alata</i> Curtis)	24E
Passionfruit ( <i>Passiflora edulis</i> Sims)	24E
Passionfruit, banana ( <i>Passiflora tripartita</i> var. <i>mollissima</i> (Kunth) Holm-Niels. & P. Jorg.)	24E
Passionfruit, purple ( <i>Passiflora edulis</i> Sims forma <i>edulis</i> )	24E
Passionfruit, yellow ( <i>Passiflora edulis</i> Sims forma <i>flavicarpa</i> O. Deg.)	24E
Pawpaw, common ( <i>Asimina triloba</i> (L.) Dunal)	24B
Pawpaw, small-flower ( <i>Asimina parviflora</i> (Michx.) Dunal)	24A
Pelipisan ( <i>Mangifera casturi</i> Kosterm.)	24B
Pequi ( <i>Caryocar brasiliense</i> Cambess)	24B
Pequia ( <i>Caryocar villosum</i> (Aubl.) Pers.)	24B
Persimmon, American ( <i>Diospyros virginiana</i> L.)	24B
Pineapple ( <i>Ananas comosus</i> (L.) Merr.)	24C
Pitahaya ( <i>Hylocereus polyrhizus</i> (F.A.C. Weber) Britton & Rose)	24D
Pitaya ( <i>Hylocereus</i> sp. including <i>H. megalanthus</i> ( <i>H. ocamponis</i> and <i>H. polychizus</i> )	24D
Pitaya, amarilla ( <i>Hylocereus triangularis</i> Britton & Rose)	24D
Pitaya, roja ( <i>Hylocereus ocamponis</i> (Salm-Dyck) Britton & Rose)	24D
Pitaya, yellow ( <i>Hylocereus megalanthus</i> (K. Schum. ex Vaupel) Ralf Bauer)	24D
Plantain ( <i>Musa paradisiaca</i> L.)	24B
Pomegranate ( <i>Punica granatum</i> L.)	24B
Poshte ( <i>Annona liebmänniana</i> Baill.)	24B
Prickly pear, fruit ( <i>Opuntia ficus-indica</i> (L.) Mill.)	24D
Prickly pear, Texas, fruit ( <i>Opuntia engelmannii</i> Salm-Dyck ex Engelm. var. <i>lindheimeri</i> (Engelm.) B.D. Parfitt & Pinkav)	24D
Pulasan ( <i>Nephelium ramboutan-ake</i> (Labill.) Leenh.)	24C
Quandong ( <i>Santalum acuminatum</i> (R. Br.) DC.)	24B
Rambutan ( <i>Nephelium lappaceum</i> L.)	24C

Saguaro ( <i>Carnegieia gigantea</i> (Engelm.) Britton & Rose)	24D
Sapodilla ( <i>Manilkara zapota</i> (L.) P. Royen)	24C
Sapote, black ( <i>Diospyros digyna</i> Jacq.)	24B
Sapote, green ( <i>Pouteria viridis</i> (Pittier) Cronquist)	24B
Sapote, mamey ( <i>Pouteria sapota</i> (Jacq.) H.E. Moore & Stearn)	24C
Sapote, white ( <i>Casimiroa edulis</i> La Llave & Lex)	24B
Sataw ( <i>Parkia speciosa</i> Hassk.)	24B
Satinleaf ( <i>Chrysophyllum oliviforme</i> L.)	24A
Screw-pine ( <i>Pandanus tectorius</i> Parkinson)	24B
Sierra Leone-tamarind ( <i>Dialium guineense</i> Willd.)	24A
Soncoya ( <i>Annona purpurea</i> Moc. & Sessé ex Dunal)	24C
Soursop ( <i>Annona muricata</i> L.)	24C
Spanish lime ( <i>Melicoccus bijugatus</i> Jacq.)	24A
Star apple ( <i>Chrysophyllum cainito</i> L.)	24B
Sugar apple ( <i>Annona squamosa</i> L.)	24C
Sun sapote ( <i>Licania platypus</i> (Hemsl.) Fritsch)	24C
Tamarind-of-the-Indies ( <i>Vangueria madagascariensis</i> J.F. Gmel.)	24B
Velvet tamarind ( <i>Dialium indum</i> L.)	24A
Wampi ( <i>Clausena lansium</i> (Lour.) Skeels)	24A
White star apple ( <i>Chrysophyllum albidum</i> G. Don)	24A
Wild loquat ( <i>Uapaca kirkiana</i> Müll. Arg.)	24B
Cultivars, varieties, and hybrids of these commodities	

(iii) *Table*. The following Table 2 identifies the crop subgroups for Crop Group 24, specifies the representative commodities for each subgroup, and lists all the commodities included in each subgroup.

**TABLE 2—CROP GROUP 24: SUBGROUP LISTING**

Representative commodities	Commodities
<b>Crop Subgroup 24A. Tropical and Subtropical, Small fruit, inedible peel subgroup</b>	
Lychee	Aisen; bael fruit; Burmese grape; cat's-eyes; ingá; longan; lychee; madras-thorn; manduro; matisia; mesquite; mongongo, fruit; pawpaw, small-flower; satinleaf; Sierra Leone-tamarind; Spanish lime; velvet tamarind; wampi; white star apple; cultivars, varieties, and hybrids of these commodities.
<b>Crop Subgroup 24B. Tropical and Subtropical, Medium to large fruit, smooth, inedible peel subgroup</b>	
Avocado, plus pomegranate or banana	Abiu; akee apple; avocado; avocado, Guatemalan; avocado, Mexican; avocado, West Indian; bacury; banana; banana, dwarf; binjai; canistel; cupuacú; etambe; jatobá; kei apple; langsat; lanjut; lucuma; mabolo; mango; mango, horse; mango, Saipan; mangosteen; paho; papaya; pawpaw, common; pelipisan; pequi; pequia; persimmon, American; plantain; pomegranate; poshte; quandong; sapote, black; sapote, green; sapote, white; sataw; screw-pine; star apple; tamarind-of-the-Indies; wild loquat; cultivars, varieties, and hybrids of these commodities.
<b>Crop Subgroup 24C. Tropical and Subtropical, Medium to large fruit, rough or hairy, inedible peel subgroup</b>	
Pineapple, plus atemoya or sugar apple	Atemoya; biriba; breadfruit; champedak; cherimoya; custard apple; durian; elephant-apple; ilama; jackfruit; karuka; mammy-apple; marang; marmaladebox; monkey-bread tree; nicobar-breadfruit; pandanus; pineapple; pulasan; rambutan; sapodilla; sapote, mamey; soncoya; soursop; sugar apple; sun sapote; cultivars, varieties, and hybrids of these commodities.
<b>Crop Subgroup 24D. Tropical and Subtropical, Cactus, inedible peel subgroup</b>	
Dragon fruit and Prickly pear fruit	Dragon fruit; pitahaya; pitaya; pitaya, amarilla; pitaya, roja; pitaya, yellow; prickly pear, fruit; prickly pear, Texas, fruit; saguaro; cultivars, varieties, and hybrids of these commodities.
<b>Crop Subgroup 24E. Tropical and Subtropical, Vine, inedible peel subgroup</b>	
Passionfruit	Granadilla; granadilla, giant; monstera; passionflower, winged-stem; passionfruit; passionfruit, banana; passionfruit, purple; passionfruit, yellow; cultivars, varieties, and hybrids of these commodities.

[60 FR 26635, May 17, 1995, as amended at 72 FR 69156, 69157, Dec. 7, 2007; 73 FR 52, Jan. 2, 2008; 75 FR 76289, Dec. 8, 2010; 77 FR 50620, Aug. 22, 2012; 81 FR 26477, May 3, 2016]

[↑ Back to Top](#)

## Subpart C—Specific Tolerances

EDITORIAL NOTE: Nomenclature changes to subpart C of part 180 appear at 67 FR 41803, June 19, 2002; 67 FR 42393, June 21, 2002; 68 FR 39430, July 1, 2003; 71 FR 74804, Dec. 13, 2006; 72 FR 53137, Sept. 18, 2007; 72 FR 61536, Oct. 31, 2007; 73 FR 60155, Oct. 10, 2008; 75 FR 56014, Sept. 15, 2010; and 76 FR 34885, June 15, 2011.

[↑ Back to Top](#)

### §180.101 Specific tolerances; general provisions.

(a) The tolerances established for pesticide chemicals in this subpart C apply to residues resulting from their application prior to harvest or slaughter, unless otherwise stated. Tolerances are expressed in terms of parts by weight of the pesticide chemical per one million parts by weight of the raw agricultural commodity.

(b) The poisonous and deleterious substances for which tolerances are established by the regulations in this subpart C are named by their common names wherever practicable, otherwise by their chemical names.

(c) The analytical methods to be used for determining whether pesticide residues, including negligible residues, in or on raw agricultural commodities are in compliance with the tolerances established in this part 180 are identified among the methods contained or referenced in the Food and Drug Administration's "Pesticide Analytical Manual" which is available from the Food and Drug Administration, Department of Health, Education, and Welfare, 200 C Street SW., Washington, DC 20204.

[↑ Back to Top](#)

### §180.103 Captan; tolerances for residues.

(a)(1) *General.* Tolerances are established for residues of the fungicide, captan (N-trichloromethylthio-4-cyclohexene-1,2-dicarboximide) in or on the following commodities:

Commodity	Parts per million
Almond	0.25
Almond, hulls	75.0
Animal feed, nongrass, group 18	0.05
Apple	25.0
Apricot	10.0
Blueberry	20.0
Caneberry, subgroup 13A	25.0
Cherry, sweet	50.0
Cherry, tart	50.0
Cotton, undelinted seed	0.05
Dill, seed	0.05
Flax, seed	0.05
Grape	25.0
Grain, cereal, forage, fodder and straw, group 16	0.05
Grain, cereal, group 15	0.05
Grass, forage	0.05
Grass, hay	0.05
Nectarine	25.0
Okra	0.05
Peach	15.0
Peanut	0.05
Peanut, hay	0.05
Pear	25.0
Plum, prune, fresh	10.0
Rapeseed, forage	0.05
Rapeseed, seed	0.05
Safflower, seed	0.05
Sesame, seed	0.05
Strawberry	20.0
Sunflower, seed	0.05
Vegetable, brassica leafy, group 5	0.05
Vegetable, bulb, group 3	0.05
Vegetable, cucurbit, group 9	0.05
Vegetable, foliage of legume, group 7	0.05
Vegetable, fruiting, group 8	0.05
Vegetable, leafy, except brassica, group 4	0.05
Vegetable, leaves of root and tuber, group 2	0.05
Vegetable, legume, group 6	0.05
Vegetable, root and tuber, group 1	0.05

(2) Tolerances are established for the combined residues of the fungicide, captan (N-trichloromethylthio-4-cyclohexene-1,2-dicarboximide) and its metabolite 1,2,3,6-tetrahydrophthalimide (THPI), measured as THPI, in or on the following commodities:

Commodity	Parts per million
Cattle, fat	0.15
Cattle, meat	0.20
Cattle, meat byproducts	0.30
Goat, fat	0.15
Goat, meat	0.20
Goat, meat byproducts	0.30
Hog, fat	0.15
Hog, meat	0.20
Hog, meat byproducts	0.30
Horse, fat	0.15
Horse, meat	0.20
Horse, meat byproducts	0.30
Milk	0.10
Sheep, fat	0.15



Sheep, meat	0.20
Sheep, meat byproducts	0.30

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 52016, Sept. 12, 2007]

[↑ Back to Top](#)

### §180.106 Diuron; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the herbicide diuron, 3-(3,4-dichlorophenyl)-1,1-dimethylurea and its metabolites convertible to 3,4-dichloroaniline in or on food commodities, as follows:

Commodity	Parts per million
Alfalfa, forage	3.0
Alfalfa, hay	2.0
Apple	0.1
Artichoke, globe	1
Asparagus	7
Banana	0.1
Berry group 13	0.1
Cattle, fat	1
Cattle, meat	1
Cattle, meat byproducts	1
Citrus, oil	3.0
Corn, field, grain	0.1
Corn, pop, grain	0.1
Cotton, undelinted seed	0.2
Fish - freshwater finfish, farm raised	2.0
Fruit, citrus, group 10, except lemon	0.05
Goat, fat	1
Goat, meat	1
Goat, meat byproducts	1
Grain, aspirated fractions	5.0
Grape	0.05
Grass, forage, except bermudagrass	2
Grass, hay, except bermudagrass	2
Hazelnut	0.1
Hog, fat	1
Hog, meat	1
Hog, meat byproducts	1
Horse, fat	1
Horse, meat	1
Horse, meat byproducts	1
Lemon	0.5
Nut, macadamia	0.05
Olive	1
Papaya	0.5
Peach	0.1
Pear	1
Pea, field, seed	0.1
Pea, field, vines	2
Pea, field, hay	2
Pecan	0.05
Peppermint, tops	1.5
Pineapple	0.1
Pineapple, process residue	0.4
Sheep, fat	1
Sheep, meat	1
Sheep, meat byproducts	1
Sorghum, grain, forage	2
Sorghum, grain, grain	0.5
Sorghum, grain, stover	2
Spearmint, tops	1.5
Sugarcane, cane	0.2
Sugarcane, molasses	0.7
Walnut	0.05

Wheat, bran	0.7
Wheat, forage	2
Wheat, grain	0.5
Wheat, hay	2
Wheat, straw	1.5

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with a regional registration as defined in §180.1(l) are established for the combined residues of the herbicide diuron (3-(3,4-dichlorophenyl)-1,1-dimethylurea and its metabolites convertible to 3,4-dichloroaniline) in or on the raw agricultural commodities:

Commodity	Parts per million
Barley, bran	0.7
Barley, grain	0.2
Barley, hay	2
Barley, straw	1.5
Cactus	0.05
Clover, forage	0.1
Clover, hay	1.0
Oat, forage	2
Oat, grain	0.1
Oat, hay	2
Oat, straw	1.5
Trefoil, forage	0.1
Trefoil, hay	1.5
Vetch, forage	0.1
Vetch, hay	1.5

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 2164, Jan. 14, 1998, as amended at 63 FR 57072, Oct. 26, 1998; 64 FR 41305, July 30, 1999; 66 FR 28671, May 24, 2001; 67 FR 46883, July 17, 2002; 69 FR 71717, Dec. 10, 2004; 72 FR 32540, June 13, 2007; 72 FR 35666, June 29, 2007; 73 FR 54958, Sept. 24, 2008; 76 FR 34885, June 15, 2011]

[↑ Back to Top](#)

#### §180.107 Triflumezopyrim; tolerance for residues.

(a) *General.* Tolerances are established for residues of the insecticide triflumezopyrim, including its metabolites and degradates, in or on the following food commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only triflumezopyrim (2,4-dioxo-1-(5-pyrimidinylmethyl)-3-[3-(trifluoromethyl)phenyl]-2H-pyrido[1,2-a] pyrimidinium inner salt) in or on the commodity.

Commodity	Parts per million
Rice, grain*	0.40
Rice, hulls*	1.0

\*There are no U.S. registrations for the use of triflumezopyrim on these commodities.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[82 FR 48005, Oct. 16, 2017]

[↑ Back to Top](#)

#### §180.108 Acephate; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of acephate, O,S-dimethyl acetyl phosphoramidothioate, including its metabolites and degradates other than methamidophos, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only acephate, O,S-dimethyl acetyl phosphoramidothioate, in or on the commodity.

Commodity <sup>1</sup>	Parts per million
Bean, dry, seed	3.0

Brussels sprouts	3.0
Cattle, fat	0.1
Cattle, meat	0.1
Cattle, meat byproducts	0.1
Cauliflower	2.0
Celery	10
Cotton, hulls	1.0
Cotton, meal	1.0
Cotton, undelinted seed	0.5
Cranberry	0.5
Egg	0.1
Goat, fat	0.1
Goat, meat	0.1
Goat, meat byproducts	0.1
Hog, fat	0.1
Hog, meat	0.1
Hog, meat byproducts	0.1
Horse, fat	0.1
Horse, meat	0.1
Horse, meat byproducts	0.1
Lettuce, head	10
Milk	0.1
Peanut	0.2
Pepper	4.0
Peppermint, tops	27
Poultry, fat	0.1
Poultry, meat	0.1
Poultry, meat byproducts	0.1
Sheep, fat	0.1
Sheep, meat	0.1
Sheep, meat byproducts	0.1
Spearmint, tops	27
Soybean, seed	1.0

<sup>1</sup>Where there is a direct use of methamidophos on the commodity, residues of methamidophos resulting from methamidophos application are regulated under 40 CFR 180.315.

(2) A tolerance of 0.02 ppm is established for residues of acephate, O,S-dimethyl acetyl phosphoramidothioate, including its metabolites and degradates other than methamidophos, in or on all food items (other than those already covered by a higher tolerance as a result of use on growing crops) in food handling establishments where food and food products are held, processed, prepared and served, including food service, manufacturing and processing establishments, such as restaurants, cafeterias, supermarkets, bakeries, breweries, dairies, meat slaughtering and packing plants, and canneries, where application of acephate shall be limited solely to spot and/or crack and crevice treatment (a coarse, low-pressure spray shall be used to avoid atomization or splashing of the spray for spot treatments; equipment capable of delivering a pin-stream of insecticide shall be used for crack and crevice treatments). Spray concentration shall be limited to a maximum of 1.0 percent active ingredient. Contamination of food or food-contact surfaces shall be avoided. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only acephate, O,S-dimethyl acetyl phosphoramidothioate, in or on the commodity.

(3) Tolerances are established for residues of methamidophos, O,S-dimethyl phosphoramidothioate, including its metabolites and degradates, in or on the commodities in the following table as a result of the application of acephate. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only methamidophos, O,S-dimethyl phosphoramidothioate, in or on the commodity.

Commodity	Parts per million
Bean, dry, seed	1
Brussels sprouts	0.5
Cauliflower	0.5
Celery	1
Cranberry	0.1
Lettuce, head	1
Pepper	1
Peppermint, tops	1
Spearmint, tops	1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* A tolerance with a regional registration is established for residues of acephate, O,S-dimethyl acetyl phosphoramidothioate, including its metabolites and degradates other than methamidophos, in or on the

commodity in the following table. Compliance with the tolerance level specified in this paragraph is to be determined by measuring only acephate, *O,S*-dimethyl acetyl phosphoramidothioate, in or on the commodity.

Commodity <sup>1</sup>	Parts per million
Nut, macadamia	0.05

<sup>1</sup>Where there is a direct use of methamidophos on the commodity, residues of methamidophos resulting from methamidophos application are regulated under 40 CFR 180.315.

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 13542, Mar. 20, 1998, as amended at 67 FR 49615, July 31, 2002; 73 FR 5108, Jan. 29, 2008; 75 FR 60237, Sept. 29, 2010; 81 FR 34905, June 1, 2016]

[↑ Back to Top](#)

### §180.109 Fepicoxamid; Tolerances for residues.

(a) *General.* Tolerances are established for residues of fepicoxamid including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels for fepicoxamid is to be determined by measuring only fepicoxamid ([4-methoxy-2-[[[(3*S*,7*R*,8*R*,9*S*)-9-methyl-8-(2-methyl-1-oxopropoxy)-2,6-dioxo-7-(phenylmethyl)-1,5-dioxonan-3-yl]amino]carbonyl]-3-pyridinyl]oxy)methyl 2-methylpropanoate) in or on the commodity.

Commodity	Parts per million
Banana*	0.15
Wheat, grain*	0.60
Rye, grain*	0.60

\*There are no U.S. registrations for use of fepicoxamid on this commodity.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[82 FR 48000, Oct. 16, 2017]

[↑ Back to Top](#)

### §180.111 Malathion; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide malathion (*O,O*-dimethyl dithiophosphate of diethyl mercaptosuccinate) in or on the following food commodities:

Commodity	Parts per million
Alfalfa, forage	135
Alfalfa, hay	135
Almond, hulls	50
Almond, postharvest	8
Apple	8
Apricot	8
Asparagus	8
Avocado	8
Barley, grain, postharvest	8
Bean, dry, seed	8
Bean, succulent	8
Beet, garden, roots	8
Beet, garden, tops	8
Beet, sugar, roots	1
Beet, sugar, tops	8
Blackberry	8
Blueberry	8
Boysenberry	8
Carrot, roots	8
Chayote, fruit	8
Chayote, roots	8
Cherry	8
Chestnut	1

Clover, forage	135
Clover, hay	135
Corn, field, forage	8
Corn, field, grain, postharvest	8
Corn, pop, grain, postharvest	8
Corn, sweet, forage	8
Corn, sweet, kernel plus cob with husks removed	2
Cowpea, forage	135
Cowpea, hay	135
Cranberry	8
Cucumber	8
Currant	8
Date, dried fruit	8
Dewberry	8
Eggplant	8
Fig	8
Flax, seed	0.1
Garlic, bulb	8
Gooseberry	8
Grape	8
Grapefruit	8
Guava	8
Hazelnut	1
Hop, dried cones	1
Horseradish	8
Kumquat	8
Leek	8
Lemon	8
Lentil, seed	8
Lespedeza, hay	135
Lime	8
Loganberry	8
Lupin, seed	8
Mango	8
Melon	8
Mushroom	8
Nectarine	8
Nut, macadamia	1
Oat, grain, postharvest	8
Okra	8
Onion, bulb	8
Onion, green	8
Orange	8
Papaya	1
Parsnip	8
Passionfruit	8
Pea	8
Pea, field, hay	8
Pea, field, vines	8
Peach	8
Peanut, hay	135
Peanut, postharvest	8
Pear	8
Pecan	8
Pepper	8
Peppermint, tops	8
Pineapple	8
Plum	8
Plum, prune	8
Potato	8
Pumpkin	8
Quince	8
Radish	8
Raspberry	8
Rice, grain, postharvest	8
Rice, wild	8
Rutabaga	8
Rye, grain, postharvest	8
Safflower, seed	0.2
Salsify, roots	8
Salsify, tops	8
Shallot, bulb	8
Sorghum, grain, forage	8

Sorghum, grain, grain, postharvest	8
Soybean, forage	135
Soybean, hay	135
Soybean, seed	8
Soybean, vegetable, succulent	8
Spearmint, tops	8
Squash, summer	8
Squash, winter	8
Strawberry	8
Sunflower, seed, postharvest	8
Sweet potato, roots	1
Tangerine	8
Tomato	8
Trefoil, forage	135
Trefoil, hay	135
Turnip, greens	8
Turnip, roots	8
Vegetable, brassica, leafy, group 5	8
Vegetable, leafy, except brassica, group 4	8
Vetch, hay	135
Walnut	8
Wheat, grain, postharvest	8

(2) Tolerances are established for the combined residues of the insecticide malathion (O,O-dimethyl dithiophosphate of diethyl mercaptosuccinate) and its metabolite, malaoxon (O,O-dimethyl thiophosphate of diethyl mercaptosuccinate), in or on the following food commodities:

Commodity	Parts per million
Barley, straw	50
Corn, field, stover	30.0
Cotton, undelinted seed	20.0
Grass, forage	200
Grass, hay	270
Oat, forage	4.0
Oat, straw	50
Rye, forage	4.0
Rye, straw	50
Watercress	0.2
Wheat, forage	4.0
Wheat, straw	50

(3) Tolerances are established for residues of the insecticide malathion (O,O-dimethyl dithiophosphate of diethyl mercaptosuccinate), in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	4
Cattle, meat <sup>1</sup>	4
Cattle, meat byproducts <sup>1</sup>	4
Egg	0.1
Goat, fat	4
Goat, meat <sup>1</sup>	4
Goat, meat byproducts <sup>1</sup>	4
Hog, fat	4
Hog, meat <sup>1</sup>	4
Hog, meat byproducts <sup>1</sup>	4
Horse, fat	4
Horse, meat <sup>1</sup>	4
Horse, meat byproducts <sup>1</sup>	4
Milk, fat	0.5
Poultry, fat	4
Poultry, meat <sup>1</sup>	4
Poultry, meat byproducts <sup>1</sup>	4
Sheep, fat	4
Sheep, meat <sup>1</sup>	4
Sheep, meat byproducts <sup>1</sup>	4

<sup>1</sup>The tolerance level shall not be exceeded in any cut of meat or in any meat byproducts from cattle, goat, hog, horse, poultry, or sheep.

(4) Malathion may be safely used in accordance with the following conditions:

(i) It is incorporated into paper trays in amounts not exceeding 100 milligrams per square foot.

(ii) Treated paper trays are intended for use only in the drying of grape (raisins).

(iii) Total residues of malathion resulting from drying of grape on treated trays and from application to grape before harvest shall not exceed 12 parts per million on processed ready-to-eat raisins.

(5) Residues of malathion in safflower, refined oil from application to the growing safflower plant shall not exceed 0.6 parts per million.

(6) Malathion may be safely used for the control of insects during the drying of grape (raisins) in compliance with paragraph (a)(4) of this section by incorporation into paper trays in amounts not exceeding 100 milligrams per square foot.

(7) Malathion (*O,O*-dimethyl dithiophosphate of diethyl mercaptosuccinate) may be safely used in feed in accordance with the following conditions.

(i) A tolerance of 50 parts per million is established for residues of malathion in citrus, dried pulp for cattle feed, when present as the result of the application of the pesticide to bagged citrus pulp during storage. Whether or not tolerances for residues of malathion on the fresh fruit have been established under section 408 of the Act, the total residue of malathion in the citrus, dried pulp shall not exceed 50 parts per million.

(ii) A tolerance of 10 parts per million is established for malathion in nonmedicated cattle feed concentrate blocks resulting from its application as a pesticide to paper used in packaging the nonmedicated cattle feed concentrate blocks.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[43 FR 22974, May 30, 1978, as amended at 43 FR 45584, Oct. 3, 1978; 44 FR 38844, July 3, 1979; 45 FR 76145, Nov. 18, 1980; 47 FR 42738, Sept. 29, 1982; 47 FR 55226, Dec. 8, 1982; 52 FR 45183, Nov. 25, 1987; 62 FR 66023, 66025, Dec. 17, 1997; 65 FR 33694, May 24, 2000; 72 FR 35665, June 29, 2007; 73 FR 54959, Sept. 24, 2008; 74 FR 47455, Sept. 16, 2009; 75 FR 60238, Sept. 29, 2010]

[↑ Back to Top](#)

#### §180.114 Ferbam; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide ferbam (ferric dimethyldithiocarbamate), calculated as carbon disulfide, in or on the following food commodities:

Commodity	Parts per million	Expiration/Revocation Date
Apple	4.0 <sup>1</sup>	None
Bean	7.0 <sup>1</sup>	10/27/07
Cabbage	7.0 <sup>1</sup>	10/27/07
Cherry	4.0 <sup>1</sup>	None
Cranberry	4.0 <sup>1</sup>	None
Fruit, citrus, group 10	4.0 <sup>1</sup>	None
Grape	4.0 <sup>1</sup>	None
Lettuce	7.0 <sup>1</sup>	10/27/07
Nectarine	4.0 <sup>1</sup>	None
Peach	4.0 <sup>1</sup>	None
Pear	4.0 <sup>1</sup>	None
Raspberry	7.0 <sup>1</sup>	10/27/07

<sup>1</sup>Some of these tolerances were established on the basis of data acquired at the public hearings held in 1950 (formerly §180.101) and the remainder were established on the basis of pesticide petitions presented under the procedure specified in the amendment to the Federal Food, Drug, and Cosmetic Act by Pub. L. 518, 83d Congress (68 Stat. 511)

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registrations, as defined in §180.1(l), are established for residues of the fungicide ferbam (ferric dimethyldithiocarbamate), calculated as carbon disulfide, in or on the following food commodities:



Commodity	Parts per million
Mango	4.0 <sup>1</sup>

<sup>1</sup>This tolerance was established on the basis of data acquired at the public hearings held in 1950 (formerly §180.101) and the remainder was established on the basis of pesticide petitions presented under the procedure specified in the amendment to the Federal Food, Drug, and Cosmetic Act by Pub. L. 518, 83d Congress (68 Stat. 511)

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 57072, Oct. 26, 1998, as amended at 72 FR 53453, Sept. 19, 2007]

[↑ Back to Top](#)

#### §180.116 Ziram; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide ziram (zinc dimethyldithiocarbamate), including its metabolites and degradates, in or on the commodities in the table below as a result of the application of ziram. Compliance with the tolerance levels specified below is to be determined by measuring total dithiocarbamates, determined as CS<sub>2</sub>, evolved during acid digestion and expressed as zinc ethylenebisdithiocarbamate.

Commodity	Parts per million
Almond	10.10
Apple	17.0
Apricot	17.0
Blueberry	17.0
Cherry, sweet	17.0
Cherry, tart	17.0
Grape	7.0
Hazelnut	0.10
Huckleberry	7.0
Peach	7.0
Pear	17.0
Pecan	0.10
Quince	17.0
Strawberry	7.0
Tomato	17.0

<sup>1</sup>Some of these tolerances were established on the basis of data acquired at the public hearings held in 1950 (formerly §180.101) and the remainder were established on the basis of pesticide petitions presented under the procedure specified in the amendment to the Federal Food, Drug, and Cosmetic Act by Public Law 518, 83d Congress (68 Stat. 511).

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 39437, July 1, 2003, as amended at 71 FR 54432, Sept. 15, 2006; 73 FR 54959, Sept. 24, 2008; 77 FR 59123, Sept. 26, 2012; 82 FR 57860, Dec. 8, 2017]

[↑ Back to Top](#)

#### §180.117 S-Ethyl dipropylthiocarbamate; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide S-ethyl dipropylthiocarbamate, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of S-ethyl dipropylthiocarbamate, S-ethyl (2-hydroxypropyl)propylcarbamothioate, S-(2-hydroxyethyl)dipropylcarbamothioate, and S-ethyl (3-hydroxypropyl)propylcarbamothioate, calculated as the stoichiometric equivalent of S-ethyl dipropylthiocarbamate, in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	0.2
Alfalfa, hay	0.6
Almond	0.08
Almond, hulls	0.08
Bean, dry, seed	0.08

Bean, succulent	0.08
Beet, garden, tops	0.5
Beet, sugar, molasses	0.4
Beet, sugar, tops	0.5
Clover, forage	0.1
Clover, hay	0.1
Corn, field, forage	0.08
Corn, field, grain	0.08
Corn, field, stover	0.08
Corn, pop, grain	0.08
Corn, pop, stover	0.08
Corn, sweet, forage	0.08
Corn, sweet, kernel plus cob with husks removed	0.08
Corn, sweet, stover	0.08
Cotton, gin byproducts	0.20
Cotton, undelinted seed	0.08
Fruit, citrus, group 10	0.1
Grass, forage	0.60
Grass, hay	0.50
Lespedeza, forage	0.1
Lespedeza, hay	0.1
Pea, succulent	0.08
Safflower, seed	0.08
Sunflower, seed	0.08
Tomato	0.08
Trefoil, forage	0.1
Trefoil, hay	0.1
Vegetable, root	0.1
Walnut	0.08

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[75 FR 60239, Sept. 29, 2010, as amended at 82 FR 42952, Sept. 13, 2017]

[↑ Back to Top](#)

### §180.123 Inorganic bromide residues resulting from fumigation with methyl bromide; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of inorganic bromides (calculated as Br) in or on the following food commodities which have been fumigated with the antimicrobial agent and insecticide methyl bromide after harvest (with the exception of strawberry):

Commodity	Parts per million	Expiration/Revocation Date
Alfalfa, hay, postharvest	50.0	10/31/11
Almond, postharvest	200.0	None
Apple, postharvest	5.0	None
Apricot, postharvest	20.0	None
Artichoke, jerusalem, postharvest	30.0	None
Asparagus, postharvest	100.0	None
Avocado, postharvest	75.0	None
Barley, grain, postharvest	50.0	None
Bean, lima, postharvest	50.0	None
Bean, postharvest	50.0	None
Bean, snap, succulent, postharvest	50.0	None
Bean, succulent, postharvest	50.0	None
Beet, garden, roots, postharvest	30.0	None
Beet, sugar, roots, postharvest	30.0	None
Blueberry, postharvest	20.0	None
Butternut, postharvest	200.0	None
Cabbage, postharvest	50.0	None
Cacao bean, roasted bean, postharvest	50.0	None
Cantaloupe, postharvest	20.0	None
Carrot, roots, postharvest	30.0	None
Cashew, postharvest	200.0	None
Cherry, sweet, postharvest	20.0	None
Cherry, tart, postharvest	20	None
Chestnut, postharvest	200.0	None
Cippolini, bulb, postharvest	50.0	None

Citron, citrus, postharvest	30.0	None
Coconut, copra, postharvest	100.0	None
Coffee, bean, green, postharvest	75.0	None
Corn, field, grain, postharvest	50.0	None
Corn, pop, postharvest	240.0	None
Corn, sweet, kernel plus cob with husks removed, postharvest	50.0	None
Cotton, undelinted seed, postharvest	200.0	10/31/11
Cucumber, postharvest	30.0	None
Cumin, seed, postharvest	100.0	None
Eggplant, postharvest	20.0	None
Garlic, postharvest	50.0	None
Ginger, postharvest	100.0	None
Grape, postharvest	20.0	None
Grapefruit, postharvest	30.0	None
Hazelnut, postharvest	200.0	None
Horseradish, postharvest	30.0	None
Kumquat, postharvest	30.0	None
Lemon, postharvest	30.0	None
Lime, postharvest	30.0	None
Melon, honeydew, postharvest	20.0	None
Muskmelon, postharvest	20.0	None
Nectarine, postharvest	20.0	None
Nut, brazil, postharvest	200.0	None
Nut, hickory, postharvest	200.0	None
Nut, macadamia, postharvest	200.0	None
Oat, postharvest	50.0	None
Okra, postharvest	30.0	None
Onion, bulb, postharvest	20.0	None
Onion, green, postharvest	20.0	None
Orange, postharvest	30.0	None
Parsnip, roots, postharvest	30.0	None
Peach, postharvest	20.0	None
Peanut, postharvest	200.0	None
Pear, postharvest	5.0	None
Pea, blackeyed, postharvest	50.0	None
Pea, postharvest	50.0	None
Pecan, postharvest	200.0	None
Pepper, postharvest	30.0	None
Pimento, postharvest	30.0	None
Pineapple, postharvest	20.0	None
Pistachio, postharvest	200.0	None
Plum, postharvest	20.0	None
Pomegranate, postharvest	100.0	None
Potato, postharvest	75.0	None
Pumpkin, postharvest	20.0	None
Quince, postharvest	5.0	None
Radish, postharvest	30.0	None
Rice, grain, postharvest	50.0	None
Rutabaga, roots, postharvest	30.0	None
Rutabaga, tops, postharvest	30.0	None
Rye, grain, postharvest	50.0	None
Salsify, roots, postharvest	30.0	None
Sorghum, grain, grain, postharvest	50.0	None
Soybean, postharvest	200.0	None
Squash, summer, postharvest	30.0	None
Squash, winter, postharvest	20.0	None
Squash, zucchini, postharvest	20.0	None
Strawberry, postharvest	60.0	None
Sweet potato, postharvest	75.0	None
Tangerine, postharvest	30.0	None
Timothy, hay, postharvest	50.0	10/19/10
Tomato, postharvest	20.0	None
Turnip, roots, postharvest	30.0	None
Walnut, postharvest	200.0	None
Watermelon, postharvest	20.0	None
Wheat	50.0	None

(2) Inorganic bromide may be present as a residue in certain processed food in accordance with the following conditions:

(i) When inorganic bromide residues are present as a result of fumigation of the processed food with methyl bromide or from such fumigation in addition to the authorized use of methyl bromide on the source raw agricultural commodity, as provided for in this part, the total residues of inorganic bromides (calculated as Br) shall not exceed the following levels:

- (A) 400 parts per million in or on egg, dried and herb, processed and spice.
- (B) 325 parts per million in or on cheese, parmesan and cheese, roquefort cheese.
- (C) 250 parts per million in or on tomato, concentrated products and fig, dried fruit.
- (D) 125 parts per million in or on processed food other than those listed above.

(ii) When inorganic bromide residues are present in malt beverage, fermented in accordance with 21 CFR 172.730(a)(2), the amount shall not exceed 25 parts per million (calculated as Br).

(iii) Where tolerances are established on both the raw agricultural commodities and processed food made therefrom, the total residues of inorganic bromides in or on the processed food shall not be greater than those designated in paragraph (a)(2) of this section, unless a higher level is established elsewhere in this part.

(3) Tolerances are established for residues of inorganic bromides (calculated as Br) as follows:

(i) 400 parts per million for residues in or on dog food, resulting from fumigation with methyl bromide.

(ii) 125 parts per million for residues in or on processed commodities for animal feedstuffs from barley, corn, grain sorghum, oat, rice, rye and wheat, resulting directly from fumigation with methyl bromide or from carryover and concentration of residues of inorganic bromides from fumigation of the grains with methyl bromide.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* A tolerance with regional registration, as defined in §180.1(l), is established for residues of inorganic bromides (calculated as Br) in or on the following food commodity grown in soil fumigated with methyl bromide.

Commodity	Parts per million
Ginger, postharvest	100

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 74812, Dec. 13, 2006, as amended at 75 FR 60239, Sept. 29, 2010]

[↑ Back to Top](#)

### §180.123a Inorganic bromide residues in peanut hay and peanut hulls; statement of policy.

(a) Investigations by the Food and Drug Administration show that peanut hay and peanut shells have been used as feed for meat and dairy animals. While many growers now harvest peanuts with combines and leave the hay on the ground to be incorporated into the soil, some growers follow the practice of curing peanuts on the vines in a stack and save the hay for animal feed. Peanut shells or hulls have been used to a minor extent as roughage for cattle feed. It has been established that the feeding to cattle of peanut hay and peanut hulls containing residues of inorganic bromides will contribute considerable residues of inorganic bromides to the meat and milk.

(b) There are no tolerances for inorganic bromides in meat and milk to cover residues from use of such peanut hulls as animal feed. Peanut hulls containing residues of inorganic bromides from the use of methyl bromide are unsuitable as an ingredient in the feed of meat and dairy animals and should not be represented, sold, or used for that purpose.

[58 FR 65555, Dec. 15, 1993]

[↑ Back to Top](#)

### §180.124 Methyl bromide; tolerances for residues.

(a) *General.* A tolerance is established for residues of the fumigant methyl bromide, including metabolites and degradates, in or on the commodity in the table below. Compliance with the tolerance level specified below is to be determined by measuring only methyl bromide.

Commodity	Parts per million
Cotton, undelinted seed	150

(b) *Section 18 emergency exemptions.* Time-limited tolerances as listed in the following table are established for residues of the fumigant methyl bromide, including its metabolites and degradates, in or on the specified agricultural commodities,

resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. Compliance with the tolerance levels specified below is to be determined by measuring only methyl bromide. These tolerances expire and are revoked on the date indicated in the table.

Commodity	Parts per million	Expiration date
Avocado	5.0	12/31/20
Banana	5.0	12/31/20
Cactus	3.0	12/31/20
Coconut, copra	8.0	12/31/20
Coffee, green bean	150	12/31/20
Cola	150	12/31/20
Cucurbit, seed	150	12/31/20
Fig	10	12/31/20
Fruit, berry and small fruit, group 13-07	5.0	12/31/20
Fruit, stone, group 12-12	5.0	12/31/20
Herb and spice, group 19	35	12/31/20
Hibiscus, seed	150	12/31/20
Ivy gourd	5.0	12/31/20
Kaffir lime, leaves	0.50	12/31/20
Kenaf, seed	150	12/31/20
Longan	5.0	12/31/20
Lychee	5.0	12/31/20
Oilseed group 20	150	12/31/20
Peppermint, tops	35	12/31/20
Pointed gourd	5.0	12/31/20
Pomegranate	5.0	12/31/20
Rambutan	5.0	12/31/20
Spanish lime	5.0	12/31/20
Spearmint, tops	35	12/31/20
Stalk, stem and leaf petiole vegetable group 22	0.50	12/31/20
Tropical and subtropical fruits, edible peel, group 23	10	12/31/20
Tropical and subtropical fruits, inedible peel, group 24	5.0	12/31/20
Vegetable, bulb, group 3-07	2.0	12/31/20
Vegetable, cucurbit, group 9	5.0	12/31/20
Vegetable, foliage of legume, group 7	0.50	12/31/20
Vegetable, fruiting, group 8-10	7.0	12/31/20
Vegetable, Head and Stem <i>Brassica</i> , group 5-16	1.0	12/31/20
Vegetable, leafy, group 4-16	0.50	12/31/20
Vegetable, leaves of root and tuber, group 2	0.50	12/31/20
Vegetable, legume, group 6	3.0	12/31/20
Vegetable, root and tuber, group 1	3.0	12/31/20

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 35298, June 13, 2012, as amended at 83 FR 8763, Mar. 1, 2018]

[↑ Back to Top](#)

### §180.127 Piperonyl butoxide; tolerances for residues.

(a) *General.* (1) Tolerances for residues of the insecticide piperonyl butoxide [(butyl carbityl)(6-propyl piperonyl)ether] are established in or on the following food commodities:

Commodity	Parts per million
Almond, postharvest	8
Apple, postharvest	8
Barley, postharvest	20
Bean, postharvest	8
Birdseed, mixtures, postharvest	20
Blackberry, postharvest	8
Blueberry, postharvest	8
Boysenberry, postharvest	8
Buckwheat, grain, postharvest	20
Cattle, fat	0.1
Cattle, meat	0.1
Cattle, meat byproducts	0.1
Cherry, sweet, postharvest	8
Cherry, tart, postharvest	8

Cocoa bean, roasted bean, postharvest	8
Coconut, copra, postharvest	8
Corn, field, grain, postharvest	20
Corn, pop, postharvest	20
Cotton, undelinted seed, postharvest	8
Crabapple, postharvest	8
Currant, postharvest	8
Dewberry, postharvest	8
Egg	1
Fig, postharvest	8
Flax, seed, postharvest	8
Goat, fat	0.1
Goat, meat	0.1
Goat, meat byproducts	0.1
Gooseberry, postharvest	8
Grape, postharvest	8
Guava, postharvest	8
Hog, fat	0.1
Hog, meat	0.1
Hog, meat byproducts	0.1
Horse, fat	0.1
Horse, meat	0.1
Horse, meat byproducts	0.1
Loganberry, postharvest	8
Mango, postharvest	8
Milk, fat	0.25
Muskmelon, postharvest	8
Oat, postharvest	8
Orange, postharvest	8
Peach, postharvest	8
Peanut, postharvest	8
Pea, postharvest	8
Pear, postharvest	8
Pineapple, postharvest	8
Plum, prune, fresh, postharvest	8
Potato, postharvest	0.25
Poultry, fat	3
Poultry, meat	3
Poultry, meat byproducts	3
Raspberry, postharvest	8
Rice, postharvest	20
Rye, postharvest	20
Sheep, fat	0.1
Sheep, meat	0.1
Sheep, meat byproducts	0.1
Sorghum, grain, postharvest	8
Sweet potato, postharvest	0.25
Tomato, postharvest	8
Walnut, postharvest	8
Wheat, postharvest	20

(2) Piperonyl butoxide may be safely used in accordance with the following prescribed conditions:

(i) It is used or intended for use in combination with pyrethrins for control of insects:

(A) In cereal grain mills and in storage areas for milled cereal grain products, whereby the amount of piperonyl butoxide is at least equal to but not more than 10 times the amount of pyrethrins in the formulation.

(B) On the outer ply of multiwall paper bags of 50 pounds or more capacity in amounts not exceeding 60 milligrams per square foot, whereby the amount of piperonyl butoxide is equal to 10 times the amount of pyrethrins in the formulation. Such treated bags are to be used only for food, dried.

(C) On cotton bags of 50 pounds or more capacity in amounts not exceeding 55 milligrams per square foot of cloth, whereby the amount of piperonyl butoxide is equal to 10 times the amount of pyrethrins in the formulation. Such treated bags are constructed with waxed paper liners and are to be used only for food, dried that contain 4 percent fat or less.

(D) In two-ply bags consisting of cellophane/polyolefin sheets bound together by an adhesive layer when it is incorporated in the adhesive. The treated sheets shall contain not more than 50 milligrams of piperonyl butoxide per square foot (538 milligrams per square meter). Such treated bags are to be used only for packaging plum, prune, dried; grape, raisin; and other

fruit, dried and are to have a maximum ratio of 3.12 milligrams of piperonyl butoxide per ounce of fruit (0.10 milligram of piperonyl butoxide per gram of product).

(E) In food processing and food storage areas: Provided, That the food is removed or covered prior to such use.

(ii) It is used or intended for use in combination with pyrethrins and N-octylbicycloheptene dicarboximide for insect control in accordance with 21 CFR 178.3730.

(iii) A tolerance of 10 parts per million is established for residues of piperonyl butoxide in or on:

(A) Grain, cereal, milled fractions when present therein as a result of its use in cereal grain mills and in storage areas for milled cereal grain products.

(B) Food, dried when present as a result of migration from its use on the outer ply of multiwall paper bags of 50 pounds or more capacity.

(C) Food treated in accordance with 21 CFR 178.3730.

(D) Food, dried that contain 4 percent fat, or less, when present as a result of migration from its use on the cloth of cotton bags of 50 pounds or more capacity constructed with waxed paper liners.

(E) Food treated in accordance with paragraph (a)(2)(i)(D) and (E) of this section.

(iv) To assure safe use of the pesticide, its label and labeling shall conform to that registered with the U.S. Environmental Protection Agency, and it shall be used in accordance with such label and labeling.

(v) Where tolerances are established on both raw agricultural commodities and processed food made therefrom, the total residues of piperonyl butoxide in or on the processed food shall not be greater than that permitted by the larger of the two tolerances.

(3) Piperonyl butoxide may be safely used in accordance with the following prescribed conditions:

(i) It is used or intended for use in combination with pyrethrins for control of insects:

(A) On the outer ply of multiwall paper bags of 50 pounds or more capacity in amounts not exceeding 60 milligrams per square foot.

(B) On cotton bags of 50 pounds or more capacity in amounts not exceeding 55 milligrams per square foot of cloth. Such treated bags are constructed with waxed paper liners and are to be used only for feed, dried that contain 4 percent fat or less.

(ii) It is used in combination with pyrethrins, whereby the amount of piperonyl butoxide is equal to 10 times the amount of pyrethrins in the formulation. Such treated bags are to be used only for feed, dried.

(iii) A tolerance of 10 parts per million is established for residues of piperonyl butoxide when present as the result of migration:

(A) In or on feed, dried from its use on the outer ply of multiwall paper bags of 50 pounds or more capacity.

(B) In or on feed, dried that contain 4 percent fat, or less, from its use on cotton bags of 50 pounds or more capacity constructed with waxed paper liners.

(iv) To assure safe use of the pesticide, its label and labeling shall conform to that registered with the U.S. Environmental Protection Agency.

(v) Where tolerances are established on both the raw agricultural commodities and food, processed made therefrom, the total residues of piperonyl butoxide in or on the processed food shall not be greater than that permitted by the larger of the two tolerances.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 74813, Dec. 13, 2006]

[↑ Back to Top](#)



**§180.128 Pyrethrins; tolerances for residues.**

(a) *General.* (1) Tolerances for residues of the insecticide pyrethrins ((1S)-2-methyl-4-oxo-3-(2Z)-2,4-pentadienylcyclopenten-1-yl (1R,3R)-2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate (pyrethrin 1), (1S)-2-methyl-4-oxo-3-(2Z)-2,4-pentadienyl-2-cyclopenten-1-yl (1R,3R)-3-[(1E)-3-methoxy-2-methyl-3-oxo-1-propenyl]-2,2-dimethylcyclopropane-carboxylate (pyrethrin 2), (1S)-3-(2Z)-2-butenyl-2-methyl-4-oxo-2-cyclopenten-1-yl (1R,3R)-2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate (cinerin 1), (1S)-3-(2Z)-2-butenyl-2-methyl-4-oxo-2-cyclopenten-1-yl (1R,3R)-3-[(1E)-3-methoxy-2-methyl-3-oxo-1-propenyl]-2,2-dimethylcyclopropanecarboxylate (cinerin 2), (1S)-2-methyl-4-oxo-3-(2Z)-2-pentenyl-2-cyclopenten-1-yl (1R, 3R)-2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate (jasmolin 1), and (1S)-2-methyl-4-oxo-3-(2Z)-2-pentenyl-2-cyclopenten-1-yl (1R,3R)-3-[(1E)-3-methoxy-2-methyl-3-oxo-1-propenyl]-2,2-dimethylcyclopropanecarboxylate (jasmolin 2)), the insecticidally active principles of *Chrysanthemum cinerariaefolium*, which are measured as cumulative residues of pyrethrin 1, cinerin 1, and jasmolin 1 are not to exceed the following:

Commodity	Parts per million
Almond, postharvest	1.0
Apple, postharvest	1.0
Barley, grain, postharvest	3.0
Bean, succulent, postharvest	1.0
Birdseed, mixtures, postharvest	3.0
Blackberry, postharvest	1.0
Blueberry, postharvest	1.0
Boysenberry, postharvest	1.0
Buckwheat, grain, postharvest	3.0
Cacao bean, roasted bean, postharvest	1.0
Cattle, fat	1.0
Cattle, meat	0.05
Cattle, meat byproducts	0.05
Cherry, sweet, postharvest	1.0
Cherry, tart, postharvest	1.0
Coconut, copra, postharvest	1.0
Corn, field, grain, postharvest	3.0
Corn, pop, grain, postharvest	3.0
Cotton, undelinted seed, postharvest	1.0
Crabapple, postharvest	1.0
Currant, postharvest	1.0
Dewberry, postharvest	1.0
Fig, postharvest	1.0
Flax, seed, postharvest	1.0
Goat, fat	1.0
Goat, meat	0.05
Goat, meat byproducts	0.05
Gooseberry, postharvest	1.0
Grape, postharvest	1.0
Guava, postharvest	1.0
Hog, fat	1.0
Hog, meat	0.05
Hog, meat byproducts	0.05
Horse, fat	1.0
Horse, meat	0.05
Horse, meat byproducts	0.05
Loganberry, postharvest	1.0
Mango, postharvest	1.0
Milk, fat (reflecting negligible residues in milk)	0.05
Muskmelon, postharvest	1.0
Oat, grain, postharvest	1.0
Orange, postharvest	1.0
Pea, dry, seed, postharvest	1.0
Peach, postharvest	1.0
Peanut, postharvest	1.0
Pear, postharvest	1.0
Pineapple, postharvest	1.0
Plum, prune, fresh, postharvest	1.0
Potato, postharvest	0.05
Raspberry, postharvest	1.0
Rice, grain, postharvest	3.0
Rye, grain, postharvest	3.0
Sheep, fat	1.0
Sheep, meat	0.05
Sheep, meat byproducts	0.05
Sorghum, grain, grain, postharvest	1.0
Sweet potato, postharvest	0.05

Tomato, postharvest	1.0
Walnut, postharvest	1.0
Wheat, grain, postharvest	3.0

(2) A tolerance of 1.0 ppm is established for residues of the insecticide pyrethrins in or on milled fractions derived from grain, cereal when present as a result of its use in cereal grain mills and in storage areas for milled cereal grain products.

(3) A tolerance of 1.0 ppm is established for residues of the insecticide pyrethrins in or on all food items in food handling establishments where food and food products are held, processed, prepared and/or served. Food must be removed or covered prior to use.

(4) Where tolerances are established on both the raw agricultural commodities and processed foods made there-from, the total residues of pyrethrins in or on the processed food shall not be greater than that permitted by the larger of the two tolerances.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 74814, Dec. 13, 2006, as amended at 73 FR 5108, Jan. 29, 2008]

[↑ Back to Top](#)

### §180.129 o-Phenylphenol and its sodium salt; tolerances for residues.

(a) *General.* Tolerances are established for combined residues of the fungicide o-phenylphenol and sodium o-phenylphenate, each expressed as o-phenylphenol, from postharvest application of either in or on the following food commodities:

Commodity	Parts per million
Apple	25
Cantaloupe (NMT 10 ppm in edible portion)	125
Carrot, roots	20
Cherry	5
Citrus fruits	10
Cucumber	10
Lemon	10
Nectarine	5
Orange	10
Pepper, bell	10
Peach	20
Pear	25.0
Pineapple	10
Plum, prune, fresh	20
Sweet potato, roots	15
Tomato	10

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 54960, Sept. 24, 2008]

[↑ Back to Top](#)

### §180.130 Hydrogen Cyanide; tolerances for residues.

(a) *General.* A tolerance for residues of the insecticide hydrogen cyanide from postharvest fumigation as a result of application of sodium cyanide is established as follows: 50 parts per million in or on Fruit, citrus.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 39077, July 21, 1999]

[↑ Back to Top](#)**§180.132 Thiram; tolerances for residues.**

(a) *General.* (1) A tolerances for residues of the fungicide thiram (tetramethyl thiuram disulfide), including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance level specified in this paragraph is to be determined by measuring only thiram.

Commodity	Parts per million
Avocado <sup>1</sup>	15

<sup>1</sup>No U.S. registrations as of September 23, 2009.

(2) Tolerances are established for residues of the fungicide thiram, tetramethyl thiuram disulfide, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only those thiram residues convertible to and expressed in terms of the degradate carbon disulfide, in or on the commodity.

Commodity	Parts per million
Apple	5
Banana <sup>1</sup>	2.0
Peach	7.0
Strawberry	13

<sup>1</sup>There are no U.S. registrations as of September 23, 2009.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[67 FR 49615, July 31, 2002, as amended at 74 FR 48391, Sept. 23, 2009; 79 FR 8301, Feb. 12, 2014; 79 FR 18822, Apr. 4, 2014; 80 FR 16306, Mar. 27, 2015; 80 FR 35252, June 19, 2015; 80 FR 72597, Nov. 20, 2015]

[↑ Back to Top](#)**§180.142 2,4-D; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the herbicide, plant regulator, and fungicide 2,4-D, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels is to be determined by measuring residues of 2,4-D (2,4-dichlorophenoxyacetic acid), both free and conjugated, determined as the acid, in or on the following commodities:

Commodity	Parts per million
Almond hulls	0.1
Asparagus	5.0
Barley, bran	4.0
Barley, grain	2.0
Barley, straw	50
Berry, group 13	0.2
Cattle, fat	0.3
Cattle, kidney	4.0
Cattle, meat	0.3
Cattle, meat byproducts, except kidney	0.3
Corn, field, forage	6.0
Corn, field, grain	0.05
Corn, field, stover	50
Corn, pop, grain	0.05
Corn, pop, stover	50
Corn, sweet, forage	6.0
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	50
Cotton, gin byproducts	1.5
Cotton, undelinted seed	0.08

Cranberry	0.5
Fish	0.1
Fruit, citrus, group 10	3.0
Fruit, pome, group 11	0.05
Fruit, stone, group 12	0.05
Goat, fat	0.3
Goat, kidney	4.0
Goat, meat	0.3
Goat, meat byproducts, except kidney	0.3
Grain, aspirated fractions	40
Grape	0.05
Grass, forage	360
Grass, hay	300
Hop, dried cones	0.2
Horse, fat	0.3
Horse, kidney	4.0
Horse, meat	0.3
Horse, meat byproducts, except kidney	0.3
Millet, forage	25
Millet, grain	2.0
Millet, straw	50
Milk	0.05
Nut, tree, group 14	0.2
Oat, forage	25
Oat, grain	2.0
Oat, straw	50
Pistachio	0.05
Potato	0.4
Rice, grain	0.5
Rice, hulls	2.0
Rye, bran	4.0
Rye, forage	25
Rye, grain	2.0
Rye, straw	50
Sheep, fat	0.3
Sheep, kidney	4.0
Sheep, meat	0.3
Sheep, meat byproducts, except kidney	0.3
Shellfish	1.0
Sorghum, grain, forage	0.2
Sorghum, grain, grain	0.2
Sorghum, grain, stover	0.2
Soybean, forage	0.02
Soybean, hay	2.0
Soybean, seed	0.02
Strawberry	0.05
Sugarcane, cane	0.05
Sugarcane, molasses	0.2
Teff, bran	4.0
Teff, forage	25.0
Teff, grain	2.0
Teff, straw	50.0
Vegetable, leaves of root and tuber, group 2	0.1
Vegetable, root and tuber, except potato, group 1	0.1
Wheat, bran	4.0
Wheat, forage	25
Wheat, grain	2.0
Wheat, straw	50

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of the herbicide, plant regulator, and fungicide 2,4-D, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels is to be determined by measuring residues of 2,4-D (2,4-dichlorophenoxyacetic acid), both free and conjugated, determined as the acid, in or on the follow commodities:

Commodity	Parts per million
Rice, wild, grain	0.05

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of the herbicide, plant regulator, and fungicide 2,4-D, including its metabolites and degradates, in or on the commodities in the table below.

Compliance with the tolerances levels is to be determined by measuring residues of 2,4-D (2,4-dichlorophenoxyacetic acid), both free and conjugated, determined as the acid, in or on the following commodities:

Commodity	Parts per million
Animal feed, nongrass, group 18	0.2
Avocado	0.05
Dill, seed	0.05
Okra	0.05
Vegetable, brassica leafy, group 5	0.4
Vegetable, bulb, group 3	0.05
Vegetable, cucurbit, group 9	0.05
Vegetable, foliage of legume, group 7	0.2
Vegetable, fruiting, group 8	0.05
Vegetable, leafy, except brassica, group 4	0.4
Vegetable, legume, group 6	0.05

[72 FR 52017, Sept. 12, 2007, as amended at 73 FR 53737, Sept. 17, 2008; 74 FR 48411, Sept. 23, 2009; 76 FR 55817, Sept. 9, 2011; 80 FR 72597, Nov. 20, 2015; 82 FR 9529, Feb. 7, 2017]

[↑ Back to Top](#)

### §180.145 Fluorine compounds; tolerances for residues.

(a) *General.* (1) Tolerances are established for combined residues of the insecticidal fluorine compounds cryolite and synthetic cryolite (sodium aluminum fluoride) in or on the following agricultural commodities:

Commodity	Parts per million
Apricot	7
Blackberry	7
Blueberry	7
Boysenberry	7
Broccoli	7
Brussels sprouts	7
Cabbage	7
Cauliflower	7
Collards	7
Cranberry	7
Cucumber	7
Dewberry	7
Eggplant	7
Fruit, citrus	7
Grape	7
Kale	7
Kohlrabi	7
Lettuce, head	7
Lettuce, leaf	7
Loganberry	7
Melon	7
Nectarine	7
Peach	7
Pepper	7
Plum, prune, fresh	7
Pumpkin	7
Raspberry	7
Squash, summer	7
Squash, winter	7
Strawberry	7
Tomato	7
Youngberry	7

(2) Tolerances are established for residues of fluoride in or on the following commodities from the postharvest fumigation with sulfuryl fluoride for the control of insects:

Commodity	Parts per million
All processed food commodities not otherwise listed	70
Barley, bran, postharvest	45.0
Barley, flour, postharvest	45.0
Barley, grain, postharvest	15.0
Barley, pearled barley, postharvest	45.0
Cattle, meat, dried	40
Cheese	5.0
Cacao bean, roasted bean, postharvest	20

Coconut, postharvest	40
Coffee, bean, green, postharvest	15
Corn, field, flour, postharvest	35.0
Corn, field, grain, postharvest	10.0
Corn, field, grits, postharvest	10.0
Corn, field, meal, postharvest	30.0
Corn, pop, grain, postharvest	10.0
Cotton, undelinted seed, postharvest	70
Egg, dried	900
Fruit, dried, except grape, raisin, postharvest	3.0
Ginger, postharvest	70
Grain, aspirated fractions, postharvest	55.0
Grape, raisin, postharvest	7.0
Hog, meat	20
Herbs and spices group 19, postharvest	70
Milk, powdered	5.0
Millet, grain, postharvest	40.0
Nut, pine, postharvest	20
Nut, tree, Group 14, postharvest	10.0
Oat, flour, postharvest	75.0
Oat, grain, postharvest	25.0
Oat, groats/rolled oats	75.0
Peanut, postharvest	15
Pistachio, postharvest	10.0
Rice, bran, postharvest	31.0
Rice, flour, postharvest	45
Rice, grain, postharvest	12.0
Rice, hulls, postharvest	35.0
Rice, polished rice, postharvest	25.0
Rice, wild, grain, postharvest	25.0
Sorghum, grain, postharvest	40.0
Triticale, grain, postharvest	40.0
Vegetable, legume, group 6, postharvest	70
Wheat, bran, postharvest	40.0
Wheat, flour, postharvest	125.0
Wheat, germ, postharvest	130.0
Wheat, grain, postharvest	40.0
Wheat, milled byproducts, postharvest	130.0
Wheat, shorts, postharvest	40.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined by §180.1(l), are established for the combined residues of the insecticidal fluorine compounds, cryolite and synthetic cryolite (sodium aluminum fluoride), in or on the following raw agricultural commodities:

Commodity	Parts per million
Kiwifruit	15

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 74815, Dec. 13, 2006, as amended at 76 FR 34885, June 15, 2011]

[↑ Back to Top](#)

### §180.151 Ethylene oxide; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the antimicrobial agent and insecticide ethylene oxide, when used as a postharvest fumigant in or on the following food commodities:

Commodity	Parts per million
Herb and spice, group 19, dried, except basil	7
Licorice, roots	7
Peppermint, tops, dried	7
Sesame, seed	7
Spearmint, tops, dried	7
Vegetable, dried	7
Walnut	50

(2) Tolerances are established for residues of the ethylene oxide reaction product, 2-chloroethanol, commonly referred to as ethylene chlorohydrin, when ethylene oxide is used as a postharvest fumigant in or on food commodities as follows:

Commodity	Parts per million
Herb and spice, group 19, dried, except basil	940
Licorice, roots	940
Peppermint, tops, dried	940
Sesame, seed	940
Spearmint, tops, dried	940
Vegetable, dried	940

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33695, May 24, 2000, as amended at 74 FR 46696, Sept. 11, 2009]

[↑ Back to Top](#)

### §180.153 Diazinon; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide diazinon, O,O-diethyl O-[6-methyl-2-(1-methylethyl)-4-pyrimidinyl]phosphorothioate (CAS No. 333-41-5), in or on the following food commodities:

Commodity	Parts per million
Almond, hulls	3.0
Apple	0.50
Apricot	0.20
Bean, lima	0.50
Bean, snap, succulent	0.50
Beet, garden, roots	0.75
Beet, garden, tops	0.70
Blueberry	0.50
Caneberry subgroup 13-07A	0.75
Carrot, roots	0.75
Cattle, fat	0.50
Cherry, sweet	0.20
Cherry, tart	0.20
Cranberry	0.50
Endive	0.70
Fig	0.50
Ginseng	0.75
Grape	0.75 <sup>2</sup>
Hazelnut	0.50
Kiwifruit <sup>1</sup>	0.75
Lettuce	0.70
Melon	0.75
Mushroom	0.75 <sup>2</sup>
Nectarine	0.20
Onion, bulb	0.75
Onion, green	0.75
Pea, succulent	0.50
Peach	0.20
Pear	0.50
Pineapple	0.50
Plum, prune, fresh	0.20
Radish	0.50
Rutabaga	0.75
Spinach	0.70
Strawberry	0.50
Tomato	0.75
Vegetable, brassica, leafy, group 5	0.70
Watercress	0.05

<sup>1</sup>There are no domestic registrations for kiwifruit as of March 6, 2002.

<sup>2</sup>The expiration/revocation date for this tolerance is 9/10/2010.

(b) *Section 18 emergency exemptions.* [Reserved]



(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of the insecticide diazinon, O, O-diethyl O-[6-methyl-2-(1-methylethyl)-4-pyrimidinyl]-phosphorothioate (CAS No. 333-41-5), in or on the following food commodities:

Commodity	Parts per million
Almond	0.50
Banana	0.20
Celery	0.70
Cucumber	0.75
Parsley, leaves	0.75
Parsnip	0.50
Pepper	0.5
Potato	0.10
Squash, summer	0.50
Squash, winter	0.75
Sweet potato, roots	0.10
Swiss chard	0.70
Turnip, roots	0.50
Turnip, tops	0.75

(d) *Indirect or inadvertent residues.* [Reserved]

[47 FR 42738, Sept. 29, 1982]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.153, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

#### §180.155 1-Naphthaleneacetic acid; tolerances for residues.

(a) *General.* Tolerances are established for the residues of 1-naphthaleneacetic acid, including its metabolites and degradates in or on the commodities in the following table. Compliance with the tolerance levels specified is to be determined by measuring only 1-naphthaleneacetic acid and its conjugates, calculated as the Stoichiometric equivalent of 1-naphthaleneacetic acid, in or on the commodity.

Commodity	Parts per million
Avocado	0.05
Cherry, sweet	0.1
Fruit, pome, group 11-10	0.15
Mango	0.05
Olive	0.7
Orange	0.1
Pineapple <sup>1</sup>	0.05
Pomegranate	0.05
Potato	0.01
Rambutan	2.0
Sapote, mamey	0.05
Tangerine	0.1

<sup>1</sup>There are no U.S. registrations since 1988.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[78 FR 30218, May 22, 2013, as amended at 80 FR 77260, Dec. 14, 2015]

[↑ Back to Top](#)

#### §180.163 Dicofof; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide dicofof, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only dicofof as the sum of its p,p-dicofof and o,p-dicofof isomers: 4-chloro- $\alpha$ -(4-chlorophenyl)- $\alpha$ -(trichloromethyl)benzenemethanol and 2-chloro- $\alpha$ -(4-chlorophenyl)- $\alpha$ -(trichloromethyl)benzenemethanol, in or on the commodity.

Commodity	Parts per million	Expiration/revocation date
Apple, wet pomace	38.0	10/31/16
Bean, dry, seed	0.5	10/31/16
Bean, succulent	3.0	10/31/16
Butternut	0.1	10/31/16
Caneberry subgroup 13A	5.0	10/31/16
Chestnut	0.1	10/31/16
Citrus, dried pulp	12.0	10/31/16
Citrus oil	200.0	10/31/16
Cotton, refined oil	0.5	10/31/16
Cotton, undelinted seed	0.1	10/31/16
Fruit, citrus, group 10	6.0	10/31/16
Fruit, pome, group 11	10.0	10/31/16
Fruit, stone, group 12	5.0	10/31/16
Grape	5.0	10/31/16
Grape, raisin	20.0	10/31/16
Hazelnut	0.1	10/31/16
Hop, dried cones	65.0	10/31/16
Nut, hickory	0.1	10/31/16
Nut, macadamia	0.1	10/31/16
Pecan	0.1	10/31/16
Peppermint, oil	30.0	10/31/16
Peppermint, tops	25.0	10/31/16
Spearmint, oil	30.0	10/31/16
Spearmint, tops	25.0	10/31/16
Strawberry	10.0	10/31/16
Tea, dried	50.0	None
Tea, plucked leaves	30.0	None
Vegetable, cucurbit, group 9	2.0	10/31/16
Vegetable, fruiting, group 8	2.0	10/31/16
Walnut	0.1	10/31/16

(2) Tolerances are established for residues of the insecticide dicofol, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of p,p-dicofol, 4-chloro- $\alpha$ -(4-chlorophenyl)- $\alpha$ -(trichloromethyl)benzenemethanol, its isomer o,p-dicofol, 2-chloro- $\alpha$ -(4-chlorophenyl)- $\alpha$ -(trichloromethyl)benzenemethanol, and its metabolites 4-chloro- $\alpha$ -(4-chlorophenyl)- $\alpha$ -(dichloromethyl)benzenemethanol and 2-chloro- $\alpha$ -(4-chlorophenyl)- $\alpha$ -(dichloromethyl)benzenemethanol, calculated as the stoichiometric equivalent of p,p-dicofol, 4-chloro- $\alpha$ -(4-chlorophenyl)- $\alpha$ -(trichloromethyl)benzenemethanol, in or on the commodity.

Commodity	Parts per million	Expiration/Revocation Date
Cattle, fat	50.0	10/31/16
Cattle, liver	5.0	10/31/16
Cattle, meat	3.0	10/31/16
Cattle, meat byproducts, except liver	3.0	10/31/16
Egg	0.05	10/31/16
Goat, fat	50.0	10/31/16
Goat, liver	5.0	10/31/16
Goat, meat	3.0	10/31/16
Goat, meat byproducts, except liver	3.0	10/31/16
Hog, fat	50.0	10/31/16
Hog, liver	5.0	10/31/16
Hog, meat	3.0	10/31/16
Hog, meat byproducts, except liver	3.0	10/31/16
Horse, fat	50.0	10/31/16
Horse, liver	5.0	10/31/16
Horse, meat	3.0	10/31/16
Horse, meat byproducts, except liver	3.0	10/31/16
Milk, fat (reflecting 0.75 ppm in whole milk)	22.0	10/31/16
Poultry, fat	0.1	10/31/16
Poultry, meat	0.1	10/31/16
Poultry, meat byproducts	0.1	10/31/16
Sheep, fat	50.0	10/31/16
Sheep, liver	5.0	10/31/16
Sheep, meat	3.0	10/31/16
Sheep, meat byproducts, except liver	3.0	10/31/16

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 34826, June 26, 1998, as amended at 72 FR 35665, June 29, 2007; 72 FR 41928, Aug. 1, 2007; 77 FR 59124, Sept. 26, 2012]

[↑ Back to Top](#)**§180.169 Carbaryl; tolerances for residues.**(a) *General.* (1) Tolerances are established for residues of the insecticide carbaryl, 1-naphthyl *N*-methylcarbamate *per se*, in or on the following food commodities:

Commodity	Parts per million	Expiration/revocation date
Alfalfa, forage	50	None
Alfalfa, hay	75	None
Almond, hulls	50	None
Apple, wet pomace	15	None
Asparagus	15	None
Banana	5.0	None
Beet, sugar, roots	0.5	None
Beet, sugar, tops	25	None
Bushberry subgroup 13-07B	3.0	None
Cabbage	21	None
Cactus, fruit	5.0	None
Cactus, pads	12	None
Caneberry subgroup 13-07A	12.0	None
Citrus, oil	20	None
Clover, forage	50	None
Clover, hay	70	None
Corn, field, forage	30	None
Corn, field, grain	0.02	None
Corn, field, stover	20	None
Corn, pop, grain	0.02	None
Corn, pop, stover	20	None
Corn, sweet, forage	185	None
Corn, sweet, kernel plus cob with husks removed	0.1	None
Corn, sweet, stover	215	None
Cotton, undelinted seed	5.0	10/31/09
Cranberry	3.0	None
Dandelion, leaves	22	None
Endive	10	None
Flax, seed	0.5	None
Fruit, citrus, group 10	10	None
Fruit, pome, group 11	12	None
Fruit, stone, group 12	10	None
Grain, aspirated fractions	70	None
Grape	10	None
Grape, raisin	12	None
Grass, forage	100	None
Grass, hay	15	None
Leaf petiole subgroup 4B	3.0	None
Lettuce	10	None
Millet, proso, grain	1.0	None
Millet, proso, straw	20	None
Nut, tree group 14, except walnut	0.1	None
Okra	4.0	None
Olive	10	None
Oyster	0.25	None
Parsley, leaves	22	None
Pea and bean, dried shelled, except soybean, subgroup 6C	1.0	None
Peanut	0.05	None
Peanut, hay	20	None
Pineapple	2.0	None
Pistachio	0.1	None
Rice, grain	15	None
Rice, hulls	30	None
Sorghum grain, forage	30	None
Sorghum grain, grain	10	None
Sorghum grain, stover	30	None
Soybean, forage	15	None
Soybean, hay	15	None
Soybean, seed	0.5	None
Spinach	22	None

Strawberry	4.0	None
Sunflower, seed	0.5	None
Sweet potato, roots	0.2	None
Trefoil, forage	15	None
Trefoil, hay	25	None
Vegetable, brassica, leafy, group 5, except cabbage	10	None
Vegetable, cucurbit, group 9	3.0	None
Vegetable, foliage of legume, subgroup 7A, except soybean	60	None
Vegetable, fruiting, group 8	5.0	None
Vegetable, leaves of root and tuber, group 2, except sugar beet tops	75	None
Vegetable, legume, edible podded, subgroup 6A	10	None
Vegetable, root and tuber, group 1, except sugar beet and sweet potato	2.0	None
Walnut	1.0	None
Wheat, forage	30	None
Wheat, grain	1.0	None
Wheat, hay	30	None
Wheat, straw	20	None

(2) Tolerances are established for residues of the insecticide carbaryl, 1-naphthyl *N*-methylcarbamate, including its metabolites: 1-naphthol (naphthyl-sulfate); 5,6-dihydrodihydroxycarbaryl; and 5,6-dihydrodihydroxy naphthol, calculated as 1-naphthyl *N*-methylcarbamate and the free and conjugated residues of carbaryl: 5,6-dihydro-5,6-dihydroxy carbaryl and 5-methoxy-6-hydroxy carbaryl, in or on the following food commodities:

Commodity	Parts per million	Expiration/revocation date
Cattle, fat	0.5	None
Cattle, meat	1.0	None
Cattle, meat byproducts	3.0	None
Egg	0.5	10/31/09
Goat, fat	0.5	None
Goat, meat	1.0	None
Goat, meat byproducts	3.0	None
Hog, fat	0.5	None
Hog, meat	1.0	None
Hog, meat byproducts	3.0	None
Horse, fat	0.5	None
Horse, meat	1.0	None
Horse, meat byproducts	3.0	None
Milk	1.0	None
Poultry, fat	5.0	10/31/09
Poultry, meat	5.0	10/31/09
Sheep, fat	0.5	None
Sheep, meat	1.0	None
Sheep, meat byproducts	3.0	None

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registrations, as defined in §180.1(l), are established for residues of the insecticide carbaryl, 1-naphthyl *N*-methylcarbamate *per se*, in or on the following food commodities:

Commodity	Parts per million
Dillweed, fresh leaves	0.2

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33695, May 24, 2000, as amended at 66 FR 38955, July 26, 2001; 67 FR 49615, July 31, 2002; 70 FR 44492, Aug. 3, 2005; 73 FR 52611, Sept. 10, 2008; 74 FR 10490, Mar. 11, 2009; 80 FR 72597, Nov. 20, 2015]

[↑ Back to Top](#)

## §180.172 Diodine; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide diodine, including its metabolites and degradates, in or on the commodities listed in the table below. Compliance with the tolerance levels specified in the table is to be determined by measuring only diodine, *N*-dodecylguanidine acetate; in or on the following commodities.

Commodity	Parts per million
Almond, hull	30.0
Apple	5.0
Apple, wet pomace	15.0
Banana	0.50
Fruit, stone, crop group 12	5.0

Nuts, tree, crop group 14	0.3
Peanut	0.013
Pear	5.0
Strawberry	5.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 52017, Sept. 12, 2007, as amended at 73 FR 45634, Aug. 6, 2008; 77 FR 72237, Dec. 5, 2012]

[↑ Back to Top](#)

#### §180.175 Maleic hydrazide; tolerances for residues.

(a) *General.* (1) Tolerances for residues of the herbicide and plant regulator maleic hydrazide (1,2-dihydro-3,6-pyridazinedione) are established in or on the following raw agricultural commodities:

Commodity	Parts per million
Onion, bulb	15.0
Potato	50.0

(2) A food additive known as maleic hydrazide (1,2-dihydro-3,6-pyridazinedione) may be present in potato, chips when used in accordance with the following conditions:

(i) The food additive is present as a result of the application of a pesticide formulation containing maleic hydrazide to the growing potato plant in accordance with directions registered by the U.S. Environmental Protection Agency.

(ii) The label of the pesticide formulation containing the food additive conforms to labeling registered by the U.S. Environmental Protection Agency.

(iii) The food additive is present in an amount not to exceed 160 parts per million by weight of the finished food.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 64293, Dec. 5, 1997, as amended at 64 FR 11792, Mar. 10, 1999; 67 FR 35048, May 17, 2002]

[↑ Back to Top](#)

#### §180.176 Mancozeb; tolerances for residues.

(a) *General.* Tolerances are established for residues of mancozeb (a coordination product of zinc ion and maneb (manganese ethylenebisdithiocarbamate)), including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only those mancozeb residues convertible to and expressed in terms of the degradate carbon disulfide.

Commodity	Parts per million
Almond	0.1
Almond, hulls	4
Apple	0.6
Asparagus	0.1
Atemoya	3.0
Banana	2
Barley, bran	2
Barley, flour	1.2
Barley, grain	1
Barley, hay	30
Barley, pearled barley	20
Barley, straw	25
Beet, sugar, dried pulp	3.0
Beet, sugar, roots	1.2
Beet, sugar, tops	60
Broccoli	7

Cabbage	9
Canistel	15.0
Cattle, kidney	0.5
Cattle, liver	0.5
Cherimoya	3.0
Corn, field, forage	40
Corn, field, grain	0.06
Corn, field, stover	15
Corn, pop, grain	0.1
Corn, pop, stover	40
Corn, sweet, forage	70
Corn, sweet, kernel plus cob with husks removed	0.1
Corn, sweet, stover	40
Cotton, undelinted seed	0.5
Crabapple	0.6
Cranberry	5
Custard apple	3.0
Fennel	2.5
Flax, seed	0.15
Ginseng	1.2
Goat, kidney	0.5
Goat, liver	0.5
Grape	1.5
Hog, kidney	0.5
Hog, liver	0.5
Horse, kidney	0.5
Horse, liver	0.5
Lettuce, head	3.5
Lettuce, leaf	18
Mango	15.0
Oat, flour	1.2
Oat, grain	1
Oat, groats/rolled oats	20
Oat, hay	30
Oat, straw	25
Onion, bulb	1.5
Papaya	9
Peanut	0.1
Peanut, hay	65
Pear	0.6
Pepper	12
Potato	0.2
Poultry, kidney	0.5
Poultry, liver	0.5
Quince	0.6
Rice, grain	0.06
Rye, bran	2
Rye, flour	1.2
Rye, grain	1
Rye, straw	25
Sapodilla	15.0
Sapote, mamey	15.0
Sapote, white	15.0
Sheep, kidney	0.5
Sheep, liver	0.5
Sorghum, grain, forage	0.15
Sorghum, grain, grain	0.25
Sorghum, grain, stover	0.15
Star apple	15.0
Sugar apple	3.0
Tangerine <sup>1</sup>	10
Tomato	2.5
Vegetable, cucurbit, group 9	2.0
Walnut	0.70
Wheat, bran	2
Wheat, flour	1.2
Wheat, germ	20
Wheat, grain	1
Wheat, hay	30
Wheat, middlings	20
Wheat, shorts	2
Wheat, straw	25

<sup>1</sup>There are no U.S. registrations for use of mancozeb on tangerine.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* A tolerance with regional registrations, as defined in §180.1(l), is established for residues of the fungicide mancozeb, (a coordination product of zinc ion and maneb (manganese ethylenebisdithiocarbamate)), including its metabolites and degradates, in or on the commodity in the following table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only those mancozeb residues convertible to and expressed in terms of the degradate carbon disulfide.

Commodity	Parts per million
Carrot, roots	1

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33708, May 24, 2000, as amended at 65 FR 49924, Aug. 16, 2000; 66 FR 64773, Dec. 14, 2001; 68 FR 2247, Jan. 16, 2003; 69 FR 29458, May 24, 2004; 71 FR 76199, Dec. 20, 2006; 74 FR 46372, Sept. 9, 2009; 75 FR 770, Jan. 6, 2010; 75 FR 50913, Aug. 18, 2010; 76 FR 18915, Apr. 6, 2011; 78 FR 44455, July 24, 2013; 79 FR 27501, May 14, 2014; 80 FR 72597, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.178 Ethoxyquin; tolerances for residues.

(a) *General.* A tolerance is established for residues of the plant regulator ethoxyquin (1,2-dihydro-6-ethoxy-2,2,4-trimethylquinoline) from preharvest or postharvest use in or on the following commodity:

Commodity	Parts per million
Pear	3

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 57073, Oct. 26, 1998]

[↑ Back to Top](#)

### §180.181 Chlorpropham; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the plant regulator and herbicide chlorpropham (isopropyl m-chlorocarbanilate (CIPC) in or on the following food commodities:

Commodity	Parts per million
Potato	30
Potato, wet peel	40

(2) Tolerances are established for the combined residues of the plant regulator and herbicide chlorpropham (isopropyl m-chlorocarbanilate (CIPC) and its metabolite 4-hydroxychlorpropham-O-sulfonic acid (4-HSA) in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	0.20
Cattle, kidney	0.30
Cattle, meat	0.06
Cattle, meat byproducts except kidney	0.06
Goat, fat	0.20
Goat, kidney	0.30
Goat, meat	0.06
Goat, meat byproducts except kidney	0.06
Hog, fat	0.20
Hog, kidney	0.30
Hog, meat	0.06
Hog, meat byproducts except kidney	0.06
Horse, fat	0.20
Horse, kidney	0.30
Horse, meat	0.06
Horse, meat byproducts except kidney	0.06

Milk	0.30
Sheep, fat	0.20
Sheep, kidney	0.30
Sheep, meat	0.06
Sheep, meat byproducts except kidney	0.06

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[43 FR 52487, Nov. 13, 1978, as amended at 63 FR 57073, Oct. 26, 1998; 72 FR 37653, July 11, 2007]

[↑ Back to Top](#)

### §180.182 Endosulfan; tolerances for residues.

(a)(1) *General.* Tolerances are established for residues of the insecticide endosulfan, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of endosulfan, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin 3-oxide (alpha and beta isomers), and its metabolite endosulfan sulfate, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3,3-dioxide, calculated as the stoichiometric equivalent of endosulfan, in or on the commodity.

Commodity	Parts per million	Expiration/revocation date
Almond	0.3	7/31/12
Almond, hulls	1.0	7/31/12
Apricot	2.0	7/31/12
Bean	2.0	7/31/12
Broccoli	3.0	7/31/12
Brussels sprouts	2.0	7/31/12
Cabbage	4.0	7/31/12
Cantaloupe	1.0	7/31/12
Carrot, roots	0.2	7/31/12
Cattle, fat	13.0	7/31/16
Cattle, liver	5.0	7/31/16
Cattle, meat	2.0	7/31/16
Cattle, meat byproducts, except liver	1.0	7/31/16
Cauliflower	2.0	7/31/12
Celery	8.0	7/31/12
Cherry, sweet	2.0	7/31/12
Cherry, tart	2.0	7/31/12
Collards	2.0	7/31/12
Cotton, gin byproducts	30.0	7/31/12
Cotton, undelinted seed	1.0	7/31/12
Cucumber	1.0	7/31/12
Eggplant	1.0	7/31/12
Goat, fat	13.0	7/31/16
Goat, liver	5.0	7/31/16
Goat, meat	2.0	7/31/16
Goat, meat byproducts, except liver	1.0	7/31/16
Hazelnut	0.2	7/31/12
Hog, fat	13.0	7/31/16
Hog, liver	5.0	7/31/16
Hog, meat	2.0	7/31/16
Hog, meat byproducts, except liver	1.0	7/31/16
Horse, fat	13.0	7/31/16
Horse, liver	5.0	7/31/16
Horse, meat	2.0	7/31/16
Horse, meat byproducts, except liver	1.0	7/31/16
Kale	2.0	7/31/12
Lettuce, head	11.0	7/31/12
Lettuce, leaf	6.0	7/31/12
Milk, fat	2.0	7/31/16
Muskmelon	1.0	7/31/12
Mustard greens	2.0	7/31/12
Mustard, seed	0.2	7/31/12
Nectarine	2.0	7/31/12
Nut, macadamia	0.2	7/31/12



Peach	2.0	7/31/12
Pear	2.0	7/31/13
Pineapple	1.0	7/31/16
Pineapple, process residue	20.0	7/31/16
Plum	2.0	7/31/12
Plum, prune	2.0	7/31/12
Sheep, fat	13.0	7/31/16
Sheep, liver	5.0	7/31/16
Sheep, meat	2.0	7/31/16
Sheep, meat byproducts, except liver	1.0	7/31/16
Squash, summer	1.0	7/31/12
Strawberry	2.0	7/31/16
Sweet potato, roots	0.15	7/31/12
Walnut	0.2	7/31/12
Watermelon	1.0	7/31/12

(2) A tolerance is established for the combined residues of the insecticide endosulfan, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide (alpha and beta isomers), and its metabolite endosulfan sulfate, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3,3-dioxide in or on the commodity in the following table:

Commodity	Parts per million	Expiration/revocation date
Tea, dried	24 (reflecting less than 0.1 ppm in beverage tea) resulting from application of the insecticide to growing tea	7/31/16

(b) *Section 18 emergency exemptions.* [Reserved]

(c) Tolerances with regional registrations. (1) Tolerances with regional registration, as defined in §180.1(l), are established for residues of the insecticide endosulfan, including its metabolites and degradates, in or on the commodities in the table in this paragraph, when endosulfan is used in the state of Florida. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of endosulfan, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin 3-oxide (alpha and beta isomers), and its metabolite endosulfan sulfate, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3,3-dioxide, calculated as the stoichiometric equivalent of endosulfan, in or on the commodity.

Commodity	Parts per million	Expiration/revocation date
Apple	1.0	12/31/14
Apple, wet pomace	5.0	12/31/14
Blueberry	0.3	12/31/14
Corn, sweet, forage	12.0	12/31/14
Corn, sweet, kernel plus cob with husks removed	0.2	12/31/14
Corn, sweet, stover	14.0	12/31/14
Pepper	2.0	12/31/14
Potato	0.2	12/31/14
Pumpkin	1.0	12/31/14
Squash, winter	1.0	12/31/14
Tomato	1.0	12/31/14

(2) Tolerances with regional registrations. Tolerances with regional registration, as defined in §180.1(l), are established for residues of the insecticide endosulfan, including its metabolites and degradates, in or on the commodities in the table in this paragraph, when endosulfan is used in the United States (except Florida). Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of endosulfan, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin 3-oxide (alpha and beta isomers), and its metabolite endosulfan sulfate, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3,3-dioxide, calculated as the stoichiometric equivalent of endosulfan, in or on the commodity.

Commodity	Parts per million	Expiration/revocation date
Apple	1.0	7/31/15
Apple, wet pomace	5.0	7/31/15
Blueberry	0.3	7/31/15
Corn, sweet, forage	12.0	7/31/15
Corn, sweet, kernel plus cob with husks removed	0.2	7/31/15
Corn, sweet, stover	14.0	7/31/15
Pepper	2.0	7/31/15
Potato	0.2	7/31/15
Pumpkin	1.0	7/31/15

Squash, winter	1.0	7/31/15
Tomato	1.0	7/31/15

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33696, May 24, 2000, as amended at 71 FR 54433, Sept. 15, 2006; 76 FR 56653, Sept. 14, 2011; 78 FR 8409, Feb. 6, 2013]

[↑ Back to Top](#)

### §180.183 Disulfoton; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide disulfoton, *O,O*-diethyl *S*-(2-(ethylthio)ethyl) phosphorodithioate, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of disulfoton, *O,O*-diethyl *S*-(2-(ethylthio)ethyl) phosphorodithioate, and its metabolites demeton-*S*, *O,O*-diethyl *S*-(2-(ethylthio)ethyl) phosphorothioate; disulfoton sulfoxide, *O,O*-diethyl *S*-(2-(ethylsulfinyl)ethyl) phosphorodithioate; disulfoton oxygen analog sulfoxide, *O,O*-diethyl *S*-(2-(ethylsulfinyl)ethyl) phosphorothioate, disulfoton sulfone, *O,O*-diethyl *S*-(2-(ethylsulfonyl)ethyl) phosphorodithioate; and disulfoton oxygen analog sulfone, *O,O*-diethyl *S*-(2-(ethylsulfonyl)ethyl) phosphorothioate; calculated as the stoichiometric equivalent of disulfoton, in or on the commodity.

Commodity	Parts per million	Expiration/Revocation Date
Bean, lima	0.75	12/31/13
Bean, snap, succulent	0.75	12/31/13
Broccoli	0.75	12/31/13
Brussels sprouts	0.75	12/31/13
Cabbage	0.75	12/31/13
Cauliflower	0.75	12/31/13
Coffee, green bean	0.2	6/30/14
Cotton, undelinted seed	0.75	12/31/13
Lettuce, head	0.75	12/31/14
Lettuce, leaf	2	12/31/14

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* A tolerance with regional registration is established for residues of the insecticide disulfoton, *O,O*-diethyl *S*-(2-(ethylthio)ethyl) phosphorodithioate, including its metabolites and degradates, in or on the commodity in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of disulfoton, *O,O*-diethyl *S*-(2-(ethylthio)ethyl) phosphorodithioate, and its metabolites demeton-*S*, *O,O*-diethyl *S*-(2-(ethylthio)ethyl) phosphorothioate; disulfoton sulfoxide, *O,O*-diethyl *S*-(2-(ethylsulfinyl)ethyl) phosphorodithioate; disulfoton oxygen analog sulfoxide, *O,O*-diethyl *S*-(2-(ethylsulfinyl)ethyl) phosphorothioate, disulfoton sulfone, *O,O*-diethyl *S*-(2-(ethylsulfonyl)ethyl) phosphorodithioate; and disulfoton oxygen analog sulfone, *O,O*-diethyl *S*-(2-(ethylsulfonyl)ethyl) phosphorothioate; calculated as the stoichiometric equivalent of disulfoton, in or on the commodity.

Commodity	Parts per million	Expiration/Revocation Date
Asparagus	0.1	12/31/13

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 2165, Jan. 14, 1998, as amended at 63 FR 57073, Oct. 26, 1998; 66 FR 38955, July 26, 2001; 67 FR 41806, June 19, 2002; 67 FR 49615, July 31, 2002; 70 FR 44492, Aug. 3, 2005; 73 FR 54960, Sept. 24, 2008; 74 FR 46697, Sept. 11, 2009; 75 FR 60240, Sept. 29, 2010]

[↑ Back to Top](#)

### §180.184 Linuron; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide linuron (3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea), including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only those linuron residues convertible to 3,4-dichloroaniline, calculated as the stoichiometric equivalent of linuron, in or on the commodity:

Commodity	Parts per million
Asparagus	7.0
Carrot, roots	1.0
Cattle, fat	0.2
Cattle, kidney	2.0
Cattle, liver	2.0
Cattle, meat	0.1

Cattle, meat byproducts except kidney and liver	0.1
Celeriac	1.0
Cilantro, dried leaves	10
Cilantro, fresh leaves	3.0
Coriander, seed	0.01
Corn, field, forage	1.0
Corn, field, grain	0.1
Corn, field, stover	6.0
Corn, sweet, forage	1.0
Corn, sweet, kernel plus cob with husks removed	0.25
Corn, sweet, stover	6.0
Cotton, gin byproducts	5.0
Cotton, undelinted seed	0.25
Dill, oil	2.0
Dill, seed	0.5
Dillweed, dried leaves	5.0
Dillweed, fresh leaves	1.5
Goat, fat	0.2
Goat, kidney	2.0
Goat, liver	2.0
Goat, meat	0.1
Goat, meat byproducts except kidney and liver	0.1
Hog, fat	0.05
Hog, meat	0.05
Hog, meat byproducts	0.1
Horse, fat	0.2
Horse, kidney	2.0
Horse, liver	2.0
Horse, meat	0.1
Horse, meat byproducts except kidney and liver	0.1
Horseradish	0.05
Milk	0.05
Parsley, dried leaves	9.0
Parsley, leaves	4.0
Parsnip, roots	0.05
Parsnip, tops	0.05
Pea, dry, seed	0.09
Rhubarb	0.5
Sheep, fat	0.2
Sheep, kidney	2.0
Sheep, liver	2.0
Sheep, meat	0.1
Sheep, meat byproducts except kidney and liver	0.1
Sorghum, grain, forage	1.0
Sorghum, grain, grain	0.25
Sorghum, grain, stover	1.0
Soybean, seed	1.0
Soybean, vegetable	1.0

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of the herbicide linuron [3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea], including its metabolites and degradates, in or on the commodities in the table below, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. Compliance with the tolerance levels specified below is to be determined by measuring only those linuron residues convertible to 3,4-dichloroaniline, calculated as the stoichiometric equivalent of linuron, in or on the commodity. The tolerance expires and is revoked on the date specified in the table.

Commodity	Parts per million	Expiration/revocation date
Lentil	0.1	12/31/14

(c) *Tolerances with regional registrations.* Tolerances with regional registrations, as defined in §180.1(l), are established for residues of the herbicide linuron (3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea), including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only those linuron residues convertible to 3,4-dichloroaniline, calculated as the stoichiometric equivalent of linuron, in or on the commodity.

Commodity	Parts per million
Celery	0.5
Potato	0.2
Wheat, forage	0.5
Wheat, grain	0.05

Wheat, hay	0.5
Wheat, straw	2.0

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 41822, Aug. 2, 1999, as amended at 72 FR 37653, July 11, 2007; 73 FR 51727, Sept. 5, 2008; 76 FR 81396, Dec. 28, 2011; 79 FR 8307, Feb. 12, 2014]

[↑ Back to Top](#)

### §180.185 DCPA; tolerances for residues.

(a) *General.* Tolerances for the combined residues of the herbicide dimethyl tetrachloroterephthalate (DCPA) and its metabolites monomethyltetrachloroterephthalate (MTP) and tetrachloroterephthalic acid (TCP) (calculated as dimethyl tetrachloroterephthalate) are established in or on the following food commodities:

Commodity	Parts per million
Cantaloupe	1.0
Garlic	1.0
Ginseng	2.0
Horseradish	2.0
Muskmelon	1.0
Onion, bulb	1.0
Onion, green	1.0
Strawberry	2.0
Tomato	1.0
Vegetable, brassica, leafy, group 5	5.0
Watermelon	1.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for the combined inadvertent residues of the herbicide dimethyl tetrachloroterephthalate (DCPA) and its metabolites monomethyl tetrachloroterephthalate acid (MTP) and terachlorophthalic acid (TCP) (calculated as DCPA) in or on the following food commodities:

Commodity	Parts per million
Radish, roots	2.0
Radish, tops	15.0

(d) *Indirect or inadvertent residues.* Tolerances are established for the combined indirect or inadvertent residues of the herbicide dimethyl tetrachloroterephthalate (DCPA) and its metabolites monomethyl tetrachloroterephthalate acid (MTP) and terachlorophthalic acid (TCP) (calculated as DCPA) in or on the following food commodities:

Commodity	Parts per million
Basil, dried leaves	20.0
Basil, fresh leaves	5.0
Bean, dry	2.0
Bean, mung, seed	2.0
Bean, snap, succulent	2.0
Celeriac	2.0
Chicory, roots	2.0
Chicory, tops	5.0
Chive	5.0
Coriander, leaves	5.0
Corn, field, forage	0.4
Corn, field, grain	0.05
Corn, field, stover	0.4
Corn, pop, forage	0.4
Corn, pop, grain	0.05
Corn, pop, stover	0.4
Corn, sweet, forage	0.4
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	0.4
Cotton, undelinted seed	0.2
Cucumber	1.0
Dill	5.0
Eggplant	1.0
Lettuce	2.0
Marjoram	5.0

Parsley, dried leaves	20.0
Parsley, leaves	5.0
Pea, blackeyed, seed	2.0
Pepper	2.0
Pimento	2.0
Potato	2.0
Radicchio	5.0
Radish, oriental, roots	2.0
Radish, oriental, tops	2.0
Rutabaga	2.0
Soybean	2.0
Squash, summer	1.0
Squash, winter	1.0
Sweet potato	2.0
Turnip, roots	2.0
Turnip, tops	5.0
Yam, true, tuber	2.0

[72 FR 52018, Sept. 12, 2007, as amended at 73 FR 53737, Sept. 17, 2008; 73 FR 80302, Dec. 31, 2008; 74 FR 14744, Apr. 1, 2009]

[↑ Back to Top](#)

### §180.189 Coumaphos; tolerances for residues.

(a) *General.* Tolerances for residues of the insecticide coumaphos (*O,O*-diethyl *O*-3-chloro-4-methyl-2-oxo-2H-1-benzopyran-7-yl phosphorothioate and its oxygen analog (*O,O*-diethyl *O*-3-chloro-4-methyl-2-oxo-2H-1-benzopyran-7-yl phosphate) in or on food commodities as follows:

Commodity	Parts per million
Cattle, fat	1.0
Cattle, meat	1.0
Cattle, meat byproducts	1.0
Goat, fat	1.0
Goat, meat	1.0
Goat, meat byproducts	1.0
Hog, fat	1.0
Hog, meat	1.0
Hog, meat byproducts	1.0
Honey	0.15
Honeycomb	45.0
Horse, fat	1.0
Horse, meat	1.0
Horse, meat byproducts	1.0
Milk, fat (= n in whole milk)	0.5
Sheep, fat	1.0
Sheep, meat	1.0
Sheep, meat byproducts	1.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 39077, July 21, 1999, as amended at 65 FR 49936, Aug. 16, 2000; 67 FR 46883, July 17, 2002; 69 FR 29458, May 24, 2004; 72 FR 28876, May 23, 2007]

[↑ Back to Top](#)

### §180.190 Diphenylamine; tolerances for residues.

(a) *General.* Tolerances for residues of the plant regulator diphenylamine are established in or on the following commodities:

Commodity	Parts per million
Apple, wet pomace	30.0
Apple from preharvest or postharvest use, including use of impregnated wraps	10.0
Cattle, fat	0.01
Cattle, liver	0.1
Cattle, meat byproducts, except liver	0.01
Cattle, meat	0.01

Goat, fat	0.01
Goat, liver	0.1
Goat, meat byproducts, except liver	0.01
Goat, meat	0.01
Horse, fat	0.01
Horse, liver	0.1
Horse, meat byproducts, except liver	0.01
Horse, meat	0.01
Milk	0.01
Pear (post harvest)	5.0
Sheep, fat	0.01
Sheep, liver	0.1
Sheep, meat byproducts, except liver	0.01
Sheep, meat	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 25848, May 13, 1999, as amended at 66 FR 63198, Dec. 5, 2001; 72 FR 16283, Apr. 4, 2007; 76 FR 34885, June 15, 2011]

[↑ Back to Top](#)

### §180.191 Folpet; tolerances for residues.

(a) *General.* Tolerances are established for the fungicide folpet (*N*-(trichloromethylthio)phthalimide) in or on raw agricultural commodities as follows:

Commodity	Parts per million
Apple <sup>1</sup>	5.0
Cranberry <sup>1</sup>	15.0
Cucumber <sup>1</sup>	2.0
Grape <sup>1</sup>	50.0
Grape, raisin <sup>1</sup>	80.0
Hop, dried cones	120.0
Lettuce <sup>1</sup>	50.0
Melon <sup>1</sup>	3.0
Onion, bulb <sup>1</sup>	2.0
Strawberry <sup>1</sup>	5.0
Tomato <sup>1</sup>	25.0

<sup>1</sup> No U.S. registrations.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registrations as defined in §180.1(l) are established for the fungicide folpet (*N*-(trichloromethylthio)phthalimide) in or on the following raw agricultural commodity:

Commodity	Parts per million
Avocado	25.0

(d) *Indirect or inadvertent residues.* [Reserved]

[61 FR 37222, July 17, 1996, as amended at 68 FR 10388, Mar. 5, 2003; 69 FR 52192, Aug. 25, 2004; 72 FR 41928, Aug. 1, 2007]

[↑ Back to Top](#)

### §180.198 Trichlorfon; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide trichlorfon (dimethyl (2,2,2-trichloro-1-hydroxyethyl) phosphonate) in or on the following food commodities:

Commodity	Parts per million
Cattle, fat <sup>1</sup>	0.5
Cattle, meat <sup>1</sup>	0.2
Cattle, meat byproducts <sup>1</sup>	0.1

<sup>1</sup>There are no U.S. registrations for cattle commodities as of June 24, 1999.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 54578, Sept. 26, 2007]

[↑ Back to Top](#)

#### §180.200 Dicloran; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide dicloran, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only dicloran, 2,6-dichloro-4-nitroaniline, in or on the commodity.

Commodity	Parts per million	Expiration/revocation date
Apricot	20	None
Bean, snap, succulent	20	None
Carrot, roots	10	11/2/11
Celery	15	None
Cherry, sweet	20	None
Cucumber	5	None
Endive	10	None
Garlic	5	None
Grape	10	None
Lettuce	10	None
Nectarine	20	None
Onion	10	None
Peach	20	None
Plum, prune, fresh	15	None
Potato	0.25	12/31/14
Rhubarb	10	None
Sweet potato, roots	10	None
Tomato	5	None

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 40815, July 11, 2012]

[↑ Back to Top](#)

#### §180.202 *p*-Chlorophenoxyacetic acid; tolerances for residues.

(a) *General.* A tolerance is established for the combined residues of the plant regulator *p*-chlorophenoxyacetic acid and its metabolite *p*-chlorophenol to inhibit embryonic root development in or on the following food commodity:

Commodity	Parts per million
Bean, mung, sprouts	0.2

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 39439, July 1, 2003, as amended at 71 FR 56398, Sept. 27, 2006]

[↑ Back to Top](#)

#### §180.204 Dimethoate; tolerances for residues.

(a) *General.* Tolerances are established for total residues of the insecticide dimethoate (*O,O*-dimethyl *S*-(*N*-methylcarbamoylmethyl) phosphorodithioate) including its oxygen analog (*O,O*-dimethyl *S*-(*N*-methylcarbamoylmethyl) phosphorothioate) in or on the following food commodities:

Commodity	Parts per million
Alfalfa, forage	2.0
Alfalfa, hay	2.0
Bean, dry, seed	2.0
Bean, lima	2.0
Bean, snap, succulent	2.0
Blueberry <sup>1</sup>	1.0
Broccoli	2.0
Cattle, meat byproducts	0.02
Cauliflower	2.0
Celery	2.0
Citrus, dried pulp	5.0
Corn, field, forage	1.0
Corn, field, grain	0.1
Corn, field, stover	1.0
Corn, pop, grain	0.1
Corn, pop, stover	1.0
Corn, sweet, forage	1.0
Cotton, undelinted seed	0.1
Egg	0.02
Endive	2.0
Goat, meat byproducts	0.02
Grapefruit	2.0
Hog, meat byproducts	0.02
Horse, meat byproducts	0.02
Kale	2.0
Lemon	2.0
Lettuce, leaf	2.0
Melon	1.0
Milk	0.002
Mustard greens	2.0
Orange	2.0
Pea	2.0
Pear	2.0
Pecan	0.1
Pepper	2.0
Potato	0.2
Poultry, meat byproducts	0.02
Safflower, seed	0.1
Sheep, meat byproducts	0.02
Sorghum, grain, forage	0.1
Sorghum, grain, grain	0.1
Sorghum, grain, stover	0.1
Soybean, forage	2.0
Soybean, hay	2.0
Soybean, seed	0.05
Swiss chard	2.0
Tangerine	2.0
Tomato	2.0
Turnip, roots	0.2
Turnip, tops	2.0
Wheat, forage	2.0
Wheat, grain	0.04
Wheat, hay	2.0
Wheat, straw	2.0

<sup>1</sup> There are U.S. registrations as of August 16, 1996.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for total residues of dimethoate including its oxygen analog in or on the following food commodities:

Commodity	Parts per million
Asparagus	0.15
Brussels sprouts	5.0
Cherry, sweet	2.0



(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33697, May 24, 2000, as amended at 69 FR 6567, Feb. 11, 2004; 73 FR 53737, Sept. 17, 2008]

[↑ Back to Top](#)

### §180.205 Paraquat; tolerances for residues.

(a) *General.* Tolerances are established for residues of the desiccant, defoliant, and herbicide paraquat (1,1'-dimethyl-4,4'-bipyridinium-ion) derived from application of either the bis(methyl sulfate) or the dichloride salt (both calculated as the cation) in or on the following food commodities:

Commodity	Parts per million
Acerola	0.05
Almond, hulls	0.5
Animal feed, nongrass, group 18, forage	75.0
Animal feed, nongrass, group 18, hay	210.0
Artichoke, globe	0.05
Asparagus	0.5
Atemoya	0.05
Avocado	0.05
Banana	0.05
Barley, grain	0.05
Barley, hay	3.5
Barley, straw	1.0
Beet, sugar, roots	0.5
Beet, sugar, tops	0.05
Berry group 13	0.05
Biriba	0.05
Cacao bean, bean	0.05
Canistel	0.05
Carrot, roots	0.05
Cattle, fat	0.05
Cattle, kidney	0.5
Cattle, meat	0.05
Cattle, meat byproducts, except kidney	0.05
Cherimoya	0.05
Coffee, bean, green	0.05
Corn, field, forage	3.0
Corn, field, grain	0.1
Corn, field, stover	10.0
Corn, pop, grain	0.1
Corn, pop, stover	10.0
Corn, sweet, kernel plus cob with husks removed	0.05
Cotton, gin byproducts	110.0
Cotton, undelinted seed	3.5
Cowpea, forage	0.1
Cowpea, hay	0.4
Cranberry	0.05
Custard apple	0.05
Egg	0.01
Endive	0.05
Feijoa	0.05
Fig	0.05
Fruit, citrus, group 10	0.05
Fruit, pome, group 11	0.05
Fruit, stone, group 12	0.05
Goat, fat	0.05
Goat, kidney	0.5
Goat, meat	0.05
Goat, meat byproducts, except kidney	0.05
Grain, aspirated fractions	65.0
Grape	0.05
Grass, forage	90.0
Grass, hay	40.0
Guar, seed	0.5
Guava	0.05
Hog, fat	0.05
Hog, kidney	0.5
Hog, meat	0.05

Hog, meat byproducts, except kidney	0.05
Hop, dried cones	0.5
Horse, fat	0.05
Horse, kidney	0.5
Horse, meat	0.05
Horse, meat byproducts, except kidney	0.05
Llama	0.05
Jaboticaba	0.05
Kiwifruit	0.05
Lentil, seed	0.3
Lettuce	0.05
Longan	0.05
Lychee	0.05
Mango	0.05
Milk	0.01
Nut, tree, group 14	0.05
Okra	0.05
Olive	0.05
Onion, bulb	0.1
Onion, green	0.05
Papaya	0.05
Passionfruit	0.2
Pawpaw	0.05
Pea and bean, dried shelled, except soybean, subgroup 6C, except guar bean	0.3
Pea and bean, succulent shelled, subgroup 6B	0.05
Pea, field, hay	0.8
Pea, field, vines	0.2
Peanut	0.05
Peanut, hay	0.5
Peppermint, tops	0.5
Persimmon	0.05
Pineapple	0.05
Pineapple, process residue	0.25
Pistachio	0.05
Pomegranate	0.05
Pulasan	0.05
Rambutan	0.05
Rhubarb	0.05
Rice, grain	0.05
Safflower, seed	0.05
Sapodilla	0.05
Sapote, black	0.05
Sapote, mamey	0.05
Sapote, white	0.05
Sheep, fat	0.05
Sheep, kidney	0.5
Sheep, meat	0.05
Sheep, meat byproducts, except kidney	0.05
Sorghum, forage, forage	0.1
Sorghum, grain, forage	0.1
Sorghum, grain, grain	0.05
Soursop	0.05
Soybean, forage	0.4
Soybean, hay	10.0
Soybean, hulls	4.5
Soybean, seed	0.7
Spanish lime	0.05
Spearmint, tops	0.5
Star apple	0.05
Starfruit	0.05
Strawberry	0.25
Sugar apple	0.05
Sugarcane, cane	0.5
Sugarcane, molasses	3.0
Sunflower, seed	2.0
Turnip, greens	0.05
Turnip, roots	0.05
Vegetable, brassica, leafy, group 5	0.05
Vegetable, cucurbit, group 9	0.05
Vegetable, fruiting, group 8	0.05
Vegetable, legume, edible podded, subgroup 6A	0.05
Vegetable, tuberous and corm, subgroup 1C	0.50
Wax jambu	0.05

Wheat, forage	0.5
Wheat, grain	1.1
Wheat, hay	3.5
Wheat, straw	50.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration as defined in §180.1(l), are established for residues of the pesticide paraquat (1,1'-dimethyl-4,4' bipyridinium ion) derived from application of either the bis(methyl sulfate) or the dichloride salt (both calculated as the cation) in or on the following food commodities:

Commodity	Parts per million
Pea, pigeon, seed	0.05
Taro, corm	0.1
Tyfon	0.05

(d) *Indirect or inadvertent residues.* [Reserved]

[46 FR 51614, Oct. 21, 1981]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.205, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.206 Phorate; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the insecticide phorate (O,O-diethyl S (ethylthio) methyl]phosphorodithioate), phorate sulfoxide, phorate sulfone, phorate oxygen analog, phorate oxygen analog sulfoxide, and phorate oxygen analog sulfone in or on the following food commodities:

Commodity	Parts per million
Bean, dry, seed	0.05
Bean, succulent	0.05
Beet, sugar, roots	0.3
Beet, sugar, tops	3.0
Coffee, green bean <sup>1</sup>	0.02
Corn, field, forage	0.5
Corn, field, grain	0.05
Corn, sweet, forage	0.5
Corn, sweet, kernel plus cob with husks removed	0.05
Cotton, undelinted seed	0.05
Hop, dried cones	2.0
Peanut	0.1
Potato	0.2
Sorghum, grain, grain	0.05
Sorghum, grain, stover	0.1
Soybean, seed	0.05
Sugarcane, cane	0.05
Wheat, forage	1.5
Wheat, grain	0.05
Wheat, hay	1.5
Wheat, straw	0.05

<sup>1</sup> There are no U.S. registrations as of September 1, 1993 for the use of phorate on the growing crop, coffee.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[58 FR 62038, Nov. 24, 1993, as amended at 63 FR 2165, Jan. 14, 1998; 63 FR 57074, Oct. 26, 1998; 66 FR 50833, Oct. 5, 2001; 67 FR 49616, July 31, 2002; 71 FR 74816, Dec. 13, 2006; 73 FR 53738, Sept. 17, 2008]

[↑ Back to Top](#)

### §180.207 Trifluralin; tolerances for residues.

(a) *General.* Tolerances are established for residues of trifluralin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only trifluralin (2,6-dinitro-N,N-dipropyl-4-(trifluoromethyl)benzenamine).

Commodity	Parts per million
Alfalfa, forage	3.0
Alfalfa, hay	2.0
Almond, hulls	0.05
Asparagus	0.05
Barley, grain	0.05
Barley, hay	0.05
Barley, straw	0.05
Bean, mung, sprouts	2.0
Carrot, roots	1.0
Celery	0.05
Corn, field, forage	0.05
Corn, field, grain	0.05
Corn, field, stover	0.05
Cotton, gin byproducts	0.05
Endive	0.05
Fruit, citrus, group 10	0.05
Fruit, stone, group 12	0.05
Grape	0.05
Hop, dried cones	0.05
Nut, tree, group 14	0.05
Oilseed, crop group 20	0.05
Okra	0.05
Peanut	0.05
Peanut, hay	0.05
Peppermint, oil	2.0
Peppermint, tops	0.05
Rosemary, dried leaves	0.10
Rosemary, fresh leaves	0.10
Rosemary, oil	3.0
Sorghum, grain, forage	0.05
Sorghum, grain, grain	0.05
Sorghum, grain, stover	0.05
Spearmint, oil	2.0
Spearmint, tops	0.05
Sugarcane, cane	0.05
Vegetable, brassica, leafy group 5	0.05
Vegetable, bulb, group 3	0.05
Vegetable, cucurbit, group 9	0.05
Vegetable, foliage of legume, group 7	0.05
Vegetable, fruiting, group 8	0.05
Vegetable, leaves of root and tuber, group 2	0.05
Vegetable, legume, group 6	0.05
Vegetable, root and tuber, group 1, except carrot	0.05
Wheat, grain	0.05
Wheat, straw	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[45 FR 42619, June 25, 1980, as amended at 45 FR 56346, Aug. 25, 1980; 45 FR 86493, Dec. 31, 1980; 46 FR 37250, July 20, 1981; 47 FR 13524, Mar. 31, 1982; 47 FR 20309, May 12, 1982; 63 FR 57074, Oct. 26, 1998; 64 FR 39082, July 21, 1999; 70 FR 21643, Apr. 27, 2005; 71 FR 54433, Sept. 15, 2006; 78 FR 46274, July 31, 2013; 84 FR 4351, Feb. 15, 2019]

[↑ Back to Top](#)

### §180.208 Benfluralin; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide benfluralin, *N*-butyl-*N*-ethyl-*ααα*-trifluoro-2,6-dinitro-*p*-toluidine, in or on the following food commodities:

Commodity	Parts per million
Alfalfa, forage	0.05
Alfalfa, hay	0.05

Clover, forage	0.05
Clover, hay	0.05
Lettuce	0.05
Trefoil, forage	0.05
Trefoil, hay	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 39439, July 1, 2003, as amended at 73 FR 52613, Sept. 10, 2008]

[↑ Back to Top](#)

### §180.209 Terbacil; tolerances for residues.

(a) *General.* Tolerances are established for combined residues of the herbicide terbacil, (3-tert-butyl-5-chloro-6-methyluracil) and its metabolites [3-tert-butyl-5-chloro-6-hydroxymethyluracil], [6-chloro-2,3-dihydro-7-hydroxymethyl 3,3-dimethyl-5H-oxazolo(3,2-a) pyrimidin-5-one], and [6-chloro-2,3-dihydro-3,3,7-trimethyl-5H-oxazolo(3,2-a) pyrimidin-5-one], calculated as terbacil, in or on the following raw agricultural commodities:

Commodity	Parts per million
Alfalfa, forage	1.0
Alfalfa, hay	2.0
Apple	0.3
Asparagus	0.4
Blueberry	0.2
Caneberry subgroup 13A	0.2
Peach	0.2
Peppermint, tops	2.0
Spearmint, tops	2.0
Strawberry	0.1
Sugarcane, cane	0.4
Watermelon	1.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 30818, May 31, 2006]

[↑ Back to Top](#)

### §180.210 Bromacil; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide bromacil (5-bromo-3-sec-butyl-6-methyluracil) in or on the following food commodities:

Commodity	Parts per million
Fruit, citrus	0.1
Pineapple	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 39439, July 1, 2003]

[↑ Back to Top](#)

### §180.211 Propachlor; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the herbicide propachlor (2-chloro-N-isopropylacetanilide) and its metabolites containing the N-isopropylaniline moiety, calculated as 2-chloro-N-isopropylacetanilide,

in or on the following raw agricultural commodities:

Commodity	Parts per million
Cattle, fat	0.05
Cattle, kidney	0.2
Cattle, meat	0.02
Cattle, meat byproducts, except kidney	0.05
Corn, field, forage	3.0
Corn, field, grain	0.2
Corn, field, stover	1.0
Corn, sweet, forage	3.0
Goat, fat	0.05
Goat, kidney	0.2
Goat, meat	0.02
Goat, meat byproducts, except kidney	0.05
Hog, fat	0.02
Hog, meat	0.02
Hog, meat byproducts	0.02
Horse, fat	0.05
Horse, kidney	0.2
Horse, meat	0.02
Horse, meat byproducts, except kidney	0.05
Milk	0.02
Sheep, fat	0.05
Sheep, kidney	0.2
Sheep, meat	0.02
Sheep, meat byproducts, except kidney	0.05
Sorghum, forage, forage	8.0
Sorghum, grain, forage	8.0
Sorghum, grain, grain	0.25
Sorghum, grain, stover	12.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[47 FR 25959, June 16, 1982, as amended at 47 FR 28381, June 30, 1982; 47 FR 28626, July 1, 1982; 47 FR 46701, Oct. 20, 1982; 63 FR 57074, Oct. 26, 1998; 72 FR 53454, Sept. 19, 2007]

[↑ Back to Top](#)

#### §180.212 S-Ethyl cyclohexylethylthiocarbamate; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide S-ethyl cyclohexylethylthiocarbamate in or on the following food commodities:

Commodity	Parts per million
Beet, garden, roots	0.05(N)
Beet, garden, tops	0.05(N)
Beet, sugar, roots	0.05(N)
Beet, sugar, tops	0.05(N)
Spinach	0.05(N)

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 39439, July 1, 2003]

[↑ Back to Top](#)

#### §180.213 Simazine; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the herbicide simazine (2-chloro-4,6-bis(ethylamino)-s-triazine) and its two chlorinated degradates (2-amino-4-chloro-6-ethylamino-s-triazine and 2,4-diamino-6-chloro-s-triazine), the total residue to be measured in or on the following food commodities:

Commodity	Parts per million
Almond	0.25
Almond, hulls	0.25
Apple	0.20
Avocado	0.20
Blackberry	0.20
Blueberry	0.20
Cattle, meat	0.03
Cattle, meat byproducts	0.03
Cherry	0.25
Corn, field, forage	0.20
Corn, field, grain	0.20
Corn, field, stover	0.25
Corn, pop, grain	0.20
Corn, pop, stover	0.25
Corn, sweet, forage	0.20
Corn, sweet, kernel plus cob with husks removed	0.25
Corn, sweet, stover	0.25
Cranberry	0.25
Currant	0.25
Egg	0.03
Goat, meat	0.03
Goat, meat byproducts	0.03
Grape	0.20
Grapefruit	0.25
Hazelnut	0.20
Horse, meat	0.03
Horse, meat byproducts	0.03
Lemon	0.25
Loganberry	0.20
Milk	0.03
Nut, macadamia	0.25
Olive	0.20
Orange	0.25
Peach	0.20
Pear	0.25
Pecan	0.20
Plum	0.20
Raspberry	0.20
Sheep, meat	0.03
Sheep, meat byproducts	0.03
Strawberry	0.25
Walnut	0.2

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 2165, Jan. 14, 1998, as amended at 63 FR 57074, Oct. 26, 1998; 72 FR 35665, June 29, 2007; 72 FR 53454, Sept. 19, 2007]

[↑ Back to Top](#)

### §180.215 Naled; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide naled (1,2-dibromo-2,2-dichloro-ethyl dimethyl phosphate) and its conversion product 2,2-dichlorovinyl dimethyl phosphate, expressed as naled, resulting from the application of the pesticide to growing crops or from direct application to livestock and poultry, in or on the following raw agricultural commodities:

Commodity	Parts per million
Almond, hulls	0.5
Almond	0.5
Bean, dry, seed	0.5
Bean, succulent	0.5
Beet, sugar, roots	0.5
Beet, sugar, tops	0.5
Broccoli	1
Brussels sprouts	1
Cabbage	1

Cauliflower	1
Celery	3
Collards	3
Cotton, undelinted seed	0.5
Cucumber	0.5
Eggplant	0.5
Grape	0.5
Grapefruit	3
Grass, forage	10
Hop, dried cones	0.5
Kale	3
Legume, forage	10
Lemon	3
Melon	0.5
Orange, sweet	3
Peach	0.5
Pea, succulent	0.5
Pepper	0.5
Pumpkin	0.5
Safflower, seed	0.5
Spinach	3
Squash, summer	0.5
Squash, winter	0.5
Strawberry	1
Swiss chard	3
Tangerine	3
Tomato	0.5
Turnip, greens	3
Walnut	0.5

(2) A tolerance of 0.5 part per million is established for the pesticide named in or on all raw agricultural commodities, except those otherwise listed in this section, from use of the pesticide for area pest (mosquito and fly) control.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[42 FR 46304, Sept. 15, 1977, as amended at 54 FR 20125, May 10, 1989; 63 FR 57074, Oct. 26, 1998; 66 FR 50833, Oct. 5, 2001; 77 FR 59124, Sept. 26, 2012]

[↑ Back to Top](#)

### §180.217 Metiram; tolerances for residues.

(a) *General.* Tolerances are established for residues of a metiram (a mixture of 5.2 parts by weight of ammoniates of [ethylenebis (dithiocarbamate)] zinc with 1 part by weight ethylenebis [dithiocarbamic acid] bimolecular and trimolecular cyclic anhydrosulfides and disulfides), including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only those metiram residues convertible to and expressed in terms of the degradate carbon disulfide.

Commodity	Parts per million
Apple	0.5
Apple, pomace, wet	2
Banana <sup>1</sup>	3
Grape, wine <sup>1</sup>	5
Potato	0.2

<sup>1</sup>There are no U.S. registrations on bananas and grape, wine as of April 29, 2011.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 57074, Oct. 26, 1998, as amended at 76 FR 23891, Apr. 29, 2011]

[↑ Back to Top](#)



**§180.220 Atrazine; tolerances for residues.**

(a) *General.* Tolerances are established for the combined residues of the herbicide atrazine (2-chloro-4-ethylamino-6-isopropylamino-s-triazine) and its chlorinated metabolites 2-amino-4-chloro-6-isopropylamino-s-triazine, 2-amino-4-chloro-6-ethylamino-s-triazine, and 2,4-diamino-6-chloro-s-triazine, in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	0.02
Cattle, meat	0.02
Cattle, meat byproducts	0.02
Corn, field, forage	1.5
Corn, field, grain	0.20
Corn, field, stover	0.5
Corn, pop, forage	1.5
Corn, pop, grain	0.20
Corn, pop, stover	0.5
Corn, sweet, forage	15
Corn, sweet, kernel plus cob with husks removed	0.20
Corn, sweet, stover	2.0
Goat, fat	0.02
Goat, meat	0.02
Goat, meat byproducts	0.02
Grass, forage	4.0
Grass, hay	4.0
Guava	0.05
Horse, fat	0.02
Horse, meat	0.02
Horse, meat byproducts	0.02
Milk	0.02
Nut, macadamia	0.20
Sheep, fat	0.02
Sheep, meat	0.02
Sheep, meat byproducts	0.02
Sorghum, forage, forage	0.25
Sorghum, grain, forage	0.25
Sorghum, grain, grain	0.20
Sorghum, grain, stover	0.50
Sugarcane, cane	0.20
Wheat, forage	1.5
Wheat, grain	0.10
Wheat, hay	5.0
Wheat, straw	0.50

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of atrazine, 2-chloro-4-ethylamino-6-isopropylamino-s-triazine, in or on the following raw agricultural commodity when present therein as a result of application of atrazine to the growing crops in paragraph (a) of this section:

Commodity	Parts per million
Vegetable, leafy, except brassica, group 4	0.25

[43 FR 29121, July 6, 1978, as amended at 44 FR 67116, Nov. 23, 1979; 47 FR 3771, Jan. 27, 1982; 47 FR 8012, Feb. 24, 1982; 63 FR 57075, Oct. 26, 1998; 67 FR 46893, July 17, 2002; 69 FR 6567, Feb. 11, 2004; 72 FR 35666, June 29, 2007; 72 FR 53454, Sept. 19, 2007; 73 FR 37852, July 2, 2008; 76 FR 56654, Sept. 14, 2011]

[↑ Back to Top](#)

**§180.222 Prometryn; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the herbicide prometryn, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only prometryn, 2,4-bis(isopropylamino)-6-methylthio-s-triazine, in or on the following raw agricultural commodities:

Commodity	Parts per million
Bean, snap, succulent	0.05
Carrot, roots	0.45

Celeriac, roots	0.05
Celeriac, tops	0.20
Celtuce	0.50
Cilantro, leaves	3.5
Coriander, dried leaves	9.0
Cotton, gin byproducts	1.0
Cottonseed subgroup 20C	0.25
Dill, oil	1.3
Dillweed, dried leaves	1.1
Dillweed, fresh leaves	0.30
Fennel, Florence, fresh leaves and stalk	0.50
Leaf petiole vegetable subgroup 22B	0.50
Okra	0.05
Parsley, dried leaves	1.5
Parsley, leaves	0.60
Pea, pigeon, seed	0.25
Sesame, seed	0.05
Swiss chard	0.50

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional exemptions.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of the herbicide prometryn, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only prometryn, 2,4-bis(isopropylamino)-6-methylthio-s-triazine, in or on the following raw agricultural commodities.

Commodity	Parts per million
Barley, forage	0.3
Barley, hay	1.0
Barley, straw	0.3
Oat, forage	0.3
Oat, hay	1.0
Oat, straw	0.3
Rye, forage	0.3
Rye, hay	1.0
Rye, straw	0.3
Triticale, forage	0.3
Triticale, hay	1.0
Triticale, straw	0.3
Wheat, forage	0.3
Wheat, hay	1.0
Wheat, straw	0.3

[43 FR 29121, July 6, 1978, as amended at 45 FR 51782, Aug. 5, 1980; 54 FR 6918, Feb. 15, 1989; 60 FR 20434, Apr. 26, 1995; 63 FR 17692, Apr. 10, 1998; 63 FR 57075, Oct. 26, 1998; 64 FR 39082, July 21, 1999; 74 FR 47456, Sept. 16, 2009; 74 FR 67108, Dec. 18, 2009; 76 FR 34885, June 15, 2011; 78 FR 55640, Sept. 11, 2013; 82 FR 57144, Dec. 4, 2017]

[↑ Back to Top](#)

### §180.225 Phosphine; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of phosphine in or on the following raw agricultural commodities (RACs) resulting from post-harvest fumigation for the control of insects with phosphine gas or phosphide compounds that produce phosphine gas.

Commodity	Parts per million
Almond	0.1
Avocado	0.01
Banana	0.01
Barley, grain	0.1
Cabbage, Chinese, bok choy	0.01
Cabbage, Chinese, napa	0.01
Cacao bean, dried bean	0.1
Cashew	0.1
Citron, citrus	0.01
Coffee, bean, green	0.1
Corn, field, grain	0.1
Corn, pop, grain	0.1
Cotton, undelinted seed	0.1

Date, dried fruit	0.1
Dill, seed	0.01
Eggplant	0.01
Endive	0.01
Grapefruit	0.01
Hazelnut	0.1
Kumquat	0.01
Lemon	0.01
Lettuce	0.01
Lime	0.01
Mango	0.01
Millet, grain	0.1
Mushroom	0.01
Nut, brazil	0.1
Oat, grain	0.1
Okra	0.01
Orange, sweet	0.01
Papaya	0.01
Peanut	0.1
Pecan	0.1
Pepper	0.01
Persimmon	0.01
Pistachio	0.1
Rice, grain	0.1
Rye, grain	0.1
Safflower, seed	0.1
Salsify, tops	0.01
Sesame, seed	0.1
Sorghum, grain	0.1
Soybean, seed	0.1
Sunflower, seed	0.1
Sweet potato, roots	0.01
Tangelo	0.01
Tangerine	0.01
Tomato	0.01
Vegetable, legume, group 6, except soybean	0.01
Walnut	0.1
Wheat, grain	0.1

(2) Tolerances are established for residues of the fumigant in or on all RACs resulting from preharvest treatment of pest burrows in agricultural and non-crop land areas.

Commodity	Parts per million
All raw agricultural commodities resulting from preharvest treatment of pest burrows	0.01

(3) Residues resulting from fumigation of processed food:

Commodity	Parts per million
Processed food	0.01

(4) Residues resulting from fumigation of animal feed:

Commodity	Parts per million
Animal feed	0.1

(5) To assure safe use of this pesticide, it must be used in compliance with the labeling conforming to that registered by the U.S. Environmental Protection Agency (EPA) under FIFRA. Labeling shall bear a restriction to aerate the finished food/feed for 48 hours before it is offered to the consumer, unless EPA specifically determines that a different time period is appropriate. Where appropriate, a warning shall state that under no condition should any formulation containing aluminum or magnesium phosphide be used so that it will come in contact with any processed food, except processed brewer's rice, malt, and corn grits stored in breweries for use in the manufacture of beer.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertant residues.* [Reserved]

[64 FR 72950, Dec. 29, 1999, as amended at 71 FR 74816, Dec. 13, 2006; 72 FR 41929, Aug. 1, 2007; 74 FR 46372, Sept. 9, 2009]

[↑ Back to Top](#)

### §180.226 Diquat; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the plant growth regulator and herbicide diquat, (6,7-dihydrodipyrido (1,2-a:2'1'-c)pyrazinediium) derived from application of the dibromide salt and calculated as the cation in or on the following food commodities:

Commodity	Parts per million
Alfalfa, seed	3.0
Cattle, fat	0.05
Cattle, meat	0.05
Cattle, meat byproducts	0.05
Canola, meal	6.0
Canola, seed	2.0
Egg	0.05
Goat, fat	0.05
Goat, meat	0.05
Goat, meat byproducts	0.05
Hog, fat	0.05
Hog, meat	0.05
Hog, meat byproducts	0.05
Horse, fat	0.05
Horse, meat	0.05
Horse, meat byproducts	0.05
Milk	0.02
Potato	0.1
Poultry, fat	0.05
Poultry, meat	0.05
Poultry, meat byproducts	0.05
Sheep, fat	0.05
Sheep, meat	0.05
Sheep, meat byproducts	0.05

(2)(i) Tolerances are established for residues of the herbicide diquat (6,7 dihydrodipyrido(1,2-a:2'1'-c)pyrazinediium) (calculated as the cation) derived from the application of the dibromide salt to ponds, lakes, reservoirs, marshes, drainage ditches, canals, streams, and rivers which are slow-moving or quiescent in programs of the Corp of Engineers or other Federal or State public agencies and to ponds, lakes and drainage ditches only where there is little or no outflow of water and which are totally under the control of the user, in or on the following food commodities:

Commodity	Parts per million
Avocado	0.2
Berry group 13	0.05
Cotton, undelinted seed	0.2
Cranberry	0.05
Fish	2.0
Fruit, citrus, group 10	0.05
Fruit, pome, group 11	0.02
Fruit, stone, group 12	0.02
Grain, cereal, forage, fodder and straw, group 16	0.02
Grain, cereal, group 15	0.02
Grape	0.05
Grass, forage, fodder and hay, group 17	0.2
Hop, dried cones	0.2
Nut, tree, group 14	0.02
Shellfish	20.0
Strawberry	0.05
Sugarcane, cane	0.2
Vegetable, brassica, leafy, group 5	0.05
Vegetable, cucurbit, group 9	0.02
Vegetable, foliage of legume, group 7	0.2
Vegetable, fruiting, group 8	0.05
Vegetable, leafy, except brassica, group 4	0.05
Vegetable, root and tuber, group 1	0.02
Vegetable, seed and pod	0.05

(ii) Where tolerances are established at higher levels from other uses of diquat on the subject crops, the higher tolerances applies also to residues of the aquatic uses cited in this paragraph.

(3) Tolerances are established for the plant growth regulator diquat (6,7 dihydrodipyrido(1,2-a:2'1'-c)pyrazinedium) derived from application of the dibromide salt and calculated as the cation in or on the following food commodities:

Commodity	Parts per million
Banana <sup>1</sup>	0.05
Coffee, bean, green <sup>1</sup>	0.05
Soybean, hulls	0.6

<sup>1</sup>There are no U.S. registrations as of May 26, 2010.

(4) A tolerance of 0.5 part per million is established for residues of diquat in potato, granules/flakes and potato, chips.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33709, May 24, 2000, as amended at 72 FR 41929, Aug. 1, 2007; 75 FR 29441, May 26, 2010; 75 FR 60241, Sept. 29, 2010]

[↑ Back to Top](#)

### §180.227 Dicamba; tolerances for residues.

(a) *General.* (1) Tolerances are established for the residues of the herbicide dicamba (3,6-dichloro-o-anisic acid), including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels is to be determined by measuring only the sum of the residues of dicamba (3,6-dichloro-o-anisic acid) and its metabolite, 3,6-dichloro-5-hydroxy-o-anisic acid, calculated as the stoichiometric equivalent of dicamba, in or on the following commodities:

Commodity	Parts per million
Barley, grain	6.0
Barley, hay	2.0
Barley, straw	15.0
Corn, field, forage	3.0
Corn, field, grain	0.1
Corn, field, stover	3.0
Corn, pop, grain	0.1
Corn, pop, stover	3.0
Corn, sweet, forage	0.50
Corn, sweet, kernel plus cob with husks removed	0.04
Corn, sweet, stover	0.50
Grass, forage, fodder and hay, group 17, forage	125.0
Grass, forage, fodder and hay, group 17, hay	200.0
Millet, proso, forage	90.0
Millet, proso, grain	2.0
Millet, proso, hay	40.0
Millet, proso, straw	30.0
Oat, forage	90.0
Oat, grain	2.0
Oat, hay	40.0
Oat, straw	30.0
Rye, forage	90.0
Rye, grain	2.0
Rye, straw	30.0
Sorghum, grain, forage	3.0
Sorghum, grain, grain	4.0
Sorghum, grain, stover	10.0
Sugarcane, cane	0.3
Sugarcane, molasses	5.0
Teff, forage	90.0
Teff, grain	6.0
Teff, hay	40.0
Teff, straw	30.0
Wheat, forage	90.0
Wheat, grain	2.0
Wheat, hay	40.0
Wheat, straw	30.0

(2) Tolerances are established for residues of the herbicide dicamba, 3,6-dichloro-o-anisic acid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels is to be determined by

measuring only the residues of dicamba (3,6-dichloro-*o*-anisic acid) and its metabolite, 3,6-dichloro-2-hydroxybenzoic acid, calculated as the stoichiometric equivalent of dicamba, in or on the following commodities:

Commodity	Parts per million
Asparagus	4.0
Cattle, fat	0.3
Cattle, kidney	25.0
Cattle, meat	0.25
Cattle, meat byproducts, except kidney	3.0
Goat, fat	0.3
Goat, kidney	25.0
Goat, meat	0.25
Goat, meat byproducts, except kidney	3.0
Hog, fat	0.3
Hog, kidney	25.0
Hog, meat	0.25
Hog, meat byproducts, except kidney	3.0
Horse, fat	0.3
Horse, kidney	25.0
Horse, meat	0.25
Horse, meat byproducts, except kidney	3.0
Milk	0.2
Sheep, fat	0.3
Sheep, kidney	25.0
Sheep, meat	0.25
Sheep, meat byproducts, except kidney	3.0

(3) Tolerances are established for residues of the herbicide dicamba, 3,6-dichloro-*o*-anisic acid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels is to be determined by measuring only the residues of dicamba, 3,6-dichloro-*o*-anisic acid, and its metabolites, 3,6-dichloro-5-hydroxy-*o*-anisic acid, and 3,6-dichloro-2-hydroxybenzoic acid, calculated as the stoichiometric equivalent of dicamba, in or on the following commodities:

Commodity	Parts per million
Cotton, gin byproducts	70
Cotton, undelinted seed	3.0
Grain, aspirated fractions	1000
Soybean, forage	60
Soybean, hay	100
Soybean, hulls	30.0
Soybean, seed	10.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33709, May 24, 2000, as amended at 72 FR 35665, June 29, 2007; 73 FR 17918, Apr. 2, 2008; 73 FR 54960, Sept. 24, 2008; 75 FR 60241, Sept. 29, 2010; 76 FR 55806, Sept. 9, 2011; 81 FR 88634, Dec. 8, 2016]

[↑ Back to Top](#)

#### §180.229 Fluometuron; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues of the herbicide fluometuron, *N,N*-dimethyl-*N'*-[3-(trifluoromethyl)phenyl]urea, and its metabolite, trifluoromethylaniline (TFMA) determined as TFMA, in or on the following food commodities:

Commodity	Parts per million
Cotton, gin byproducts	3.5
Cotton, undelinted seed	1.0

(2) Tolerances are established for the combined residues of the herbicide fluometuron, *N,N*-dimethyl-*N'*-[3-(trifluoromethyl)phenyl]urea, and its metabolites determined as TFMA and the hydroxylated metabolites: CGA-236431, 1-(4-hydroxy-3-trifluoromethylphenyl)urea; CGA-236432, 1-methyl-3-(4-hydroxy-3-trifluoromethylphenyl)urea; and CGA-13211, 1,1-dimethyl-3-(4-hydroxy-3-trifluoromethylphenyl)urea, in or on the following food commodities:

Commodity	Parts per million
Cattle, meat byproducts	0.1

Egg	0.1
Goat, meat byproducts	0.1
Hog, meat byproducts	0.1
Horse, meat byproducts	0.1
Milk	0.02
Poultry, fat	0.1
Poultry, meat	0.1
Poultry, meat byproducts	0.1
Sheep, meat byproducts	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for the combined residues of the herbicide fluometuron, *N,N*-dimethyl-*N'*-[3-(trifluoromethyl)phenyl]urea, and its metabolite, trifluoromethylaniline (TFMA) determined as TFMA, in or on the following food commodities.

Commodity	Parts per million
Grain, cereal, forage, fodder, and straw group 16, forage	3.0
Grain, cereal, forage, fodder, and straw, group 16, stover	6.0
Grain, cereal, group 15	0.5
Peanut	0.1
Peanut, hay	4.0
Peanut, meal	0.2
Soybean, forage	3.0
Soybean, hay	3.0
Soybean, seed	2.0
Rice, hulls	1.0
Wheat, milled byproducts	1.0

[73 FR 52613, Sept. 10, 2008]

[↑ Back to Top](#)

#### §180.231 Dichlobenil; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the herbicide dichlobenil (2,6-dichlorobenzonitrile) and its metabolite 2,6-dichlorobenzamide in or on the following raw agricultural commodities:

Commodity	Parts per million
Apple	0.5
Bushberry subgroup 13-07B	0.15
Caneberry subgroup 13-07A	0.10
Cranberry	0.1
Fruit, stone, group 12	0.15
Grape	0.15
Hazelnut	0.1
Pear	0.5
Rhubarb	0.06

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registration.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[36 FR 22540, Nov. 25, 1971, as amended at 63 FR 57075, Oct. 26, 1998; 66 FR 63198, Dec. 5, 2001; 73 FR 50570, Aug. 27, 2008]

[↑ Back to Top](#)

#### §180.235 Dichlorvos; tolerances for residues.

(a) *General.* (1) Tolerances for residues of the insecticide 2,2-dichlorovinyl dimethyl phosphate are established as follows:

Commodity	Parts per million
Cattle, fat	0.02(N)
Cattle, meat	0.02(N)
Cattle, meat byproducts	0.02(N)
Egg	0.05(N)
Goat, fat	0.02(N)

Goat, meat	0.02(N)
Goat, meat byproducts	0.02(N)
Horse, fat	0.02(N)
Horse, meat	0.02(N)
Horse, meat byproducts	0.02(N)
Milk	0.02(N)
Mushroom (residues expressed as naled)	0.5
Poultry, fat	0.05(N)
Poultry, meat	0.05(N)
Poultry, meat byproducts	0.05(N)
Raw agricultural commodities, nonperishable, bulk stored regardless of fat content, postharvest	0.5
Raw agricultural commodities nonperishable, packaged or bagged, containing 6 percent fat or less, postharvest	0.5
Raw agricultural commodities, nonperishable, packaged or bagged, containing more than 6 percent fat, postharvest	2
Sheep, fat	0.02(N)
Sheep, meat	0.02(N)
Sheep, meat byproducts	0.02(N)

(2) The tolerance of 0.1 part per million prescribed by 21 CFR 556.180 for negligible residues of 2,2-dichlorovinyl dimethyl phosphate in hog, fat; hog, meat; hog, meat byproducts; and hog, skin covers both its use as an anthelmintic in swine feed and as an insecticide applied directly to swine.

(3) Dichlorvos may be present as a residue from application as an insecticide on packaged or bagged nonperishable processed food (see: 21 CFR 170.3(j)) in an amount in such food not in excess of 0.5 part per million (ppm). To assure safe use of the insecticide, its label and labeling shall conform to the label and labeling registered by the U.S. Environmental Protection Agency, and the usage employed shall conform with such label or labeling.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[47 FR 55223, Dec. 8, 1982, as amended at 55 FR 26440, June 28, 1990; 56 FR 29183, June 26, 1991; 63 FR 57075, Oct. 26, 1998; 65 FR 33697, May 24, 2000; 74 FR 46373, Sept. 9, 2009; 77 FR 59125, Sept. 26, 2012]

[↑ Back to Top](#)

### §180.236 Triphenyltin hydroxide; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the fungicide triphenyltin hydroxide (TPTH) and its monophenyltin (MPTH) and diphenyltin (DPTH) hydroxide and oxide metabolites, expressed in terms of parent TPTH, in or on the following raw agricultural commodities:

Commodity	Parts per million
Beet, sugar, roots	0.05
Beet, sugar, tops	10.0
Cattle, fat	0.2
Cattle, kidney	2.0
Cattle, liver	4.0
Cattle, meat	0.5
Goat, fat	0.2
Goat, kidney	2.0
Goat, liver	4.0
Goat, meat	0.5
Hog, fat	0.3
Hog, meat	0.06
Hog, meat byproducts	0.3
Horse, fat	0.2
Horse, kidney	2.0
Horse, liver	4.0
Horse, meat	0.5
Milk	0.06
Pecan	0.05
Potato	0.05
Sheep, fat	0.2
Sheep, kidney	2.0
Sheep, liver	4.0
Sheep, meat	0.5

(b) *Section 18 emergency exemptions.* [Reserved]



(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 41929, Aug. 1, 2007]

[↑ Back to Top](#)

#### §180.241 Bensulide; tolerances for residues.

(a) *General.* Tolerances are established for the residues of S-(O,O-diisopropyl phosphorodithioate) of N-(2-mercaptoethyl) benzenesulfonamide including its oxygen analog S-(O,O-diisopropyl phosphorothioate) of N-(2-mercaptoethyl) benzenesulfonamide in or on the following food commodities:

Commodity	Parts per million
Onion, bulb	0.10
Vegetable, brassica, leafy group 5	0.15
Vegetable, cucurbits group 9	0.15
Vegetable, fruiting group 8	0.10
Vegetable, leafy except brassica group 4	0.15

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for the residues of S-(O,O-diisopropyl phosphorodithioate) of N-(2-mercaptoethyl) benzenesulfonamide including its oxygen analog S-(O,O-diisopropyl phosphorothioate) of N-(2-mercaptoethyl) benzenesulfonamide in or on the following food commodities:

Commodity	Parts per million
Carrot, roots	0.10

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 39440, July 1, 2003, as amended at 73 FR 53738, Sept. 17, 2008]

[↑ Back to Top](#)

#### §180.242 Thiabendazole; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of thiabendazole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of thiabendazole (2-(4-thiazolyl)benzimidazole) and its metabolite benzimidazole (free and conjugated), calculated as the stoichiometric equivalent of thiabendazole, in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	0.02
Alfalfa, hay	0.02
Apple, wet pomace	12.0
Avocado <sup>1</sup>	10.0
Banana, postharvest	3.0
Barley, grain	0.05
Barley, hay	0.30
Barley, straw	0.30
Bean, dry, seed <sup>2</sup>	0.1
Brassica, head and stem, subgroup 5A	0.02
Cantaloupe <sup>1</sup>	15.0
Carrot, roots, postharvest	10.0
Citrus, oil	15.0
Corn, field, forage	0.01
Corn, field, grain	0.01
Corn, field, stover	0.01
Corn, pop, forage	0.01
Corn, pop, grain	0.01
Corn, pop, stover	0.01
Corn, sweet, forage	0.01
Corn, sweet, kernels plus cop with husks removed	0.01
Corn, sweet, stover	0.01
Fruit, citrus, group 10, postharvest	10.0
Fruit, pome, group 11, postharvest	5.0
Mango	10.0

Mushroom	40.0
Oats, forage	0.30
Oats, grain	0.05
Oats, hay	0.30
Oats, straw	0.30
Onion, bulb, subgroup 3-07A	0.02
Papaya, postharvest	5.0
Potato, postharvest	10.0
Radish, tops	0.02
Rye, forage	0.30
Rye, grain	0.05
Rye, straw	0.30
Soybean <sup>2</sup>	0.1
Spinach	0.02
Strawberry <sup>1</sup>	5.0
Sweet potato (postharvest to sweet potato intended only for use as seed)	0.05
Triticale, forage	0.30
Triticale, grain	0.05
Triticale, hay	0.30
Triticale, straw	0.30
Vegetable, cucurbit, group 9	0.02
Vegetable, foliage of legume, group 7	0.20
Vegetable, legume, group 6	0.02
Vegetable, root (except sugarbeet), subgroup 1B	0.02
Wheat, forage	0.30
Wheat, grain	0.05
Wheat, hay	0.30
Wheat, straw	0.30

<sup>1</sup>There are no U.S. registrations on the indicated commodity.

<sup>2</sup>This tolerance expires on March 21, 2017.

(2) Tolerances are established for residues of thiabendazole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of thiabendazole (2-(4-thiazolyl)benzimidazole) and its metabolites 5-hydroxythiabendazole (free and conjugated) and benzimidazole (free and conjugated), calculated as the stoichiometric equivalent of thiabendazole, in or on the commodity.

Commodity	Parts per million
Cattle, meat	0.1
Cattle, meat byproducts	0.4
Goat, meat byproducts	0.4
Hog, meat byproducts	0.3
Horse, meat byproducts	0.4
Milk	0.1
Sheep, meat byproducts	0.4

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for residues of the thiabendazole, including its metabolites and degradates, in or on the specified agricultural commodities, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of thiabendazole (2-(4-thiazolyl)benzimidazole) and its metabolite benzimidazole (free and conjugated), calculated as the stoichiometric equivalent of thiabendazole. The tolerances expire on the date specified in the table.

Commodity	Parts per million	Expiration date
Sweet potato	10	12/31/19

(c) *Tolerances with regional exemptions.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[42 FR 32783, June 28, 1977]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.242, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.243 Propazine; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide propazine, 2-chloro-4,6-bis(isopropylamino)-s-triazine, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of propazine, 2-chloro-4,6-bis(isopropylamino)-s-triazine, and its two chlorinated degradates, 2-amino-4-chloro-6-isopropylamino-s-triazine and 2,4-diamino-6-chloro-s-triazine, calculated as the stoichiometric equivalent of propazine, in or on the commodity.

Commodity	Parts per million
Sorghum, grain, forage	0.25
Sorghum, grain, grain	0.25
Sorghum, grain, stover	0.25

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[75 FR 60242, Sept. 29, 2010]

[↑ Back to Top](#)

### §180.245 Streptomycin; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the fungicide streptomycin in or on food commodities as follows:

Commodity	Parts per million
Bean, dry, seed	0.5
Bean, succulent	0.5
Fruit, pome, group 11	0.25

(2) Tolerances are established for residues of the fungicide streptomycin from treatment of seedling plants before transplanting in or on the following food commodities:

Commodity	Parts per million
Celery	0.25
Pepper	0.25
Tomato	0.25

(3) Tolerances are established for residues of the fungicide streptomycin from treatment of seed pieces in or on the following food commodity:

Commodity	Parts per million
Potato	0.25

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of streptomycin, in or on the agricultural commodities, as specified in the following table, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. Compliance with the tolerance levels listed in the following table is to be determined by measuring the levels of streptomycin only, in or on the commodities listed in the table. The tolerances expire on the dates specified in the table.

Commodity	Parts per million	Expiration date
Fruit, citrus, group 10-10	2.0	12/31/19
Fruit, citrus, group 10-10, dried pulp	6.0	12/31/19
Grapefruit	0.15	12/31/18
Grapefruit, dried pulp	0.40	12/31/18

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 39440, July 1, 2003, as amended at 73 FR 54960, Sept. 24, 2008; 78 FR 29055, May 17, 2013; 80 FR 78145, Dec. 16, 2015; 82 FR 13764, Mar. 15, 2017]

[↑ Back to Top](#)

### §180.249 Alachlor; tolerances for residues.

(a) *General.* Tolerances are established for combined residues of alachlor (2-chloro-2',6"-diethyl-N-(methoxymethyl)acetanilide) and its metabolites which can be converted to 2,6-diethylaniline (DEA) or 2-ethyl-6-(1-hydroxyethyl)aniline (1-HEEA) upon basic hydrolysis, calculated as alachlor in or on the following raw agricultural commodities.

Commodity	Parts per million
Beans, dry	0.1
Beans, succulent lima	0.1
Cattle, fat	0.02
Cattle, meat byproducts	0.02
Cattle, meat	0.02
Corn, field, forage	2.0
Corn, field, grain	0.2
Corn, field, pop	0.2
Corn, field, stover	2.0
Corn, pop, stover	2.0
Corn, sweet (K + CWHR)	0.05
Corn, sweet, stover	2.0
Cotton, gin byproducts	0.7
Cotton, undelinted seed	0.03
Cowpea, forage	5.0
Cowpea, hay	5.0
Egg	0.02
Goat, fat	0.02
Goat, meat byproducts	0.02
Goat, meat	0.02
Hog, fat	0.02
Hog meat byproducts	0.02
Hog, meat	0.02
Horse, fat	0.02
Horse, meat byproducts	0.02
Horse, meat	0.02
Milk	0.02
Peanut	0.5
Poultry, fat	0.02
Poultry, meat byproducts	0.02
Poultry, meat	0.02
Sheep, fat	0.02
Sheep, meat byproducts	0.02
Sheep, meat	0.02
Sorghum grain, forage	2.0
Sorghum, grain, grain	0.1
Sorghum, grain, stover	1.0
Soybeans, seed	1.0
Sunflower, meal	3.4
Sunflower, seed	2.5

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of alachlor (2-chloro-2',6"-diethyl-N-(methoxymethyl)acetanilide) and its metabolites which can be converted to 2,6-diethylaniline (DEA) or 2-ethyl-6-(1-hydroxyethyl)aniline (1-HEEA) upon basic hydrolysis, calculated as alachlor, in or on the following raw agricultural commodities when present therein as a result of the application of alachlor to the growing crops in paragraph (a) of this section:

Commodity	Parts per million
Animal feed, nongrass, group 18, forage	1.4
Animal feed, nongrass, group 18, hay	1.2
Grain, cereal, forage, and straw, group 16 except corn, sorghum, rice, straw	0.8
Grain, cereal, forage, fodder and straw, group 16 except corn, sorghum, rice, forage	0.6
Grain, cereal, forage, fodder, and straw, group 16 except for corn, sorghum, rice, hay	0.8
Grain, cereal, group 15 except corn, sorghum, rice	0.05

[72 FR 54584, Sept. 26, 2007]

[↑ Back to Top](#)

### §180.252 Tetrachlorvinphos; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the insecticide tetrachlorvinphos [(Z)-2-chloro-1-(2,4,5-trichlorophenyl) vinyl dimethyl phosphate], including its metabolites, 1-(2,4,5-trichlorophenyl)-ethanol (free and

conjugated forms), 2,4,5-trichloroacetophenone, and 1-(2,4,5-trichlorophenyl)-ethanediol, in or on the following commodities:

Commodity	Parts per million
Cattle, fat (of which no more than 0.1 ppm is tetrachlorvinphos <i>per se</i> )	0.2
Cattle, kidney (of which no more than 0.05 ppm is tetrachlorvinphos <i>per se</i> )	1.0
Cattle, liver (of which no more than 0.05 ppm is tetrachlorvinphos <i>per se</i> )	0.5
Cattle, meat (of which no more than 2.0 ppm is tetrachlorvinphos <i>per se</i> )	2.0
Cattle, meat byproducts, except kidney and liver	1.0
Egg (of which no more than 0.05 ppm is tetrachlorvinphos <i>per se</i> )	0.2
Hog, fat (of which no more than 0.1 ppm is tetrachlorvinphos <i>per se</i> )	0.2
Hog, kidney (of which no more than 0.05 ppm is tetrachlorvinphos <i>per se</i> )	1.0
Hog, liver (of which no more than 0.05 ppm is tetrachlorvinphos <i>per se</i> )	0.5
Hog, meat (of which no more than 2.0 ppm is tetrachlorvinphos <i>per se</i> )	2.0
Hog, meat byproducts, except kidney and liver	1.0
Milk, fat (reflecting negligible residues in whole milk and of which no more than 0.05 ppm is tetrachlorvinphos <i>per se</i> )	0.05
Poultry, fat (of which no more than 7.0 ppm is tetrachlorvinphos <i>per se</i> )	7.0
Poultry, liver (of which no more than 0.05 ppm is tetrachlorvinphos <i>per se</i> )	2.0
Poultry, meat (of which no more than 3.0 ppm is tetrachlorvinphos <i>per se</i> )	3.0
Poultry, meat byproducts, except liver	2.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[76 FR 57659, Sept. 16, 2011, as amended at 78 FR 15882, Mar. 13, 2013; 78 FR 53684, Aug. 30, 2013]

[↑ Back to Top](#)

### §180.253 Methomyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide methomyl, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only methomyl, methyl *N*-[[[(methylamino)carbonyl]oxy]ethanimidothioate, in or on the commodity.

Commodity	Parts per million	Expiration/revocation date
Alfalfa, forage	10	None
Alfalfa, hay	10	None
Apple	1	None
Asparagus	2	None
Avocado	2	None
Barley, grain	1	None
Barley, hay	10	None
Barley, straw	10	None
Bean, dry, seed	0.1	None
Bean, forage	10	None
Bean, succulent	2	None
Beet, garden, tops	6	None
Bermudagrass, forage	10	None
Bermudagrass, hay	40	None
Blueberry	6	None
Broccoli	3	None
Brussels sprouts	2	None
Cabbage	5	None
Cabbage, Chinese, bok choy	5	None
Cabbage, Chinese, napa	5	None
Cauliflower	2	None
Celery	3	None
Collards	6	None
Corn, field, forage	10	None
Corn, field, grain	0.1	None
Corn, field, stover	10	None
Corn, pop, grain	0.1	None
Corn, pop, stover	10	None
Corn, sweet, forage	10	None
Corn, sweet, kernel plus cob with husks removed	0.1	None
Corn, sweet, stover	10	None
Cotton, undelinted seed	0.1	None
Dandelion, leaves	6	None
Endive	5	None

Grape	5	12/31/16
Grapefruit	2	None
Hop, dried cones <sup>1</sup>	12	None
Kale	6	None
Lemon	2	None
Lentil, seed	0.1	None
Lettuce	5	None
Mustard greens	6	None
Nectarine	5	None
Oat, forage	10	None
Oat, grain	1	None
Oat, hay	10	None
Oat, straw	10	None
Onion, dry bulb	0.2	None
Onion, green	3	None
Orange	2	None
Parsley, leaves	6	None
Pea	5	None
Pea, field, vines	10	None
Peach	5	None
Peanut	0.1	None
Pecan	0.1	None
Pepper, bell	2	None
Pepper, nonbell	2	None
Peppermint, tops	2	None
Pomegranate	0.2	None
Rye, forage	10	None
Rye, grain	1	None
Rye, straw	10	None
Sorghum, grain, forage	1	None
Sorghum, grain, grain	0.2	None
Soybean, forage	10	None
Soybean, seed	0.2	None
Spearmint, tops	2	None
Spinach	6	None
Swiss chard	6	None
Tangerine	2	None
Tomato	1	None
Turnip, greens	6	None
Vegetable, brassica, leafy, group 5	6.0	None
Vegetable, cucurbit, group 9	0.2	None
Vegetable, fruiting, group 8	0.2	None
Vegetables, leafy <sup>2</sup>	0.2	None
Vegetable, root and tuber, group 1	0.2	None
Wheat, forage	10	None
Wheat, grain	1	None
Wheat, hay	10	None
Wheat, straw	10	None

<sup>1</sup>There are no U.S. registrations for use of methomyl on hop, dried cone, as of February 14, 1990.

<sup>2</sup>Except for Beet (tops), broccoli, Brussels sprouts, cabbage, Chinese, cauliflower, celery, collards, dandelions, endive (escarole), kale, lettuce, mustard greens, parsley, spinach, Swiss chard, turnip, greens (tops), and watercress.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* A tolerance with regional registration, as defined in §180.1(l), is established for residues of the insecticide methomyl, including its metabolites and degradates, in or on the commodity in the table in this paragraph. Compliance with the tolerance level specified in this paragraph is to be determined by measuring only methomyl, methyl *N*-[[[(methylamino)carbonyl]oxy]ethanimidothioate, in or on the commodity.

Commodity	Parts per million
Pear	4

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33697, May 24, 2000, as amended at 72 FR 35666, June 29, 2007; 74 FR 46373, Sept. 9, 2009; 75 FR 60242, Sept. 29, 2010; 76 FR 34885, June 15, 2011; 77 FR 59125, Sept. 26, 2012; 80 FR 72598, Nov. 20, 2015]

[↑ Back to Top](#)

**§180.254 Carbofuran; tolerances for residues.**

(a) *General.* Tolerances are established for the combined residues of the insecticide carbofuran (2,3-dihydro-2,2-dimethyl-7-benzofuranyl-*N*-methylcarbamate), its carbamate metabolite-2,3-dihydro-2,2-dimethyl-3-hydroxy-7-benzofuranyl-*N*-methylcarbamate, and its phenolic metabolites 2,3-dihydro-2,2-dimethyl-7-benzofuranol, 2,3-dihydro-2,2-dimethyl-3,-oxo-7-benzofuranol and 2,3-dihydro-2,2-dimethyl-3,7-benzofurandiol in or on the following raw agricultural commodities:

Commodity	Parts per million
Banana <sup>1</sup>	0.1
Coffee, bean, green <sup>1</sup>	0.1
Rice, grain <sup>1</sup>	0.2
Sugarcane, cane <sup>1</sup>	0.1

<sup>1</sup>There are no U.S. registrations for use of carbofuran on these commodities.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[39 FR 20597, June 12, 1974]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.254, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

**§180.258 Ametryn; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the desiccant and herbicide (2-ethylamino)-4-(isopropylamino)-6-(methylthio)-*s*-triazine in or on the following raw agricultural commodities:

Commodity	Parts per million	Expiration/Revocation Date
Banana	0.25	6/16/10
Corn, field, forage	0.1	None
Corn, field, grain	0.05	None
Corn, field, stover	0.05	None
Corn, pop, grain	0.05	None
Corn, pop, stover	0.05	None
Corn, sweet, forage	0.5	6/16/10
Corn, sweet, kernel plus cob with husks removed	0.25	6/16/10
Corn, sweet, stover	0.5	6/16/10
Pineapple	0.05	None
Sugarcane, cane	0.05	None

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[43 FR 29121, July 6, 1978, as amended at 48 FR 13175, Mar. 30, 1983; 48 FR 21132, May 11, 1983; 52 FR 33237, Sept. 2, 1987; 63 FR 57075, Oct. 26, 1998; 73 FR 54961, Sept. 24, 2008; 74 FR 47456, Sept. 16, 2009]

[↑ Back to Top](#)

**§180.259 Propargite; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the pesticide propargite (2-(*p*-*tert*-butylphenoxy) cyclohexyl 2-propynyl sulfite) in or on the following food commodities.

Commodity	Parts per million
Almond	0.1
Almond, hulls	55.0
Bean, dry, seed	0.2
Cattle, fat	0.1
Cattle, meat	0.1
Cattle, meat byproducts	0.1

Citrus, oil	30.0
Corn, field, forage	10.0
Corn, field, grain	0.1
Corn, field, stover	10.0
Corn, pop, grain	0.1
Corn, pop, stover	10.0
Corn, sweet, forage	10.0
Corn, sweet, stover	10.0
Cotton, undelinted seed	0.1
Egg	0.1
Goat, fat	0.1
Goat, meat	0.1
Goat, meat byproducts	0.1
Grain, aspirated fractions	0.4
Grape	10.0
Grapefruit	5.0
Hog, fat	0.1
Hog, meat	0.1
Hog, meat byproducts	0.1
Hop, dried cones	100.0
Horse, fat	0.1
Horse, meat	0.1
Horse, meat byproducts	0.1
Lemon	5.0
Milk, fat (0.08 ppm in milk)	2.0
Nectarine	4.0
Orange	10.0
Peanut	0.1
Peppermint, tops	50.0
Poultry, fat	0.1
Potato	0.1
Sheep, fat	0.1
Sheep, meat	0.1
Sheep, meat byproducts	0.1
Sorghum, grain, forage	10.0
Sorghum, grain, grain	5.0
Sorghum, grain, stover	10.0
Spearmint, tops	50.0
Tea, dried	10.0
Walnut	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of propargite in or on the following raw agricultural commodities:

Commodity	Parts per million
Corn, sweet, kernel plus cob with husks removed	0.1

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33710, May 24, 2000, as amended at 72 FR 41930, Aug. 1, 2007; 73 FR 54961, Sept. 24, 2008; 76 FR 34885, June 15, 2011]

[↑ Back to Top](#)

### §180.261 Phosmet; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide phosmet, *N*-(mercaptomethyl) phthalimide *S*-(*O*,*O*-dimethyl phosphorodithioate), including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of phosmet, *N*-(mercaptomethyl) phthalimide *S*-(*O*,*O*-dimethyl phosphorodithioate), and its oxygen analog, *N*-(mercaptomethyl) phthalimide *S*-(*O*,*O*-dimethyl phosphorothioate, calculated as the stoichiometric equivalent of phosmet, in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	20
Alfalfa, hay	40
Almond, hulls	10
Apple	10
Apricot	5
Blueberry	10
Cattle, fat	0.2



Cattle, meat	0.1
Cattle, meat byproducts	0.1
Cherry	10
Cranberry	10
Fruit, citrus, group 10	5
Goat, fat	0.1
Goat, meat	0.1
Goat, meat byproducts	0.1
Grape	10
Hog, fat	0.2
Hog, meat	0.04
Hog, meat byproducts	0.04
Horse, fat	0.1
Horse, meat	0.1
Horse, meat byproducts	0.1
Kiwifruit	25
Milk	0.1
Nectarine	5
Nut, tree, group 14	0.1
Pea, dry, seed	0.5
Pea, field, hay	20
Pea, field, vines	10
Pea, succulent	1
Peach	10
Pear	10
Plum, prune, fresh	5
Potato	0.1
Sheep, fat	0.1
Sheep, meat	0.1
Sheep, meat byproducts	0.1
Sweet potato, roots	12

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration are established for residues of the insecticide phosmet, *N*-(mercaptomethyl) phthalimide *S*-(*O,O*-dimethyl phosphorodithioate), including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of phosmet, *N*-(mercaptomethyl) phthalimide *S*-(*O,O*-dimethyl phosphorodithioate), and its oxygen analog, *N*-(mercaptomethyl) phthalimide *S*-(*O,O*-dimethyl phosphorothioate), calculated as the stoichiometric equivalent of phosmet, in or on the commodity.

Commodity	Parts per million
Crabapple	20
Pistachio	0.1

(d) *Indirect or inadvertent residues.* [Reserved]

[43 FR 46538, Oct. 10, 1978, as amended at 45 FR 8981, Feb. 11, 1980; 48 FR 37213, Aug. 17, 1983; 52 FR 48539, Dec. 23, 1987; 53 FR 657, Jan. 11, 1988; 53 FR 39090, Oct. 5, 1988; 63 FR 57075, Oct. 26, 1998; 67 FR 49616, July 31, 2002; 74 FR 46698, Sept. 11, 2009; 75 FR 60242, Sept. 29, 2010]

[↑ Back to Top](#)

### §180.262 Ethoprop; tolerances for residues.

(a) *General.* Tolerances are established for residues of the nematocide and insecticide ethoprop, *O*-ethyl *S,S*-dipropyl phosphorodithioate, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only ethoprop, *O*-ethyl *S,S*-dipropyl phosphorodithioate, in or on the commodity.

Commodity	Parts per million
Banana	0.02
Bean, lima	0.02
Bean, snap, succulent	0.02
Cabbage	0.02
Corn, field, forage	0.02
Corn, field, grain	0.02
Corn, field, stover	0.02
Corn, sweet, forage	0.02
Corn, sweet, kernel plus cob with husks removed	0.02
Corn, sweet, stover	0.02

Cucumber	0.02
Hop, dried cones	0.02
Peppermint, tops	0.02
Pineapple <sup>1</sup>	0.02
Potato	0.02
Spearmint, tops	0.02
Sugarcane, cane	0.02
Sweet potato, roots	0.02

<sup>1</sup>There are no U.S. registrations as of July 23, 2009, except for existing stocks bearing old labeling whose sale, distribution, and use is allowed, provided it is consistent with the terms of the cancellation order of July 9, 2009; *i.e.*, the EPA will allow the technical registrant to continue to sell and distribute existing stocks of the amended registered product bearing old labeling for use on pineapple for 18 months (until January 9, 2011) and persons other than the registrant may continue to sell and/or use existing stocks of product bearing the old labeling until such stocks are exhausted, provided that such use is consistent with the terms of the previously approved labeling on, or that accompanied, the modified product.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[47 FR 53004, Nov. 24, 1982, as amended at 48 FR 51485, Nov. 9, 1983; 52 FR 33237, Sept. 2, 1987; 53 FR 30053, Aug. 10, 1988; 63 FR 57075, Oct. 26, 1998; 64 FR 39078, July 21, 1999; 66 FR 38955, July 26, 2001; 67 FR 49616, July 31, 2002; 73 FR 53731, Sept. 17, 2008; 73 FR 54961, Sept. 24, 2008; 74 FR 46373, Sept. 9, 2009; 75 FR 60242, Sept. 29, 2010]

[↑ Back to Top](#)

#### §180.269 Aldicarb; tolerances for residues.

(a) *General.* Tolerances are established for combined residues of the insecticide and nematocide aldicarb (2-methyl-2-(methylthio)propionaldehyde *O*-(methylcarbamoyl) oxime and its cholinesterase-inhibiting metabolites 2-methyl 2-(methylsulfinyl) propionaldehyde *O*-(methylcarbamoyl) oxime and 2-methyl-2-(methylsulfonyl) propionaldehyde *O*-(methylcarbamoyl) oxime in or on the following food commodities:

Commodity	Parts per million
Bean, dry, seed	0.1
Beet, sugar, roots	0.05
Beet, sugar, tops	1
Citrus, dried pulp	0.6
Coffee, bean, green	0.1
Cotton, undelinted seed	0.1
Cotton, hulls	0.3
Grapefruit	0.3
Lemon	0.3
Lime	0.3
Orange, sweet	0.3
Peanut	0.05
Pecan	0.5
Potato	1
Soybean	0.02
Sugarcane, cane	0.02
Sweet potato, roots	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33710, May 24, 2000, as amended at 69 FR 6567, Feb. 11, 2004; 73 FR 54961, Sept. 24, 2008; 81 FR 34905, June 1, 2016]

[↑ Back to Top](#)

#### §180.272 Tribuphos; tolerances for residues.

(a) *General.* Tolerances are established for residues of the defoliant tribuphos (S,S,S-tributyl phosphorotrithioate) in or on food commodities as follows:

Commodity	Parts per million
Cattle, fat	0.15
Cattle, meat	0.02
Cattle, meat byproducts	0.02
Cotton, gin byproducts	40.0
Cotton, undelinted seed	4.0
Goat, fat	0.15
Goat, meat	0.02
Goat, meat byproducts	0.02
Hog, fat	0.15
Hog, meat	0.02
Hog, meat byproducts	0.02
Horse, fat	0.15
Horse, meat	0.02
Horse, meat byproducts	0.02
Milk	0.01
Sheep, fat	0.15
Sheep, meat	0.02
Sheep, meat byproducts	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33698, May 24, 2000, as amended at 67 FR 49616, July 31, 2002; 72 FR 53460, Sept. 19, 2007]

[↑ Back to Top](#)

#### §180.274 Propanil; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the herbicide propanil (3', 4'-dichloropropionanilide) and its metabolites convertible to 3, 4-dichloroaniline (3, 4-DCA) in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	0.10
Cattle, meat	0.05
Cattle, meat byproducts	1.0
Crayfish	0.05
Egg	0.30
Goat, fat	0.10
Goat, meat	0.05
Goat, meat byproducts	1.0
Hog, fat	0.10
Hog, meat	0.05
Hog, meat byproducts	1.0
Horse, fat	0.10
Horse, meat	0.05
Horse, meat byproducts	1.0
Milk	0.05
Poultry, fat	0.05
Poultry, meat	0.10
Poultry, meat byproducts	0.50
Rice, bran	40
Rice, grain	10
Rice, hulls	30
Sheep, fat	0.10
Sheep, meat	0.05
Sheep, meat byproducts	1.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 34827, June 26, 1998, as amended at 72 FR 28888, May 23, 2007; 80 FR 72598, Nov. 20, 2015]

[↑ Back to Top](#)

**§180.275 Chlorothalonil; tolerances for residues.**

(a) *General.* (1) Tolerances are established for the fungicide chlorothalonil (tetrachloroisophthalonitrile) and its metabolite 4-hydroxy-2,5,6-trichloroisophthalonitrile in or on the following food commodities.

Commodity	Parts per million
Almond	0.05
Almond, hulls	1.0
Apricot	0.5
Asparagus	0.1
Banana (NMT 0.05 ppm in edible pulp)	0.5
Bean, dry, seed	0.1
Bean, snap, succulent	5
Blueberry	1.0
Brassica, head and stem, subgroup 5A	5.0
Carrot, roots	1
Celery	15
Cherry, sweet	0.5
Cherry, tart	0.5
Cocoa bean, dried bean	0.05
Coffee, bean, green	0.20
Corn, sweet, kernel plus cob with husks removed	1
Cranberry	5.0
Ginseng	4.0
Horseradish	4.0
Lentil	0.10
Lychee	15
Mango	1.0
Mushroom	1.0
Nectarine	0.5
Okra	6.0
Onion, bulb	0.5
Onion, green	5
Papaya	15
Parsnip, roots	1
Passionfruit	3
Pea, edible podded	5
Peach	0.5
Peanut	0.3
Pistachio	0.2
Plum	0.2
Plum, prune	0.2
Potato	0.1
Rhubarb	4.0
Soybean	0.2
Starfruit	3.0
Tomato	5
Vegetable, cucurbit, group 9	5.0
Vegetable, fruiting, group 8, except tomato	6.0
Yam, true	0.10

(2) Tolerances are established for the metabolite 4-hydroxy-2,5,6-trichloroisophthalonitrile in or on the following food commodities.

Commodity	Parts per million
Cattle, fat	0.1
Cattle, kidney	0.5
Cattle, meat byproducts, except kidney	0.05
Cattle, meat	0.03
Goat, fat	0.1
Goat, kidney	0.5
Goat, meat byproducts, except kidney	0.05
Goat, meat	0.03
Hog, fat	0.1
Hog, kidney	0.5
Hog, meat byproducts, except kidney	0.05
Hog, meat	0.03
Horse, fat	0.1
Horse, kidney	0.5
Horse, meat byproducts, except kidney	0.05
Horse, meat	0.03
Milk	0.1

Sheep, fat	0.1
Sheep, kidney	0.5
Sheep, meat byproducts, except kidney	0.05
Sheep, meat	0.03

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for the combined residues of chlorothalonil and its metabolite in or on the following raw agricultural commodities:

Commodity	Parts per million
Hazelnut	0.1
Peppermint, tops	2
Persimmon	1.5
Spearmint, tops	2

(d) *Indirect or inadvertent residues.* [Reserved]

[42 FR 56114, Oct. 21, 1977]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.275, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.276 Formetanate hydrochloride; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide formetanate hydrochloride, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only formetanate hydrochloride, N,N-dimethyl-N'-[3-[(methylamino)carbonyl]oxy]phenyl]methanimidamide hydrochloride, in or on the commodity.

Commodity	Parts per million	Expiration/revocation date
Apple	0.50	12/31/13
Apple, wet pomace	1.5	12/31/13
Grapefruit	1.5	None
Lemon	0.60	None
Lime	0.03	None
Nectarine	0.40	None
Orange	1.5	None
Peach	0.40	12/31/13
Pear	0.50	12/31/13
Tangelo	0.03	None
Tangerine	0.03	None

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 40815, July 11, 2012]

[↑ Back to Top](#)

### §180.278 Phenmedipham; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the herbicide phenmedipham (3-methoxycarbonylamino-phenyl-3'-methylcarbanilate) in or on the following food commodities:

Commodity	Parts per million
Beet, garden, roots	0.2
Beet, garden, tops	0.2
Beet, sugar, dried pulp	0.5
Beet, sugar, molasses	0.2
Beet, sugar, roots	0.1
Beet, sugar, tops	0.1
Spinach	4.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 28888, May 23, 2007]

[↑ Back to Top](#)

### §180.284 Zinc phosphide; tolerances for residues.

(a) *General.* Tolerances are established for residues of the phosphine resulting from the use of the rodenticide zinc phosphide in or on the raw agricultural commodities as follows:

Commodity	Parts per million
Alfalfa, forage	0.2
Alfalfa, hay	0.2
Barley, grain	0.05
Barley, hay	0.2
Barley, straw	0.2
Bean, dry, seed	0.05
Beet, sugar, roots	0.05
Beet, sugar, tops	0.2
Grape	0.01
Grass, rangeland, forage	0.1
Grass, rangeland, hay	0.1
Potato	0.05
Sugarcane, cane	0.01
Timothy, hay	0.5
Timothy, forage	0.5
Wheat, forage	0.05
Wheat, grain	0.05
Wheat, hay	0.05
Wheat, straw	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of phosphine resulting from the use of the rodenticide zinc phosphide in or on the following raw agricultural commodities as follows:

Commodity	Parts per million
Artichoke, globe	0.01
Beet, sugar, roots	0.04
Beet, sugar, tops	0.02

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 45182, Aug. 25, 1998, as amended at 63 FR 67799, Dec. 9, 1998; 64 FR 40772, July 28, 1999; 64 FR 61791, Nov. 15, 1999; 65 FR 8874, Feb. 23, 2000; 65 FR 49941, Aug. 16, 2000; 65 FR 62634, Oct. 19, 2000; 66 FR 64773, Dec. 14, 2001; 68 FR 2247, Jan. 16, 2003; 68 FR 56195, Sept. 30, 2003; 70 FR 7046, Feb. 10, 2005; 74 FR 46373, Sept. 9, 2009; 76 FR 34885, June 15, 2011]

[↑ Back to Top](#)

### §180.287 Amitraz; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide amitraz (N'-[2,4-dimethylphenyl]-N-[[2,4-dimethylphenyl]imino]methyl]-N-methylmethanimidamide), including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified is to be determined by measuring amitraz residues convertible to 2,4-dimethylaniline, expressed as the stoichiometric equivalent of amitraz, in or on the following raw agricultural commodities:

Commodity	Parts per million
Cattle, fat	0.1
Cattle, meat	0.02
Cattle, meat byproducts	0.2
Hog, fat	0.1
Hog, kidney	0.1
Hog, liver	0.1

Hog, meat	0.05
Hog, meat byproducts	0.3
Honey	0.2
Honeycomb	9
Milk	0.03
Milk, fat	0.2

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[44 FR 70145, Dec. 6, 1979, as amended at 51 FR 16846, May 7, 1986; 52 FR 5767, Feb. 26, 1987; 57 FR 53568, Nov. 12, 1992; 58 FR 14316, Mar. 17, 1993; 60 FR 12704, Mar. 8, 1995; 67 FR 49616, July 31, 2002; 72 FR 53454, Sept. 19, 2007; 74 FR 47456, Sept. 16, 2009; 78 FR 17133, Mar. 20, 2013; 80 FR 72598, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.288 2-(Thiocyanomethylthio)benzothiazole; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide 2-(thiocyanomethylthio)benzothiazole in or on the following food commodities:

Commodity	Parts per million
Barley, grain	0.1(N)
Barley, straw	0.1(N)
Beet, sugar, roots	0.1(N)
Beet, sugar, tops	0.1(N)
Corn, field, forage	0.1(N)
Corn, field, grain	0.1
Corn, field, stover	0.1
Corn, pop, grain	0.1
Corn, pop, stover	0.1
Cotton, forage	0.1(N)
Cotton, undelinted seed	0.1(N)
Oat, forage	0.1(N)
Oat, grain	0.1(N)
Oat, hay	0.1(N)
Oat, straw	0.1(N)
Rice, grain	0.1(N)
Safflower, seed	0.1(N)
Sorghum, grain, forage	0.1(N)
Sorghum, grain, grain	0.1(N)
Sorghum, grain, stover	0.1(N)
Wheat, forage	0.1(N)
Wheat, grain	0.1(N)
Wheat, hay	0.1(N)
Wheat, straw	0.1(N)

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 39440, July 1, 2003, as amended at 74 FR 46374, Sept. 9, 2009; 80 FR 72598, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.289 Methanearsonic acid; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide methanearsonic acid, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only methanearsonic acid, from application of the disodium and monosodium salts of methanearsonic acid, calculated as the stoichiometric equivalent of  $As_2O_3$ , in or on the commodity.

Commodity	Parts per million	Expiration/Revocation Date
Cotton, undelinted seed	0.7	None
Cotton, hulls	0.9	None

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 34828, June 26, 1998, as amended at 77 FR 59126, Sept. 26, 2012]

[↑ Back to Top](#)

#### §180.291 Pentachloronitrobenzene; tolerance for residues.

(a) *General.* Tolerances are established for the combined residues of the fungicide pentachloronitrobenzene (PCNB) and its metabolites pentachloroaniline (PCA), and pentachlorothioanisole (PCTA), in or on the following food commodities:

Commodity	Parts per million
Bean	0.1
Brassica, head and stem, subgroup 5A	0.1
Cotton, undelinted seed	0.1
Garlic, bulb	0.1
Peanut	1.0
Potato	0.1
Soybean, forage	0.02
Soybean, hay	0.02
Soybean, seed	0.02
Vegetable, fruiting, group 8	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registrations, as defined in §180.1(l), are established for the combined residues of the fungicide pentachloronitrobenzene (PCNB) and its metabolites pentachloroaniline (PCA), and pentachlorothioanisole (PCTA), in or on the following food commodities:

Commodity	Parts per million
Collards	0.2
Kale	0.2
Mustard, greens	0.2

(d) *Indirect or inadvertent residues.* [Reserved]

[74 FR 47456, Sept. 16, 2009]

[↑ Back to Top](#)

#### §180.292 Picloram; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide picloram, 4-amino-3,5,6-trichloropicolinic acid, including its metabolites and degradates, in or on the commodities in the following table from its application in the acid form or in the form of its salts. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only picloram, 4-amino-3,5,6-trichloropicolinic acid, in or on the commodity.

Commodity	Parts per million
Barley, grain	0.5
Barley, pearled barley	3.0
Barley, straw	1.0
Cattle, fat	0.4
Cattle, meat	0.4
Cattle, meat byproducts	15
Egg	0.05
Goat, fat	0.4
Goat, meat	0.4
Goat, meat byproducts	15
Grain, aspirated fractions	4.0
Grass, forage	400
Grass, hay	225
Hog, fat	0.05
Hog, meat	0.05
Hog, meat byproducts	0.05



Horse, fat	0.4
Horse, meat	0.4
Horse, meat byproducts	15
Milk	0.25
Oat, forage	1.0
Oat, grain	0.5
Oat, groats/rolled oats	3.0
Oat, straw	1.0
Poultry, fat	0.05
Poultry, meat	0.05
Poultry, meat byproducts	0.05
Sheep, fat	0.4
Sheep, meat	0.4
Sheep, meat byproducts	15
Wheat, bran	3.0
Wheat, forage	1.0
Wheat, germ	3.0
Wheat, grain	0.5
Wheat, middlings	3.0
Wheat, shorts	3.0
Wheat, straw	1.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[41 FR 19221, May 11, 1976, as amended at 47 FR 53005, Nov. 24, 1982; 64 FR 425, Jan. 5, 1999; 64 FR 39082, July 21, 1999; 72 FR 41930, Aug. 1, 2007; 75 FR 60243, Sept. 29, 2010]

[↑ Back to Top](#)

### §180.293 Endothall; tolerances for residues.

(a) *General.* (1) Tolerances are established for the residues of endothall, including its metabolites and degradates, in or on the commodities in the table, below. Compliance with the tolerance levels specified, below, is to be determined by measuring only endothall (7-oxabicyclo [2.2.1] heptanes-2,3-dicarboxylic acid) and its mono-methyl ester.

Commodity	Parts per million
Apple	0.05
Apple, wet pomace	0.15
Cotton, undelinted seed	0.1
Fish	0.1
Hop, dried cones	0.1
Potato	0.1
Rice, grain	0.05

(2) An interim tolerance of 0.2 parts per million is established for residues of the herbicide endothall (7 - oxabicyclo[2.2.1] heptane-2,3-dicarboxylic acid) in water, potable from use of its potassium, sodium, di-*N*, *N*-dimethylalkylamine, and mono-*N*,*N*-dimethylalkylamine salts as algicides or herbicides to control aquatic plants in canals, lakes, ponds, and other potential sources of water, potable.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for the indirect or inadvertent combined residues of the herbicide, endothall (7 - oxabicyclo[2.2.1] heptane-2,3-dicarboxylic acid) in potable water from use of its potassium, sodium, di-*N*, *N*-dimethylalkylamine, and mono- *N*,*N*-, -dimethylalkylamine salts as algicides or herbicides to control aquatic plants in canals, lakes, ponds, and other potable water sources that may lead to endothall residues in or on the following commodities:

Commodity	Parts per million
Almond, hulls	15.0
Animal feed, nongrass, group 18, forage	4.0
Animal feed, nongrass, group 18, hay	10
Apple, wet pomace	0.15
Beet, sugar, molasses	1.5
Brassica, head and stem subgroup 5A	0.1
Brassica, leafy, subgroup 5B	2.0

Bushberry subgroup 13-07B	0.6
Caneberry subgroup 13-07A	0.6
Cattle, fat	0.05
Cattle, kidney	0.05
Cattle, kidney <sup>1</sup>	0.20
Cattle, liver <sup>1</sup>	0.10
Cattle, liver	0.05
Cattle, meat	0.05
Corn, field, grain	0.07
Corn, pop, grain	0.07
Corn, sweet, kernel plus cob with husks removed	0.3
Citrus, dried pulp	0.1
Egg	0.05
Feed commodities not otherwise listed	10.0
Food commodities not otherwise listed	5.0
Fruit, citrus group 10	0.05
Fruit, pome, group 11	0.05
Fruit, stone, group 12	0.3
Goat, fat	0.05
Goat, kidney <sup>1</sup>	0.15
Goat, kidney	0.05
Goat, liver	0.05
Goat, meat	0.05
Grain, aspirated fractions	35.0
Grain cereal, forage, fodder and straw, group 16	10.0
Grain, cereal, group 15, except corn	4.0
Grape	1.0
Grape, raisin	5.0
Grass, forage, fodder, and hay group 17, forage	3.5
Grass, forage, fodder, and hay group 17, hay	18.0
Herb and spice, group 19	5.0
Hog, fat	0.05
Hog, kidney <sup>1</sup>	0.10
Hog, kidney	0.05
Hog, liver	0.05
Hog, meat	0.05
Milk <sup>1</sup>	0.03
Milk	0.01
Nut, tree, group 14	0.05
Okra	0.05
Pea and bean, dried shelled, subgroup 6C	0.2
Pea and bean, succulent shelled, subgroup 6B	2.0
Peppermint, tops	5.0
Pistachio	0.05
Poultry, fat	0.05
Poultry, liver	0.05
Poultry, meat	0.05
Poultry, meat byproducts <sup>1</sup>	0.20
Poultry, meat byproducts	0.05
Rice, hulls	8.0
Sheep, fat	0.05
Sheep, kidney <sup>1</sup>	0.15
Sheep, kidney	0.05
Sheep, liver	0.05
Sheep, meat	0.05
Soybean, hulls	0.5
Soybean, seed	0.2
Spearmint, tops	5.0
Tomato, paste	0.1
Tomato, puree	0.1
Vegetable, bulb, group 3-07	0.5
Vegetable, cucurbit, group 9	1.5
Vegetable, foliage of legume, group 7	4.0
Vegetable, fruiting, group 8	0.05
Vegetable, leafy, except brassica, group 4	2.0
Vegetable, leaves of root and tuber, group 2	3.0
Vegetable, legume, edible, podded, subgroup 6A	2.0
Vegetable, root and tuber, group 1	1.0
Wheat, milled byproducts	5.0

<sup>1</sup>This tolerance expires on May 22, 2017.

[41 FR 23717, June 11, 1976, as amended at 51 FR 4498, Feb. 5, 1986; 62 FR 49931, Sept. 24, 1997; 63 FR 42249, Aug. 7, 1998; 67 FR 35048, May 17, 2002; 71 FR 47106, Aug. 16, 2006; 71 FR 74816, Dec. 13, 2006; 72 FR 52018, Sept. 12, 2007; 74 FR 67097, Dec. 18, 2009; 78 FR 76566, Dec. 18, 2013; 80 FR 72598, Nov. 20, 2015; 81 FR 83169, Nov. 21, 2016]

[↑ Back to Top](#)

### §180.297 *N*-1-Naphthyl phthalamic acid; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide *N*-1-naphthyl phthalamic acid from application of its sodium salt in or on the following raw agricultural commodities:

Commodity	Parts per million
Cantaloupe	0.1(N)
Cucumber	0.1(N)
Muskmelon	0.1(N)
Watermelon	0.1(N)

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[45 FR 32306, May 16, 1980, as amended at 63 FR 57075, Oct. 26, 1998]

[↑ Back to Top](#)

### §180.298 Methidathion; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide methidathion, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only methidathion, S-[(5-methoxy-2-oxo-1,3,4-thiadiazol-3(2*H*)-yl)methyl] *O*,*O*-dimethyl phosphorodithioate, in or on the commodity.

Commodity	Parts per million	Expiration/revocation date
Almond, hulls	6.0	12/31/16
Artichoke, globe	0.05	12/31/16
Citrus, oil	420.0	12/31/16
Cotton, undelinted seed	0.2	12/31/16
Fruit, citrus, group 10, except tangerine	4.0	12/31/16
Fruit, pome, group 11	0.05	12/31/16
Fruit, stone, group 12	0.05	12/31/16
Mango	0.05	12/31/16
Nut, tree, group 14	0.05	12/31/16
Olive	0.05	12/31/16
Safflower, seed	0.5	12/31/16
Sorghum, forage, forage	2.0	12/31/16
Sorghum, grain, forage	2.0	12/31/16
Sorghum, grain, grain	0.2	12/31/16
Sorghum, grain, stover	2.0	12/31/16
Sunflower, seed	0.5	12/31/16
Tangerine	6.0	12/31/16

(b) *Section 18 emergency exemptions.* [Reserved]

(c) Tolerances with regional registrations. Tolerances with regional registration, as defined in §180.1(l), are established for residues of the insecticide methidathion, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only methidathion, S-[(5-methoxy-2-oxo-1,3,4-thiadiazol-3(2*H*)-yl)methyl] *O*,*O*-dimethyl phosphorodithioate, in or on the commodity.

Commodity	Parts per million	Expiration/revocation date
Kiwifruit	0.1	12/31/16
Longan	0.1	12/31/16
Starfruit	0.1	12/31/16
Sugar apple	0.2	12/31/16

(d) *Indirect or inadvertent residues.* [Reserved]

[43 FR 44845, Sept. 29, 1978]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.298, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.299 Dicrotophos; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide dicrotophos, dimethyl phosphate of 3-hydroxy-*N,N*-dimethyl-*cis*-crotonamide, in or on the following food commodities:

Commodity	Parts per million
Cotton, gin byproducts	2.0
Cotton, undelinted seed	0.2

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 52613, Sept. 10, 2008]

[↑ Back to Top](#)

### §180.300 Ethephon; tolerances for residues.

(a) *General.* Tolerances are established for residues of the plant regulator ethephon [(2-chloroethyl) phosphonic acid] in or on food commodities as follows:

Commodity	Parts per million
Apple	5.0
Apple, juice	10.0
Barley, bran	5.0
Barley, grain	2.0
Barley, straw	10.0
Blackberry	30.0
Blueberry	20.0
Cantaloupe	2.0
Cattle, fat	0.02
Cattle, kidney	1.0
Cattle, meat	0.02
Cattle, meat byproducts, except kidney	0.2
Cherry	10.0
Coffee, bean, green	0.5
Cotton, gin byproducts	180.0
Cotton, undelinted seed	6.0
Egg	0.002
Goat, fat	0.02
Goat, kidney	1.0
Goat, meat	0.02
Goat, meat byproducts, except kidney	0.2
Grape	2.0
Grape, raisin	12.0
Hazelnut	0.80
Hog, fat	0.02
Hog, kidney	1.0
Hog, meat	0.02
Hog, meat byproducts, except kidney	0.2
Horse, fat	0.02
Horse, kidney	1.0
Horse, meat	0.02
Horse, meat byproducts, except kidney	0.2
Milk	0.01
Nut, macadamia	0.5
Pepper	30.0
Pineapple	2.0
Poultry, fat	0.02
Poultry, liver	0.05
Poultry, meat	0.01
Poultry, meat byproducts, except liver	0.01

Sheep, fat	0.02
Sheep, kidney	1.0
Sheep, meat	0.02
Sheep, meat byproducts, except kidney	0.2
Sugarcane, molasses	1.5
Tomato	2.0
Walnut	0.5
Wheat, bran	5.0
Wheat, germ	5.0
Wheat, grain	2.0
Wheat, middlings	5.0
Wheat, shorts	5.0
Wheat, straw	10.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* A tolerance with regional registration, as defined in §180.1(m), of 0.1 part per million is established for residues of the plant regulator ethephon [(2-chloroethyl)phosphonic acid] in or on the food commodity sugarcane.

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33710, May 24, 2000, as amended at 72 FR 53455, Sept. 19, 2007; 75 FR 56015, Sept. 15, 2010; 80 FR 72598, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.301 Carboxin; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the fungicide carboxin (5,6-dihydro-2-methyl-1,4-oxathiin-3-carboxanilide) and its metabolites determined as aniline and expressed as parent compound, in or on food commodities as follows:

Commodity	Parts per million
Barley, grain	0.2
Barley, straw	0.2
Bean, dry, seed	0.2
Bean, succulent	0.2
Canola, seed	0.03
Cattle, fat	0.05
Cattle, meat byproducts	0.1
Cattle, meat	0.05
Corn, field, forage	0.2
Corn, field, grain	0.2
Corn, field, stover	0.2
Corn, pop, grain	0.2
Corn, pop, stover	0.2
Corn, sweet, forage	0.2
Corn, sweet, kernel plus cob with husks removed	0.2
Corn, sweet, stover	0.2
Cotton, undelinted seed	0.2
Egg	0.05
Goat, fat	0.05
Goat, meat byproducts	0.1
Goat, meat	0.05
Hog, fat	0.05
Hog, meat byproducts	0.1
Hog, meat	0.05
Horse, fat	0.05
Horse, meat byproducts	0.1
Horse, meat	0.05
Milk	0.05
Oat, forage	0.5
Oat, grain	0.2
Oat, straw	0.2
Onion, bulb	0.2
Peanut	0.2
Peanut, hay	0.2
Poultry, fat	0.1
Poultry, meat byproducts	0.1
Poultry, meat	0.1
Rice, grain	0.2

Safflower, seed	0.2
Sheep, fat	0.05
Sheep, meat byproducts	0.1
Sheep, meat	0.05
Soybean, seed	0.2
Wheat, forage	0.5
Wheat, grain	0.2
Wheat, straw	0.2

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[47 FR 55222, Dec. 8, 1982, as amended at 50 FR 81, Jan. 2, 1985; 62 FR 4915, Feb. 3, 1997; 63 FR 4586, Jan. 30, 1998; 64 FR 11801, Mar. 10, 1999; 66 FR 9773, Feb. 12, 2001; 66 FR 64773, Dec. 14, 2001; 67 FR 40218, June 12, 2002; 67 FR 72853, Dec. 9, 2002; 71 FR 56383, Sept. 27, 2006; 80 FR 72598, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.303 Oxamyl; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the insecticide oxamyl, methyl *N,N*-dimethyl-*N*-[(methylcarbamoyl)-oxy]-1-thiooxamimidate, and its oxime metabolite methyl *N,N*-dimethyl-*N*-hydroxy-1-thiooxamimidate calculated as oxamyl in or on the following food commodities:

Commodity	Parts per million
Apple	2
Banana	0.3
Cantaloupe	2.0
Carrot	0.1
Celery	10.0
Cotton, undelinted seed	0.2
Cucumber	2.0
Eggplant	2.0
Fruit, citrus, group 10	3
Garlic, bulb	0.2
Melon, honeydew	2.0
Onion, bulb	0.2
Peanut	0.05
Peanut, hay	2.0
Pear	2.0
Peppermint, tops	10.0
Pepper, bell	2.0
Pepper, nonbell	5.0
Pineapple	1
Pineapple, process residue	2.0
Pumpkin	2.0
Spearmint, tops	10.0
Squash, summer	2.0
Squash, winter	2.0
Tomato	2
Vegetable, tuberous and corm, subgroup 1C	0.1
Watermelon	2.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 54961, Sept. 24, 2008, as amended at 72598, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.304 Oryzalin; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide oryzalin, 3,5-dinitro-*N*<sub>4</sub>,*N*<sub>4</sub>-dipropylsulfanilamide, in or on the following raw agricultural commodities:

Commodity	Parts per million
Almond, hulls	0.05
Avocado	0.05
Berry group 13	0.05
Cranberry	0.05
Fig	0.05
Fruit, citrus, group 10	0.05
Fruit, pome, group 11	0.05
Fruit, stone, group 12	0.05
Grape	0.05
Kiwifruit	0.05
Nut, tree, group 14	0.05
Olive	0.05
Pistachio	0.05
Pomegranate	0.05
Strawberry	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of oryzalin, 3,5-dinitro-*N*<sub>4</sub>,*N*<sub>4</sub>-dipropylsulfanilamide, in or on the following raw agricultural commodities:

Commodity	Parts per million
Guava	0.05
Papaya	0.05

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 54434, Sept. 15, 2006, as amended at 76 FR 34885, June 15, 2011]

[↑ Back to Top](#)

#### §180.314 Triallate; tolerances for residues.

(a) *General.* Tolerances are established for residues of triallate, S-2,3,4-trichloroallyl diisopropylthiocarbamate and its metabolite 2,3,3-trichloroprop-2-enesulfonic acid (TCPSA) in or on the following food commodity:

Commodity	Parts per million
Bermudagrass, hay	0.3

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with a regional registration, as defined in 180.1(l), are established for residues of the herbicide (S-2, 3, 4-trichloroallyl diisopropylthiocarbamate) and its metabolite 2, 3, 3-trichloroprop-2-enesulfonic acid (TCPSA) in or on the following food commodities:

Commodity	Parts per million
Barley, grain	0.05
Barley, hay	1.0
Barley, straw	0.3
Beet, sugar, dried pulp	0.2
Beet, sugar, roots	0.1
Beet, sugar, tops	0.5
Pea, dry	0.2
Pea, field, hay	1.0
Pea, field, vines	0.5
Pea, succulent	0.2
Wheat, forage	0.5
Wheat, grain	0.05
Wheat, hay	1.0
Wheat, straw	1.0

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 28888, May 23, 2007, as amended at 73 FR 5109, Jan. 29, 2008; 73 FR 53738, Sept. 17, 2008; 74 FR 29963, June 24, 2009]

[↑ Back to Top](#)

#### §180.316 Pyrazon; tolerances for residues.

(a) *General.* Tolerances are established for combined residues of the herbicide pyrazon (5-amino-4-chloro-2-phenyl-3(2H)-pyridazinone) and its metabolites (calculated as pyrazon) in or on the following food commodities:

Commodity	Parts per million
Beet, garden, roots	0.9
Beet, garden, tops	7.0
Beet, sugar, molasses	1.5
Beet, sugar, roots	0.2
Beet, sugar, tops	3.0
Cattle, fat	0.10
Cattle, liver	0.15
Cattle, meat	0.10
Cattle, meat byproducts, except liver	0.10
Goat, fat	0.10
Goat, liver	0.15
Goat, meat	0.10
Goat, meat byproducts, except liver	0.10
Horse, fat	0.10
Horse, liver	0.15
Horse, meat	0.10
Horse, meat byproducts, except liver	0.10
Milk	0.02
Sheep, fat	0.10
Sheep, liver	0.15
Sheep, meat	0.10
Sheep, meat byproducts, except liver	0.10

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for combined residues of the herbicide pyrazon, 5-amino-4-chloro-2-phenyl-3(2H)-pyridazinone, and its metabolites (calculated as pyrazon), in or on the following food commodities:

Commodity	Parts per million
Corn, field, forage	0.5
Corn, field, stover	0.5
Soybean, forage	0.5
Soybean, hay	0.5
Wheat, forage	0.3
Wheat, hay	0.2
Wheat, straw	0.1

[68 FR 39441, July 1, 2003, as amended at 73 FR 52614, Sept. 10, 2008]

[↑ Back to Top](#)

### §180.317 Propyzamide; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide propyzamide, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only those propyzamide residues convertible to methyl 3,5-dichlorobenzoate, expressed as the stoichiometric equivalent of propyzamide, 3,5-dichloro-*N*-(1,1-dimethyl-2-propynyl)benzamide, in or on the commodity.

Commodity	Parts per million
Alfalfa, seed	10.0
Animal feed, nongrass, group 18	10.0
Apple	0.1
Artichoke, globe	0.01
Blackberry	0.05
Blueberry	0.05
Boysenberry	0.05
Cattle, fat	0.2
Cattle, kidney	0.4
Cattle, liver	0.4
Cattle, meat	0.02
Cattle, meat byproducts, except kidney and liver	0.02
Egg	0.02
Endive	1.0
Fruit, stone, group 12	0.1



Goat, fat	0.2
Goat, kidney	0.4
Goat, liver	0.4
Goat, meat	0.02
Goat, meat byproducts, except kidney and liver	0.02
Grape	0.1
Hog, fat	0.2
Hog, kidney	0.4
Hog, liver	0.4
Hog, meat	0.02
Hog, meat byproducts, except kidney and liver	0.02
Horse, fat	0.2
Horse, kidney	0.4
Horse, liver	0.4
Horse, meat	0.02
Horse, meat byproducts, except kidney and liver	0.02
Lettuce, head	1.0
Lettuce, leaf	1.0
Milk	0.02
Pear	0.1
Poultry, fat	0.02
Poultry, liver	0.2
Poultry, meat	0.02
Poultry, meat byproducts, except liver	0.02
Radicchio	2.0
Raspberry	0.05
Sheep, fat	0.2
Sheep, kidney	0.4
Sheep, liver	0.4
Sheep, meat	0.02
Sheep, meat byproducts, except kidney and liver	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of the herbicide propyzamide, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only those propyzamide residues convertible to methyl 3,5-dichlorobenzoate, expressed as the stoichiometric equivalent of propyzamide, 3,5-dichloro-*N*-(1,1-dimethyl-2-propynyl)benzamide, in or on the commodity.

Commodity	Parts per million
Pea, field, seed	0.05
Rhubarb	0.1

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of the herbicide propyzamide, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only those propyzamide residues convertible to methyl 3,5-dichlorobenzoate, expressed as the stoichiometric equivalent of propyzamide, 3,5-dichloro-*N*-(1,1-dimethyl-2-propynyl)benzamide, in or on the commodity.

Commodity	Parts per million
Grain, cereal, forage, group 16	0.6
Grain, cereal, hay, group 16	0.2
Grain, cereal, straw, group 16	0.3

[72 FR 52018, Sept. 12, 2007, as amended at 76 FR 23493, Apr. 27, 2011; 81 FR 1531, Jan. 13, 2016]

[↑ Back to Top](#)

#### §180.318 4-(2-Methyl-4-chlorophenoxy) butyric acid; tolerance for residues.

(a) *General.* (1) A tolerance is established for the herbicide 4-(2-methyl-4-chlorophenoxy) butyric acid in or on the following food commodity:

Commodity	Parts per million
Pea	0.1(N)

(2) Tolerances are established for the combined residues, free and conjugated, of the herbicide MCPB, 4-(4-chloro-2-methylphenoxy)butanoic acid, and its metabolite MCPA, (4-chloro-2-methylphenoxy)acetic acid, in or on the following food commodities:

Commodity	Parts per million
Peppermint, tops	0.20
Spearmint, tops	0.20

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 39441, July 1, 2003, as amended at 73 FR 66785, Nov. 12, 2008]

[↑ Back to Top](#)

### §180.319 Interim tolerances.

(a) *General.* While petitions for tolerances for negligible residues are pending and until action is completed on these petitions, interim tolerances are established for residues of the listed pesticide chemicals in or on the following raw agricultural commodities:

Substances	Uses	Tolerance in parts per million	Raw agricultural commodity	Expiration/revocation date
Endothall (7-oxabicyclo-(2,2,1)heptane 2,3-dicarboxylic acid	Herbicide	0.2	Beet, sugar	None
Methyl parathion	Herbicide	0.5	Rye	12/31/13

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 59126, Sept. 26, 2012, as amended at 79 FR 27502, May 14, 2014]

[↑ Back to Top](#)

### §180.324 Bromoxynil; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide bromoxynil, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels is to be determined by measuring only bromoxynil, 3,5-dibromo-4-hydroxybenzoxynil, resulting from application of its octanoic and/or heptanoic acid ester, in or on the commodities.

Commodity	Parts per million
Alfalfa, forage	0.1
Alfalfa, hay	0.5
Barley, grain	0.05
Barley, hay	9.0
Barley, straw	4.0
Corn, field, forage	0.3
Corn, field, grain	0.05
Corn, field, stover	0.2
Corn, pop, grain	0.05
Corn, pop, stover	0.2
Flax, seed	0.1
Garlic	0.1
Grain, aspirated fractions	1.2
Grass, forage	18
Grass, hay	5.0
Oat, forage	0.3
Oat, grain	0.05
Oat, hay	9.0
Oat, straw	4.0
Onion, bulb	0.1
Peppermint, hay	0.1
Rye, forage	1.0
Rye, grain	0.05
Rye, straw	2.0
Sorghum, grain, forage	0.8
Sorghum, grain, grain	0.2
Sorghum, grain, stover	0.2

Spearmint, hay	0.1
Wheat, forage	1.0
Wheat, grain	0.05
Wheat, hay	4.0
Wheat, straw	2.0

(2) Tolerances are established for residues of the herbicide bromoxynil, 3,5-dibromo-4-hydroxybenzotrile, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels is to be determined by measuring only bromoxynil and its metabolite, 3,5-dibromo-4-hydroxybenzoic acid (DBHA), resulting from application of its octanoic and/or heptanoic acid ester, in or on the commodities.

Commodity	Parts per million
Cattle, fat	1
Cattle, meat byproducts	3.5
Cattle, meat	0.5
Cotton, gin byproducts	7.0
Cotton, hulls	5.0
Cotton, undelinted seed	1.5
Egg	0.05
Goat, fat	1
Goat, meat byproducts	3.5
Goat, meat	0.5
Hog, fat	1
Hog, meat byproducts	3.5
Hog, meat	0.5
Horse, fat	1
Horse, meat byproducts	3.5
Horse, meat	0.5
Milk	0.4
Poultry, fat	0.05
Poultry, meat byproducts	0.3
Poultry, meat	0.05
Sheep, fat	1
Sheep, meat byproducts	3.5
Sheep, meat	0.5

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 33023, June 18, 1997, as amended at 63 FR 26480, May 13, 1998; 66 FR 47402, Sept. 12, 2001; 70 FR 7046, Feb. 10, 2005; 72 FR 35666, June 29, 2007; 72 FR 41930, Aug. 1, 2007; 76 FR 31491, June 1, 2011]

[↑ Back to Top](#)

### §180.328 Napropamide; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide napropamide, *N,N*-diethyl-2-(1-naphthalenyloxy) propionamide, in or on the following food commodities:

Commodity	Parts per million	Expiration/revocation date
Almond, hulls	0.1	None
Asparagus	0.1	None
Basil	0.1	None
Berry group 13	0.1	None
Coffee, green bean	0.1	None
Cranberry	0.1	None
Grape	0.1	None
Kiwifruit	0.1	None
Marjoram	0.1	None
Nut, tree, group 14	0.1	None
Peppermint, tops	0.1	None
Persimmon	0.1	None
Rhubarb	0.1	None
Rosemary	0.1	None
Savory, summer	0.1	None
Savory, winter	0.1	None
Spearmint, tops	0.1	None
Strawberry	0.1	None

Sweet potato, roots	0.1	None
Vegetable, brassica, leafy, group 5	0.1	None
Vegetable, fruiting, group 8	0.1	None

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 52614, Sept. 10, 2008, as amended at 76 FR 34885, June 15, 2011]

[↑ Back to Top](#)

### §180.330 S-(2-(Ethylsulfinyl)ethyl) O,O-dimethyl phosphorothioate; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues of the insecticide oxydemeton-methyl (S-(2-(ethylsulfinyl)ethyl) O,O-dimethyl phosphorothioate) and its metabolite oxydemeton-methyl sulfone in or on the following food commodities:

Commodity	Parts per million
Alfalfa, forage	5.0
Alfalfa, hay	11.0
Bean, lima	0.2
Beet, sugar, roots	0.3
Beet, sugar, tops	0.5
Broccoli	1.0
Brussels sprouts	1.0
Cabbage	2.0
Cauliflower	1.0
Clover, forage	5.0
Clover, hay	10.0
Corn, sweet, forage	1.0
Corn, sweet, kernel plus cob with husks removed	0.5
Corn, sweet, stover	3.0
Cotton, undelinted seed	0.02
Cucumber	1.0
Eggplant	1.0
Grapefruit	1.0
Hazelnut	0.05
Lemon	1.0
Lettuce, head	2.0
Melon	0.2
Onion, bulb	0.05
Orange	1.0
Pepper	0.75
Peppermint, tops	12.5
Pumpkin	0.2
Safflower, seed	1.0
Sorghum, forage, forage	2.0
Sorghum, grain, forage	2.0
Sorghum, grain, grain	0.75
Spearmint, tops	12.5
Squash, summer	1.0
Squash, winter	0.3
Strawberry	2.0
Walnut	0.05

(2) Tolerances are established for the combined residues of the insecticide oxydemeton-methyl (S-(2-(ethylsulfinyl)ethyl) O,O-dimethyl phosphorothioate) and its cholinesterase-inhibiting metabolites in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	0.01
Cattle, meat	0.01
Cattle, meat byproducts	0.01
Egg	0.01
Goat, fat	0.01
Goat, meat	0.01
Goat, meat byproducts	0.01
Hog, fat	0.01
Hog, meat	0.01

Hog, meat byproducts	0.01
Horse, fat	0.01
Horse, meat	0.01
Horse, meat byproducts	0.01
Milk	0.01
Poultry, fat	0.01
Poultry, meat	0.01
Poultry, meat byproducts	0.01
Sheep, fat	0.01
Sheep, meat	0.01
Sheep, meat byproducts	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registrations, as defined in §180.1(l), are established for the combined residues of the insecticide oxydemeton-methyl (S-(2-(ethylsulfinyl)-ethyl) O,O-dimethyl phosphorothioate) and its metabolite oxydemeton-methyl sulfone in or on the following food commodities:

Commodity	Parts per million
Broccoli raab	2.0

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 54578, Sept. 26, 2007]

[↑ Back to Top](#)

#### §180.331 4-(2,4-Dichlorophenoxy) butyric acid; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide 4-(2,4-dichlorophenoxy) butyric acid (2,4-DB), both free and conjugated, determined as the acid, in or on food commodities, as follows:

Commodity	Parts per million
Alfalfa, forage	0.7
Alfalfa, hay	2.0
Cattle, meat byproducts	0.05
Clover, forage	0.2
Clover, hay	0.2
Goat, meat byproducts	0.05
Hog, meat byproducts	0.05
Horse, meat byproducts	0.05
Peanut	0.2
Peppermint, tops	0.2
Sheep, meat byproducts	0.05
Soybean, forage	0.7
Soybean, hay	2.0
Soybean, seed	0.5
Spearmint, tops	0.2
Trefoil, forage	0.7
Trefoil, hay	2.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 54961, Sept. 24, 2008, as amended at 74 FR 46374, Sept. 9, 2009]

[↑ Back to Top](#)

#### §180.332 Metribuzin; tolerances for residues.

(a) *General.* Tolerances are established for combined residues of the herbicide metribuzin (4-amino-6-(1,1-dimethyl-ethyl)-3-(methylthio)-;1,2,4-triazin-5(4H)-one) and its triazinone metabolites in or on food commodities:

Commodity	Parts per million
Alfalfa, forage	2.0
Alfalfa, hay	7.0
Asparagus	0.1

Barley, grain	0.75
Barley, hay	7.0
Barley, pearled barley	3.0
Barley, straw	1.0
Carrot, roots	0.3
Cattle, fat	0.7
Cattle, meat	0.7
Cattle, meat byproducts	0.7
Corn, field, forage	0.1
Corn, field, grain	0.05
Corn, field, stover	0.1
Corn, pop, grain	0.05
Corn, sweet, forage	0.1
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	0.1
Egg	0.01
Goat, fat	0.7
Goat, meat	0.7
Goat, meat byproducts	0.7
Grass, forage	2.0
Grass, hay	7.0
Hog, fat	0.7
Hog, meat	0.7
Hog, meat byproducts	0.7
Horse, fat	0.7
Horse, meat	0.7
Horse, meat byproducts	0.7
Lentil	0.05
Milk	0.05
Pea, dry, seed	0.05
Pea, field, hay	4.0
Pea, field, vines	0.5
Pea, succulent	0.1
Potato	0.6
Potato, chips	3.0
Potato, processed potato waste	3.0
Poultry, fat	0.7
Poultry, meat	0.7
Poultry, meat byproducts	0.7
Sainfoin, forage	2.0
Sainfoin, hay	7.0
Sheep, fat	0.7
Sheep, meat	0.7
Sheep, meat byproducts	0.7
Soybean, seed	0.3
Soybean, forage	4.0
Soybean, hay	4.0
Sugarcane, cane	0.1
Sugarcane, molasses	2.0
Tomato	0.1
Wheat, bran	3.0
Wheat, forage	2.0
Wheat, germ	3.0
Wheat, grain	0.75
Wheat, hay	7.0
Wheat, middlings	3.0
Wheat, shorts	3.0
Wheat, straw	1.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[42 FR 62913, Dec. 14, 1977, as amended at 43 FR 41396, Sept. 18, 1978; 44 FR 26744, May 7, 1979; 44 FR 45387, Aug. 2, 1979; 52 FR 23654, June 24, 1987; 55 FR 26440, June 28, 1990; 62 FR 66024, 66025, Dec. 17, 1997; 65 FR 33698, May 24, 2000; 66 FR 63198, Dec. 5, 2001; 67 FR 49617, July 31, 2002]

[↑ Back to Top](#)

### §180.337 Oxytetracycline; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide/bactericide oxytetracycline, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only oxytetracycline, (4S,4aR,5S,5aR,6S,12aS)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamide, in or on the commodity.

Commodity	Parts per million
Apple	0.35
Fruit, citrus, group 10-10	0.01
Peach	0.35
Pear	0.35

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for residues of the fungicide/bactericide oxytetracycline, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only oxytetracycline, (4S,4aR,5S,5aR,6S,12aS)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamide, in or on the specified agricultural commodities, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. The tolerances expire on the dates specified in the table.

Commodity	Parts per million	Expiration/revocation date
Fruit, citrus, group 10-10	0.40	12/31/19

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[76 FR 23493, Apr. 27, 2011, as amended at 82 FR 13251, Mar. 10, 2017; 83 FR 62493, Dec. 4, 2018]

[↑ Back to Top](#)

### §180.339 MCPA; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide MCPA ((4-chloro-2-methylphenoxy)acetic acid), both free and conjugated, resulting from the direct application of MCPA or its sodium or dimethylamine salts, or its 2-ethylhexyl ester in or on the following food commodities:

Commodity	Parts per million
Alfalfa, forage	0.5
Alfalfa, hay	2.0
Barley, grain	1.0
Barley, hay	40
Barley, straw	25
Clover, forage	0.5
Clover, hay	2.0
Flax, seed	0.1
Grain, aspirated fractions	3.0
Grass, forage	300
Grass, hay	20
Lespedeza, forage	0.5
Lespedeza, hay	2.0
Oat, forage	20
Oat, grain	1.0
Oat, hay	115
Oat, straw	25
Pea, dry	0.1
Pea, field, hay	0.1
Pea, succulent	0.1
Pea, field, vines	0.1
Rye, forage	20
Rye, grain	1.0
Rye, straw	25
Trefoil, forage	0.5
Trefoil, hay	2.0
Vetch, forage	0.5
Vetch, hay	2.0
Wheat, forage	20
Wheat, grain	1.0
Wheat, hay	115
Wheat, straw	25

(2) Tolerances are established for residues of the herbicide MCPA ((4-chloro-2-methylphenoxy)acetic acid) resulting from the direct application of MCPA or its sodium or dimethylamine salts, or its 2-ethylhexyl ester in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	0.1
Cattle, meat	0.1
Cattle, meat byproducts	0.1
Goat, fat	0.1
Goat, meat	0.1
Goat, meat byproducts	0.1
Hog, fat	0.1
Hog, meat	0.1
Hog, meat byproducts	0.1
Horse, fat	0.1
Horse, meat	0.1
Horse, meat byproducts	0.1
Milk	0.1
Sheep, fat	0.1
Sheep meat	0.1
Sheep meat byproducts	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 28888, May 23, 2007, as amended at 73 FR 5109, Jan. 29, 2008]

[↑ Back to Top](#)

#### §180.341 2,4-Dinitro-6-octylphenyl crotonate and 2,6-dinitro-4-octylphenyl crotonate; tolerances for residues.

(a) *General.* Tolerances are established for combined negligible residues of a fungicide and insecticide that is a mixture of 2,4-dinitro-6-octylphenyl crotonate and 2,6-dinitro-4-octylphenyl crotonate in or on raw agricultural commodities as follows:

Commodity	Parts per million
Apple <sup>1</sup>	0.1
Grape <sup>1</sup>	0.1

<sup>1</sup>There are no U.S. registrations on apple and grape as of October 24, 2002.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[40 FR 29715, July 15, 1975, as amended at 63 FR 57076, Oct. 26, 1998; 69 FR 43924, July 23, 2004]

[↑ Back to Top](#)

#### §180.342 Chlorpyrifos; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the pesticide chlorpyrifos *per se* (O,O-diethyl-O-(3,5,6-trichloro-2-pyridyl) phosphorothioate) in or on the following food commodities:

Commodity	Parts per million
Alfalfa, forage	3.0
Alfalfa, hay	13
Almond	0.2
Almond, hulls	12
Apple	0.01
Apple, wet pomace	0.02
Banana	0.1
Beet, sugar, dried pulp	5.0
Beet, sugar, molasses	15
Beet, sugar, roots	1.0
Beet, sugar, tops	8.0



Cattle, fat	0.3
Cattle, meat	0.05
Cattle, meat byproducts	0.05
Cherry, sweet	1.0
Cherry, tart	1.0
Citrus, dried pulp	5.0
Citrus, oil	20
Corn, field, forage	8.0
Corn, field, grain	0.05
Corn, field, refined oil	0.25
Corn, field, stover	8.0
Corn, sweet, forage	8.0
Corn, sweet, kernel plus cob with husk removed	0.05
Corn, sweet, stover	8.0
Cotton, undelinted seed	0.2
Cranberry	1.0
Cucumber	0.05
Egg	0.01
Fig	0.01
Fruit, citrus, group 10	1.0
Goat, fat	0.2
Goat, meat	0.05
Goat, meat byproducts	0.05
Hazelnut	0.2
Hog, fat	0.2
Hog, meat	0.05
Hog, meat byproducts	0.05
Horse, fat	0.25
Horse, meat	0.25
Horse, meat byproducts	0.25
Kiwifruit	2.0
Milk, fat (Reflecting 0.01 ppm in whole milk)	0.25
Nectarine	0.05
Onion, bulb	0.5
Peach	0.05
Peanut	0.2
Peanut, refined oil	0.2
Pear	0.05
Pecan	0.2
Pepper	1.0
Peppermint, tops	0.8
Peppermint, oil	8.0
Plum, prune, fresh	0.05
Poultry, fat	0.1
Poultry, meat	0.1
Poultry, meat byproducts	0.1
Pumpkin	0.05
Radish	2.0
Rutabaga	0.5
Sheep, fat	0.2
Sheep, meat	0.05
Sheep, meat byproducts	0.05
Spearmint, tops	0.8
Spearmint, oil	8.0
Sorghum, grain, forage	0.5
Sorghum, grain, grain	0.5
Sorghum, grain, stover	2.0
Soybean, seed	0.3
Strawberry	0.2
Sunflower, seed	0.1
Sweet potato, roots	0.05
Turnip, roots	1.0
Turnip, tops	0.3
Vegetable, brassica, leafy, group 5	1.0
Vegetable, legume, group 6. except soybean	0.05
Walnut	0.2
Wheat, forage	3.0
Wheat, grain	0.5
Wheat, straw	6.0

(2) Chlorpyrifos [O,O-diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate] may be safely used in accordance with the following prescribed conditions.

(i) Application shall be limited solely to spot and/or crack and crevice treatment in food handling establishments where food and food products are held, processed, prepared or served. Contamination of food or food contact surfaces shall be avoided. Food must be removed or covered during treatment.

(ii) Spray concentration for spot treatment shall be limited to a maximum of 0.5 percent of the active ingredient by weight. A course, low-pressure spray shall be used to avoid atomization or splashing of the spray.

(iii) Paint-on application for spot treatment shall be limited to a maximum of 2 percent of the active ingredient by weight.

(iv) Crack and crevice treatment shall be limited to a maximum of 2 percent of the active ingredient by weight. Equipment capable of delivering a pin-stream of insecticide shall be used.

(v) Application via adhesive strips shall contain a maximum of 10% by weight of the controlled-release product in food-handling establishments where food and food products are held, processed, prepared, or served. A maximum of 36 strips (or 5.15 grams of chlorpyrifos) is to be used per 100 square feet of floor space. The strips are not to be placed in exposed areas where direct contact with food, utensils, and food-contact surfaces would be likely to occur.

(vi) To assure safe use of the insecticide, its label and labeling shall conform to that registered by the U.S. Environmental Protection Agency, and it shall be used in accordance with such label and labeling.

(3) A tolerance of 0.1 part per million is established for residues of chlorpyrifos, *per se*, in or on food commodities (other than those already covered by a higher tolerance as a result of use on growing crops) in food service establishments where food and food products are prepared and served, as a result of the application of chlorpyrifos in microencapsulated form.

(i) Application of a microencapsulated product shall be limited solely to spot and/or crack and crevice treatment in food handling establishments where food and food products are prepared and served. All treatments shall be applied in such a manner as to avoid contamination of food or food contact surfaces.

(ii) Spray concentrations shall be limited to a maximum of 0.5 percent of the active ingredient by weight.

(iii) For crack and crevice treatment, equipment capable of delivering a pin stream of spray directly into cracks and crevices or capable of applying small amounts of insecticide into cracks and crevices shall be used.

(iv) For spot treatment, an individual spot shall not exceed 2 square feet.

(v) To assure safe use of the insecticide, its label and labeling shall conform to that registered by the U.S. Environmental Protection Agency, and it shall be used in accordance with such label and labeling.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in 180.1(l), are established for residues of the pesticide chlorpyrifos *per se* (O,O-diethyl- O-(3,5,6-trichloro-2-pyridyl) phosphorothioate) in or on the following food commodities:

Commodity	Parts per million
Asparagus	5.0
Grape	0.01

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33711, May 24, 2000, as amended at 67 FR 49617, July 31, 2002; 71 FR 74817, Dec. 13, 2006; 73 FR 53739, Sept. 17, 2008; 76 FR 56656, Sept. 14, 2011]

[↑ Back to Top](#)

#### §180.345 Ethofumesate; tolerances for residues.

(a) *General.* Tolerance are established for residues of the herbicide ethofumesate, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of ethofumesate, 2-ethoxy-2,3-dihydro-3,3-dimethyl-5-benzofuranyl methanesulfonate, and its metabolites 2-hydroxy-2,3-dihydro-3,3-dimethyl-5-benzofuranyl methanesulfonate, and 2,3-dihydro-3,3-dimethyl-2-oxo-5-benzofuranylmethanesulfonate, calculated as the stoichiometric equivalent of ethofumesate, in or on the following food commodities.

Commodity	Parts per million
Beet, garden, roots	0.5
Beet, garden, tops	5.0

Beet, sugar, molasses	2.0
Beet, sugar, roots	1.5
Beet, sugar, tops	4.0
Cattle, fat	0.05
Cattle, meat	0.05
Cattle, meat byproducts	0.05
Garlic	0.25
Goat, fat	0.05
Goat, meat	0.05
Goat, meat byproducts	0.05
Grass, straw	1.0
Horse, fat	0.05
Horse, meat	0.05
Horse, meat byproducts	0.05
Onion, bulb	0.25
Shallot, bulb	0.25
Shallot, fresh leaves	0.25
Sheep, fat	0.05
Sheep, meat	0.05
Sheep, meat byproducts	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with a regional registration, as defined in §180.1(l) are established for residues of the herbicide ethofumesate, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified is to be determined by measuring only the sum of ethofumesate, 2-ethoxy-2,3-dihydro-3,3-dimethyl-5-benzofuranyl methanesulfonate, and its metabolites 2-hydroxy-2,3-dihydro-3,3-dimethyl-5-benzofuranyl methanesulfonate, and 2,3-dihydro-3,3-dimethyl-2-oxo-5-benzofuranylmethanesulfonate, calculated as the stoichiometric equivalent of ethofumesate, in or on the raw agricultural commodities.

Commodity	Parts per million
Carrot, roots	7.0

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 34828, June 26, 1998, as amended at 71 FR 51516, Aug. 30, 2006; 72 FR 52019, Sept. 12, 2007; 82 FR 57158, Dec. 4, 2017]

[↑ Back to Top](#)

#### §180.349 Fenamiphos; tolerances for residues.

(a) *General.* Tolerances are established for residues of the nematicide/insecticide fenamiphos, ethyl 3-methyl-4-(methylthio)phenyl 1-(methylethyl)phosphoramidate, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of fenamiphos, ethyl 3-methyl-4-(methylthio)phenyl 1-(methylethyl)phosphoramidate, and its cholinesterase inhibiting metabolites ethyl 3-methyl-4-(methylsulfinyl)phenyl 1-(methylethyl)phosphoramidate and ethyl 3-methyl-4-(methylsulfonyl)phenyl 1-(methylethyl)phosphoramidate, calculated as the stoichiometric equivalent of fenamiphos, in or on the commodity.

Commodity	Parts per million
Banana <sup>1</sup>	0.1
Grape <sup>1</sup>	0.1
Grape, raisin <sup>1</sup>	0.3
Pineapple <sup>1</sup>	0.3

<sup>1</sup>There are no U.S. registrations as of May 31, 2007.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33712, May 24, 2000, as amended at 73 FR 53739, Sept. 17, 2008; 75 FR 60243, Sept. 29, 2010]

[↑ Back to Top](#)

#### §180.350 Nitrapyrin; tolerances for residues.

(a) *General.* Tolerances are established for residues of the nitrification inhibitor nitrapyrin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of nitrapyrin (2-chloro-6-(trichloromethyl) pyridine) and its 6-CPA metabolite (6-chloro-picolinic acid), calculated as the stoichiometric equivalent of nitrapyrin, in or on the commodity:

Commodity	Parts per million
Almond, hulls	0.06
Corn, field, forage	1.0
Corn, field, grain	0.1
Corn, field, milled byproducts	0.2
Corn, field, stover	1.0
Corn, pop, grain	0.1
Corn, pop, stover	1.0
Corn, sweet, forage	1.0
Corn, sweet, kernel plus cob with husks removed	0.1
Corn, sweet, stover	1.0
Fruit, citrus, group 10-10	0.06
Fruit, citrus, group 10-10, dried pulp	0.5
Fruit, citrus, group 10-10, oil	2
Leaf petiole vegetable subgroup 22B	0.5
Nut, tree, group 14-12	0.02
Sorghum, forage, forage	0.5
Sorghum, grain, forage	0.5
Sorghum, grain, grain	0.1
Sorghum, grain, stover	0.5
Vegetable, <i>Brassica</i> , head and stem, group 5-16	0.1
Vegetable, bulb, group 3-07	0.3
Vegetable, leafy, group 4-16	0.4
Wheat, bran	3.0
Wheat, forage	2.0
Wheat, grain	0.5
Wheat, milled byproducts, except flour	2.0
Wheat, straw	6.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[46 FR 58315, Dec. 1, 1981, as amended at 47 FR 22957, May 26, 1982; 52 FR 33238, Sept. 2, 1987; 58 FR 32304, June 9, 1993; 63 FR 57076, Oct. 26, 1998; 72 FR 53461, Sept. 19, 2007; 82 FR 56744, Nov. 30, 2017; 84 FR 44712, Aug. 27, 2019]

[↑ Back to Top](#)

### §180.352 Terbufos; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the insecticide terbufos (phosphorodithioic acid, *S*-(*t*-butylthio)methyl *O,O*-diethyl ester) and its phosphorylated (cholinesterase-inhibiting) metabolites (phosphorothioic acid, *S*-(*t*-butylthio)methyl *O,O*-diethyl ester; phosphorothioic acid, *S*-(*t*-butylsulfonyl)methyl *O,O*-diethyl ester; phosphorothioic acid, *S*-(*t*-butylsulfonyl)methyl *O,O*-diethyl ester; phosphorodithioic acid, *S*-(*t*-butylsulfonyl)methyl *O,O*-diethyl ester; and phosphorodithioic acid, *S*-(*t*-butylsulfonyl)methyl *O,O*-diethyl ester) in or on food commodities:

Commodity	Parts per million
Banana	0.025
Beet, sugar, roots	0.05
Beet, sugar, tops	0.1
Coffee, green bean <sup>1</sup>	0.05
Corn, field, forage	0.5
Corn, field, grain	0.5
Corn, field, stover	0.5
Corn, pop, grain	0.5
Corn, pop, stover	0.5
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, forage	0.5
Corn, sweet, stover	0.5
Sorghum, grain, forage	0.5
Sorghum, grain, grain	0.05
Sorghum, grain, stover	0.5

<sup>1</sup> There are no U. S. registrations as of August 2, 1995, for the use of terbufos on the growing crop, coffee.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 53740, Sept. 17, 2008]

[↑ Back to Top](#)

### §180.353 Desmedipham; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide desmedipham, (ethyl-*m*-hydroxycarbanilate carbanilate) in or on the following raw agricultural commodities in the table that follows:

Commodity	Parts per million
Beet, garden, roots	0.05
Beet, garden, tops	1.0
Beet, sugar, roots	0.1
Beet, sugar, tops	5.0
Spinach	6.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[40 FR 4658, Jan. 31, 1975, as amended at 62 FR 45747, Aug. 29, 1997; 63 FR 49472, Sept. 16, 1998; 64 FR 46292, Aug. 25, 1999; 65 FR 82293, Dec. 28, 2000; 66 FR 64773, Dec. 14, 2001; 68 FR 37764, June 25, 2003; 69 FR 71717, Dec. 10, 2004; 72 FR 53449, Sept. 19, 2007; 73 FR 53740, Sept. 17, 2008]

[↑ Back to Top](#)

### §180.355 Bentazon; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of bentazon, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring for only the sum of bentazon (3-(1-methylethyl)-1*H*-2,1,3-benzothiadiazin-4(3*H*)-one 2,2-dioxide), 6-hydroxy-3-isopropyl-1*H*-2,1,3-benzothiadiazin-4(3*H*)-one 2,2-dioxide, and 8-hydroxy-3-isopropyl-1*H*-2,1,3-benzothiadiazin-4(3*H*)-one 2,2-dioxide calculated as the stoichiometric equivalent of bentazon.

Commodity	Parts per million
Bean, dry, seed	0.05
Bean, succulent	0.5
Corn, field, forage	3.0
Corn, field, grain	0.05
Corn, field, stover	3.0
Corn, pop, grain	0.05
Corn, sweet, kernel plus cob with husks removed	0.05
Cowpea, forage	10.0
Cowpea, hay	3.0
Flax, seed	1.0
Pea, dry, seed	3
Pea, field, hay	8.0
Pea, field, vines	3.0
Pea, succulent	3.0
Peanut	0.05
Peanut, hay	3.0
Pepper, nonbell	0.05
Peppermint, tops	1.0
Rice, grain	0.05
Rice, hulls	0.25
Sorghum, forage	0.20
Sorghum, grain, grain	0.05
Sorghum, grain, stover	0.05
Soybean, forage	8.0
Soybean, hay	8.0

Soybean, seed	0.05
Spearmint, tops	1.0

(2) Tolerances are established for the combined residues of the herbicide bentazon (3-isopropyl-1*H*-2,1,3-benzothiadiazin-4(3*H*)-one-2,2-dioxide) and its metabolite 2-amino-*N*-isopropyl benzamide (AIBA) in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	0.05
Cattle, meat byproducts	0.05
Cattle, meat	0.05
Egg	0.05
Goat, fat	0.05
Goat, meat byproducts	0.05
Goat, meat	0.05
Hog, fat	0.05
Hog, meat byproducts	0.05
Hog, meat	0.05
Milk	0.02
Poultry, fat	0.05
Poultry, meat byproducts	0.05
Poultry, meat	0.05
Sheep, fat	0.05
Sheep, meat byproducts	0.05
Sheep, meat	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration as defined in §180.1(m), are established for combined residues of the herbicide, bentazon (3-isopropyl-1*H*-2, 1,3-benzothiadiazin-4(3*H*)-one-2,2-dioxide) and its 6- and 8-hydroxy metabolites in or on the following food commodities:

Commodity	Parts per million
Clover, forage	1.0
Clover, hay	2.0

(d) *Indirect or inadvertent residues.* [Reserved]

[42 FR 26979, May 26, 1977]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.355, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.356 Norflurazon; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the herbicide norflurazon (4-chloro-5-(methylamino)-2-(alpha, alpha, alpha-trifluoro-*m*-tolyl)-3-(2*H*)-pyridazinone) and its desmethyl metabolite 4-chloro-5-(amino)-2-alpha, alpha, alpha-trifluoro-*m*-tolyl)-3(2*H*)-pyridazinone in or on the following raw agricultural commodities:

Commodity	Parts per million
Alfalfa, forage	3.0
Alfalfa, hay	5.0
Alfalfa, seed	0.1
Almond, hulls	1.0
Almond	0.1
Apple	0.1
Apricot	0.1
Asparagus	0.05
Avocado	0.20
Blackberry	0.1
Blueberry	0.2
Cattle, fat	0.1
Cattle, liver	0.50
Cattle, meat	0.1
Cattle, meat byproducts, except liver	0.1
Cherry	0.1
Citrus, dried pulp	0.4
Citrus, molasses	1.0
Cotton, undelinted seed	0.1
Cranberry	0.1

Fruit, citrus	0.2
Goat, fat	0.1
Goat, liver	0.50
Goat, meat	0.1
Goat, meat byproducts, except liver	0.1
Grape	0.1
Hazelnut	0.1
Hog, fat	0.1
Hog, liver	0.50
Hog, meat	0.1
Hog, meat byproducts, except liver	0.1
Hop, dried cones	3.0
Hop, vines	1.0
Horse, fat	0.1
Horse, liver	0.50
Horse, meat	0.1
Horse, meat byproducts, except liver	0.1
Milk	0.1
Nectarine	0.1
Peach	0.1
Peanut	0.05
Peanut, hay	5.50
Peanut, hay	1.5
Pear	0.1
Pecan	0.1
Plum, prune, fresh	0.1
Poultry, fat	0.1
Poultry, meat	0.1
Poultry, meat byproducts	0.1
Raspberry	0.2
Sheep, fat	0.1
Sheep, liver	0.50
Sheep, meat	0.1
Sheep, meat byproducts, except liver	0.1
Soybean	0.1
Soybean, forage	1.0
Soybean, hay	1.0
Walnut	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registration.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[47 FR 14909, Apr. 7, 1982]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.356, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.360 Asulam; tolerance for residues.

(a) *General.* Tolerances are established for the combined residues of asulam (methyl sulfanilylcarbamate) and its sulfanilamide containing metabolites in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	0.05
Cattle, meat	0.05
Cattle, meat byproducts	0.2
Goat, fat	0.05
Goat, meat	0.05
Goat, meat byproducts	0.2
Hog, fat	0.05
Hog, meat	0.05
Hog, meat byproducts	0.2
Horse, fat	0.05
Horse, meat	0.05
Horse, meat byproducts	0.2
Milk	0.05
Sheep, fat	0.05

Sheep, meat	0.05
Sheep, meat byproducts	0.2
Sugarcane, cane	1.0
Sugarcane, molasses	30

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 39441, July 1, 2003, as amended at 72 FR 37654, July 11, 2007]

[↑ Back to Top](#)

### §180.361 Pendimethalin; tolerances for residues.

(a)(1) *General.* Tolerances are established for residues of the herbicide pendimethalin, including its metabolites and degradates, in or on the commodities. Compliance with the tolerance levels specified in the following table below is to be determined by measuring only the sum of pendimethalin, [*N*-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine] and its metabolite, 4-[(1-ethylpropyl)amino]-2-methyl-3,5-dinitrobenzyl alcohol, calculated as the stoichiometric equivalent of pendimethalin, in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	80
Alfalfa, hay	150
Alfalfa, seed	0.10
Almond, hulls	6.0
Apple, wet pomace	0.20
Artichoke, globe	0.1
Asparagus	0.15
Beans	0.10
Beans, forage	0.10
Beans, hay	0.10
Berry, low growing subgroup 13-07G	0.1
Brassica head and stem, subgroup 5-A	0.1
Brassica, leafy greens, subgroup 5B	0.20
Bushberry subgroup 13-07B	0.10
Caneberry subgroup 13-07A	0.10
Carrot	0.5
Citrus, oil	0.5
Corn, field, forage	0.1
Corn, field, grain	0.1
Corn, field, stover	0.1
Corn, pop, grain	0.1
Corn, sweet, forage	0.1
Corn, sweet, kernel plus cob with husks removed	0.1
Corn, sweet, stover	0.1
Cotton, gin byproducts	3.0
Cotton, undelinted seed	0.1
Crayfish	0.05
Fruit, citrus, group 10-10	0.1
Fruit, pome, group 11-10	0.1
Fruit, small vine climbing, except grape, subgroup 13-07E	0.10
Fruit, stone, group 12-12	0.1
Grape	0.1
Grass, forage, fodder, and hay crop group 17, forage	1,000
Grass, forage, fodder, and hay crop group 17, hay	2,000
Hop, dried cones	0.1
Lettuce, leaf	4.0
Melon subgroup 9A	0.10
Nut, tree, group 14-12	0.10
Olive	0.1
Onion, bulb subgroup 3-07A	0.1
Onion, green subgroup 3-07B	0.2
Peanut	0.1
Peanut, hay	0.1
Peas (except field peas)	0.10
Peppermint, oil	1.0
Peppermint, tops	0.2
Pomegranate	0.10



Potato	0.1
Rice, grain	0.1
Sorghum, forage	0.1
Sorghum, grain, grain	0.1
Sorghum, grain, stover	0.1
Soybean, forage	0.1
Soybean, hay	0.1
Soybean, seed	0.1
Spearmint, oil	1.0
Spearmint, tops	0.2
Sugarcane, cane	0.1
Sunflower subgroup 20B	0.1
Turnip greens	0.20
Vegetable, fruiting, group 8-10	0.1
Vegetable, soybean, succulent	0.10
Wheat, grain	0.10
Wheat, forage	3.0
Wheat, hay	0.60
Wheat, straw	0.30

(2) Tolerances are established for residues of the herbicide pendimethalin, including its metabolites and degradates, in or on commodities listed in the following table. Compliance with the tolerance levels is to be determined by measuring only the sum of pendimethalin (*N*-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine) and its metabolite, 1-(1-ethylpropyl)-5, 6-dimethyl-7-nitro-1*H*-benzimidazole (metabolite 6), calculated as the stoichiometric equivalent of pendimethalin, in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.30
Cattle, meat	0.10
Cattle, meat byproduct	3.0
Goats, fat	0.30
Goats, meat	0.10
Goats, meat byproduct	3.0
Horse, fat	0.30
Horse, meat	0.10
Horse, byproduct	3.0
Milk	0.04
Sheep, fat	0.30
Sheep, meat	0.10
Sheep, meat byproduct	3.0

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for combined residues of the herbicide pendimethalin, [*N*-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine], and its metabolite 4-[(1-ethylpropyl)amino]-2-methyl-3,5-dinitrobenzyl alcohol, in or on the specified agricultural commodities, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. The tolerances expire and are revoked on the date specified in the table.

Commodity	Parts per million	Expiration/revocation date
Bermuda grass, forage	25	12/31/10
Bermuda grass, hay	60	12/31/10

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[49 FR 15293, Apr. 18, 1984]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.361, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

## §180.362 Fenbutatin-oxide; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the miticide/acaricide fenbutatin-oxide, including its metabolites and degradates, in or on the plant commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only fenbutatin-oxide, hexakis (2-methyl-2-phenylpropyl) distannoxane, in or on the commodity.

Commodity	Parts per million
Almond, hulls	80.0
Apple	15.0
Apple, wet pomace	100.0
Cherry, sweet	6.0
Cherry, tart	6.0
Citrus, dried pulp	100.0
Citrus, oil	140.0
Cucumber	4.0
Eggplant	6.0
Fruit, citrus, group 10	20.0
Grape	5.0
Grape, raisin	20.0
Nut, tree, group 14	0.5
Papaya	2.0
Peach	10.0
Pear	15.0
Pistachio	0.5
Plum, prune, fresh	4.0
Plum, prune, dried	20.0
Strawberry	10.0

(2) Tolerances are established for residues of the miticide/acaricide fenbutatin-oxide, including its metabolites and degradates, in or on the animal commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of fenbutatin-oxide, hexakis (2-methyl-2-phenylpropyl) distannoxane, and its organotin metabolites, dihydroxybis(2-methyl-2-phenylpropyl) stannane and 2-methyl-2-phenylpropylstannic acid, calculated as the stoichiometric equivalent of fenbutatin-oxide, in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.5
Cattle, meat	0.5
Cattle, meat byproducts	0.5
Egg	0.1
Goat, fat	0.5
Goat, meat	0.5
Goat, meat byproducts	0.5
Hog, fat	0.5
Hog, meat	0.5
Hog, meat byproducts	0.5
Horse, fat	0.5
Horse, meat	0.5
Horse, meat byproducts	0.5
Milk, fat	0.1
Poultry, fat	0.1
Poultry, meat	0.1
Poultry, meat byproducts	0.1
Sheep, fat	0.5
Sheep, meat	0.5
Sheep, meat byproducts	0.5

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* A tolerance with regional registration, as defined in §180.1(l), is established for residues of the miticide/acaricide fenbutatin-oxide, including its metabolites and degradates, in or on the plant commodity in the table in this paragraph. Compliance with the tolerance level specified in this paragraph is to be determined by measuring only fenbutatin-oxide, hexakis (2-methyl-2-phenylpropyl) distannoxane, in or on the commodity.

Commodity	Parts per million
Raspberry	10.0

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33713, May 24, 2000, as amended at 72 FR 41930, Aug. 1, 2007; 73 FR 5109, Jan. 29, 2008; 76 FR 23494, Apr. 27, 2011]

[↑ Back to Top](#)

#### §180.364 Glyphosate; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of glyphosate, including its metabolites and degradates, in or on the commodities listed below resulting from the application of glyphosate, the isopropylamine salt of glyphosate, the

ethanolamine salt of glyphosate, the dimethylamine salt of glyphosate, the ammonium salt of glyphosate, and the potassium salt of glyphosate. Compliance with the following tolerance levels is to be determined by measuring only glyphosate (*N*-(phosphonomethyl)glycine).

Commodity	Parts per million
Acerola	0.2
Alfalfa, seed	0.5
Almond, hulls	25
Aloe vera	0.5
Ambarella	0.2
Animal feed, nongrass, group 18	400
Artichoke, globe	0.2
Asparagus	0.5
Atemoya	0.2
Avocado	0.2
Bamboo, shoots	0.2
Banana	0.2
Barley, bran	30
Beet, sugar, dried pulp	25
Beet, sugar, roots	10
Beet, sugar, tops	10
Berry and small fruit, group 13-07	0.20
Betelnut	1.0
Biriba	0.2
Blimbe	0.2
Breadfruit	0.2
Cacao bean, bean	0.2
Cactus, fruit	0.5
Cactus, pads	0.5
Canistel	0.2
Carrot	5.0
Chaya	1.0
Cherimoya	0.2
Citrus, dried pulp	1.5
Coconut	0.1
Coffee, bean, green	1.0
Corn, pop, grain	0.1
Corn, sweet, kernel plus cob with husk removed	3.5
Cotton, gin byproducts	210
Custard apple	0.2
Date, dried fruit	0.2
Dokudami	2.0
Durian	0.2
Epazote	1.3
Feijoa	0.2
Fig	0.2
Fish	0.25
Fruit, citrus, group 10-10	0.50
Fruit, pome, group 11-10	0.20
Fruit, stone, group 12	0.2
Galangal, roots	0.2
Ginger, white, flower	0.2
Gourd, buffalo, seed	0.1
Governor's plum	0.2
Gow kee, leaves	0.2
Grain, cereal, forage, fodder and straw, group 16, except field corn, forage and field corn, stover	100
Grain, cereal, group 15 except field corn, popcorn, rice, sweet corn, and wild rice	30
Grass, forage, fodder and hay, group 17	300
Guava	0.2
Herbs subgroup 19A	0.2
Hop, dried cones	7.0
Ilama	0.2
Imbe	0.2
Imbu	0.2
Jaboticaba	0.2
Jackfruit	0.2
Kava, roots	0.2
Kenaf, forage	200
Leucaena, forage	200
Longan	0.2
Lychee	0.2
Mamey apple	0.2

Mango	0.2
Mangosteen	0.2
Marmaladebox	0.2
Mioga, flower	0.2
Noni	0.20
Nut, pine	1.0
Nut, tree, group 14	1.0
Oilseeds, group 20, except canola	40
Okra	0.5
Olive	0.2
Oregano, Mexican, leaves	2.0
Palm heart	0.2
Palm heart, leaves	0.2
Palm, oil	0.1
Papaya	0.2
Papaya, mountain	0.2
Passionfruit	0.2
Pawpaw	0.2
Pea, dry	8.0
Peanut	0.1
Peanut, hay	0.5
Pepper leaf, fresh leaves	0.2
Peppermint, tops	200
Perilla, tops	1.8
Persimmon	0.2
Pineapple	0.1
Pistachio	1.0
Pomegranate	0.2
Pulasan	0.2
Quinoa, grain	5.0
Rambutan	0.2
Rice, grain	0.1
Rice, wild, grain	0.1
Rose apple	0.2
Sapodilla	0.2
Sapote, black	0.2
Sapote, mamey	0.2
Sapote, white	0.2
Shellfish	3.0
Soursop	0.2
Spanish lime	0.2
Spearmint, tops	200
Spice subgroup 19B	7.0
Star apple	0.2
Starfruit	0.2
Stevia, dried leaves	1.0
Sugar apple	0.2
Sugarcane, cane	2.0
Sugarcane, molasses	30
Surinam cherry	0.2
Sweet potato	3.0
Tamarind	0.2
Tea, dried	1.0
Tea, instant	7.0
Teff, forage	100
Teff, grain	5.0
Teff, hay	100
Ti, leaves	0.2
Ti, roots	0.2
Ugli fruit	0.5
Vegetable, bulb, group 3-07	0.20
Vegetable, cucurbit, group 9	0.5
Vegetable, foliage of legume, subgroup 7A, except soybean	0.2
Vegetable, fruiting, group 8-10 (except okra)	0.10
Vegetable, leafy, brassica, group 5	0.2
Vegetable, leafy, except brassica, group 4	0.2
Vegetable, leaves of root and tuber, group 2, except sugar beet tops	0.2
Vegetable, legume, group 6 except soybean and dry pea	5.0
Vegetables, root and tuber, group 1, except carrot, sweet potato, and sugar beet	0.20
Wasabi, roots	0.2
Water spinach, tops	0.2
Watercress, upland	0.2
Wax jambu	0.2

(2) Tolerances are established for residues of glyphosate, including its metabolites and degradates, in or on the commodities listed below resulting from the application of glyphosate, the isopropylamine salt of glyphosate, the ethanolamine salt of glyphosate, the dimethylamine salt of glyphosate, the ammonium salt of glyphosate, and the potassium salt of glyphosate. Compliance with the following tolerance levels is to be determined by measuring only glyphosate (*N*-(phosphonomethyl)glycine) and its metabolite *N*-acetyl-glyphosate (*N*-acetyl-*N*-(phosphonomethyl)glycine; calculated as the stoichiometric equivalent of glyphosate).

Commodity	Parts per Million
Canola, seed	20
Cattle, meat byproducts	5.0
Corn, field, forage	13
Corn, field, grain	5.0
Corn, field, stover	100
Egg	0.05
Goat, meat byproducts	5.0
Grain aspirated fractions	310.0
Hog, meat byproducts	5.0
Horse, meat byproducts	5.0
Poultry, meat	0.10
Poultry, meat byproducts	1.0
Sheep, meat byproducts	5.0
Soybean, forage	100.0
Soybean, hay	200.0
Soybean, hulls	120.0
Soybean, seed	20.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[45 FR 64911, Oct. 1, 1980]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.364, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.367 *n*-Octyl bicycloheptenedicarboximide; tolerances for residues.

(a) *General.* A tolerance of 5 parts per million is established for residues of the insecticide synergist *N*-octyl bicycloheptene dicarboximide, including its metabolites and degradates, in or on all food items in food handling establishments where food and food products are held, processed, prepared and/or served, provided that the food is removed or covered prior to such use, except for bagged food in warehouse storage which need not be removed or covered prior to applications of formulations containing *N*-octyl bicycloheptene dicarboximide. Compliance with the tolerance level specified in this paragraph is to be determined by measuring only *N*-octyl bicycloheptene dicarboximide, in or on the commodity.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33713, May 24, 2000, as amended at 75 FR 60243, Sept. 29, 2010]

[↑ Back to Top](#)

### §180.368 Metolachlor; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues (free and bound) of the herbicide metolachlor, 2-chloro-*N*-(2-ethyl-6-methylphenyl)-*N*-(2-methoxy-1-methylethyl)acetamide, and its metabolites, determined as the derivatives, 2-[(2-ethyl-6-methylphenyl)amino]-1-propanol and 4-(2-ethyl-6-methylphenyl)-2-hydroxy-5-methyl-3-morpholinone, each expressed as the parent compound in the following raw agricultural commodities:

Commodity	Parts per million
Almond, hulls	0.30

Animal feed, nongrass, group 18	1.0
Cattle, fat	0.02
Cattle, kidney	0.20
Cattle, liver	0.05
Cattle, meat	0.02
Cattle, meat byproducts, except kidney and liver	0.04
Corn, field, forage	6.0
Corn, field, grain	0.10
Corn, field, stover	6.0
Corn, pop, grain	0.10
Corn, pop, stover	6.0
Corn, sweet, forage	6.0
Corn, sweet, kernel plus cob with husks removed	0.10
Corn, sweet, stover	6.0
Cotton, gin byproducts	4.0
Cotton, undelinted seed	0.10
Dillweed	0.50
Egg	0.02
Goat, fat	0.02
Goat, kidney	0.20
Goat, liver	0.05
Goat, meat	0.02
Goat, meat byproducts, except kidney and liver	0.04
Grass, forage	10
Grass, hay	0.20
Horse, fat	0.02
Horse, kidney	0.20
Horse, liver	0.05
Horse, meat	0.02
Horse, meat byproducts, except kidney and liver	0.04
Milk	0.02
Nut, tree, group 14	0.10
Okra	0.50
Peanut	0.20
Peanut, hay	20
Peanut, meal	0.40
Potato	0.20
Poultry, fat	0.02
Poultry, meat	0.02
Poultry, meat byproducts	0.05
Safflower, seed	0.10
Sheep, fat	0.02
Sheep, kidney	0.20
Sheep, liver	0.05
Sheep, meat	0.02
Sheep, meat byproducts, except kidney and liver	0.04
Sorghum, grain, forage	1.0
Sorghum, grain, grain	0.30
Sorghum, grain, stover	4.0
Soybean, forage	5.0
Soybean, hay	8.0
Soybean, seed	0.20
Tomato	0.10
Vegetable, foliage of legume, subgroup 7A, except soybean	15.0
Vegetable, legume, group 6	0.30

(2) Tolerances are established for residues of S-metolachlor, including its metabolites and degradates, in or on the commodity(s), as defined. Compliance with the tolerance levels specified in the following table below is to be determined by measuring only the sum of free and bound S-metolachlor, S-2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl)acetamide, its R-enantiomer, and its metabolites, determined as the derivatives, 2-(2-ethyl-6-methylphenyl)amino-1-propanol and 4-(2-ethyl-6-methylphenyl)-2-hydroxy-5-methyl-3-morpholinone, calculated as the stoichiometric equivalent of S-metolachlor, in or on the commodity.

Commodity	Parts per million
Beet, sugar, molasses	2.0
Beet, sugar, roots	0.5
Beet, sugar, tops	15.0
Brassica, leafy greens, subgroup 4-16B	1.8
Bushberry subgroup 13-07B	0.15
Caneberry subgroup 13-07A	0.10
Carrot, roots	0.40
Cattle, fat	0.02

Cattle, kidney	0.20
Cattle, liver	0.05
Cattle, meat	0.02
Cattle, meat byproducts, except kidney and liver	0.04
Cilantro, leaves	8.0
Coriander, seed	0.13
Corn, field, forage	40
Corn, field, grain	0.10
Corn, field, stover	40
Corn, pop, grain	0.10
Corn, pop, stover	40
Corn, sweet, forage	40
Corn, sweet, kernel plus cob with husks removed	0.10
Corn, sweet, stover	40
Cotton, gin byproducts	4.0
Cottonseed subgroup 20C	0.10
Egg	0.02
Grain, aspirated fractions	0.70
Goat, fat	0.02
Goat, kidney	0.20
Goat, liver	0.05
Goat, meat	0.02
Goat, meat byproducts, except kidney and liver	0.04
Grass, forage	10.0
Grass, hay	0.20
Horse, fat	0.02
Horse, kidney	0.20
Horse, liver	0.05
Horse, meat	0.02
Horse, meat byproducts, except kidney and liver	0.04
Kohlrabi	0.60
Leaf petiole vegetable subgroup 22B	0.10
Lettuce	1.5
Low growing berry subgroup 13-07G, except cranberry	0.40
Milk	0.02
Onion, bulb, subgroup 3-07A	0.10
Onion, green, subgroup 3-07B	2.0
Peanut	0.20
Peanut, hay	20.0
Peanut, meal	0.40
Poultry, fat	0.02
Poultry, meat	0.02
Poultry, meat byproducts	0.05
Safflower, seed	0.10
Sesame, seed	0.13
Sheep, fat	0.02
Sheep, kidney	0.20
Sheep, liver	0.05
Sheep, meat	0.02
Sheep, meat byproducts, except kidney and liver	0.04
Sorghum, grain, forage	1.0
Sorghum, grain, grain	0.3
Sorghum, grain, stover	4.0
Sorghum, sweet, stalk	4.0
Soybean, forage	5.0
Soybean, hay	8.0
Soybean, seed	0.20
Spinach	0.50
Stalk and stem vegetable subgroup 22A, except kohlrabi	0.10
Stevia, dried leaves	15
Sugarcane, cane	0.20
Sugarcane, molasses	1.5
Sunflower, meal	1.0
Sunflower subgroup 20B	1.0
Swiss chard	0.15
Tomato, paste	0.30
Vegetable, <i>Brassica</i> , head and stem, group 5-16	0.60
Vegetable, cucurbit group 9	0.50
Vegetable, foliage of legume, except soybean, subgroup 7A	15.0
Vegetable, fruiting, group 8-10, except tabasco pepper	0.10
Vegetable, leaves of root and tuber, group 2, except sugar beet	2.0
Vegetable, legume, group 6	0.30
Vegetable, root, except sugar beet, subgroup 1B, except carrot	0.30

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* (1) Tolerances with regional registration as defined in 180.1(l) are established for the combined residues (free and bound) of the herbicide metolachlor [2-chloro-*N*-(2-ethyl-6-methylphenyl)-*N*-(2-methoxy-1-methylethyl)acetamide] and its metabolites, determined as the derivatives, 2-[2-ethyl-6-methylphenylamino]-1-propanol and 4-(2-ethyl-6-methylphenyl)-2-hydroxy-5-methyl-3-morpholinone, each expressed as the parent compound, in or on the following raw agricultural commodities:

Commodity	Parts per million
Pepper, nonbell	0.50

(2) Tolerances with regional registration are established for residues of S-metolachlor, including its metabolites and degradates, in or on the commodities identified in the following table below. Compliance with the tolerance levels specified in the following table below is to be determined by measuring only the sum of free and bound S-metolachlor, S-2-chloro-*N*-(2-ethyl-6-methylphenyl)-*N*-(2-methoxy-1-methylethyl)acetamide, its R-enantiomer, and its metabolites, determined as the derivatives, 2-(2-ethyl-6-methylphenylamino)-1-propanol and 4-(2-ethyl-6-methylphenyl)-2-hydroxy-5-methyl-3-morpholinone, calculated as the stoichiometric equivalent of S-metolachlor, in or on the commodity.

Commodity	Parts per million
Pepper, tabasco	0.50

(d) *Indirect or inadvertent residues.* (1) Tolerances are established for the indirect or inadvertent combined residues (free and bound) of the herbicide metolachlor, 2-chloro-*N*-(2-ethyl-6-methylphenyl)-*N*-(2-methoxy-1-methylethyl)acetamide, and its metabolites, determined as the derivatives, 2-[(2-ethyl-6-methylphenylamino)-1-propanol and 4-(2-ethyl-6-methylphenyl)-2-hydroxy-5-methyl-3-morpholinone, each expressed as the parent compound in the following raw agricultural commodities:

Commodity	Parts per million
Animal feed, nongrass, group 18	1.0
Barley, grain	0.10
Barley, hay	0.80
Barley, straw	0.80
Buckwheat, grain	0.10
Millet, forage	0.50
Millet, grain	0.10
Millet, hay	0.80
Millet, straw	0.80
Oat, forage	0.50
Oat, grain	0.10
Oat, hay	0.80
Oat, straw	0.80
Rice, grain	0.10
Rye, forage	0.50
Rye, grain	0.10
Rye, straw	0.80
Wheat, forage	0.50
Wheat, grain	0.10
Wheat, hay	0.80
Wheat, straw	0.80

(2) Tolerances for are established for the indirect or inadvertent residues of S-metolachlor, including its metabolites and degradates, in or on the commodities identified in the following table below. Compliance with the tolerance levels specified in the following table below is to be determined by measuring only the sum of free and bound S-metolachlor, S-2-chloro-*N*-(2-ethyl-6-methylphenyl)-*N*-(2-methoxy-1-methylethyl)acetamide, its R-enantiomer, and its metabolites, determined as the derivatives, 2-(2-ethyl-6-methylphenylamino)-1-propanol and 4-(2-ethyl-6-methylphenyl)-2-hydroxy-5-methyl-3-morpholinone, calculated as the stoichiometric equivalent of S-metolachlor, in or on the commodity.

Commodity	Parts per million
Animal feed, nongrass, group 18	1.0
Barley, grain	0.10
Barley, hay	0.50
Barley, straw	0.50
Buckwheat, grain	0.10
Millet, forage	0.50
Millet, grain	0.10
Millet, hay	0.50
Millet, straw	0.50
Oat, forage	0.50



Oat, grain	0.10
Oat, hay	0.50
Oat, straw	0.50
Rice, grain	0.10
Rye, forage	0.50
Rye, grain	0.10
Rye, straw	0.50
Wheat, forage	0.50
Wheat, grain	0.10
Wheat, hay	0.50
Wheat, straw	0.50

[73 FR 53740, Sept. 17, 2008, as amended at 74 FR 48412, Sept. 23, 2009; 75 FR 56903, Sept. 17, 2010; 77 FR 48906, Aug. 15, 2012; 77 FR 59127, Sept. 26, 2012; 79 FR 17441, Mar. 28, 2014; 80 FR 38986, July 8, 2015; 83 FR 12274, Mar. 21, 2018; 84 FR 8617, Mar. 11, 2019]

[↑ Back to Top](#)

### §180.370 5-Ethoxy-3-(trichloromethyl)-1,2,4-thiadiazole; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide 5-ethoxy-3-(trichloromethyl)-1,2,4-thiadiazole and its monoacid metabolite 3-carboxy-5-ethoxy-1,2,4-thiadiazole in or on the following raw agricultural commodities:

Commodity	Parts per million
Cotton, gin byproducts	0.1
Cotton, undelinted seed	0.1
Tomato	0.15

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[47 FR 49845, Nov. 3, 1982, as amended at 48 FR 12088, Mar. 23, 1983; 63 FR 57076, Oct. 26, 1998; 72 FR 41931, Aug. 1, 2007; 73 FR 54961, Sept. 24, 2008; 81 FR 34905, June 1, 2016]

[↑ Back to Top](#)

### §180.371 Thiophanate-methyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of thiophanate-methyl, dimethyl ((1,2-phenylene) bis (iminocarbonothioyl)) bis(carbamate), including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of thiophanate-methyl, dimethyl ((1,2-phenylene) bis (iminocarbonothioyl)) bis(carbamate), and its metabolite, methyl 2-benzimidazolyl carbamate (MBC), calculated as the stoichiometric equivalent of thiophanate-methyl, in or on the commodity.

Commodity	Parts per million
Almond	0.1
Almond, hulls	0.5
Apple	2.0
Apricot	15.0
Banana	2.0
Bean, dry, seed	0.2
Bean, snap, succulent	2.0
Beet, sugar, roots	0.2
Cherry, sweet	20.0
Cherry, tart	20.0
Grain, aspirated fractions	12
Grape	5.0
Onion, bulb	0.5
Onion, green	3.0
Peach	3.0
Peanut	0.1
Peanut, hay	5.0
Pear	3.0
Pecan	0.1
Pistachio	0.1
Plum	0.5
Potato	0.1

Soybean, hulls	1.5
Soybean, seed	0.2
Strawberry	7.0
Vegetable, cucurbit, group 9	1.0
Wheat, forage	1.1
Wheat, grain	0.1
Wheat, hay	0.1
Wheat, straw	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* A tolerance with a regional registration is established for residues of thiophanate-methyl, dimethyl ((1,2-phenylene) bis(iminocarbonothioyl)) bis(carbamate), including its metabolites and degradates, in or on the commodity in the following table. Compliance with the tolerance level specified in this paragraph is to be determined by measuring only the sum of thiophanate-methyl, dimethyl ((1,2-phenylene) bis(iminocarbonothioyl)) bis(carbamate), and its metabolite, methyl 2-benzimidazolyl carbamate (MBC), calculated as the stoichiometric equivalent of thiophanate-methyl, in or on the commodity.

Commodity	Parts per million
Canola, seed	0.1

(d) *Indirect or inadvertent residues.* [Reserved]

[75 FR 60244, Sept. 29, 2010]

[↑ Back to Top](#)

#### §180.372 2,6-Dimethyl-4-tridecylmorpholine; tolerances for residues.

(a) *General.* A tolerance is established for residues of the fungicide 2,6-dimethyl-4-tridecylmorpholine in or on the following food commodity:

Commodity	Parts per million
Banana <sup>1</sup>	1.0

<sup>1</sup>There are no U.S. registrations.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 54961, Sept. 24, 2008]

[↑ Back to Top](#)

#### §180.373 [Reserved]

[↑ Back to Top](#)

#### §180.377 Diflubenzuron; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of diflubenzuron, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only diflubenzuron (*N*-[[4-chlorophenyl]amino]carbonyl]-2,6-difluorobenzamide).

Commodity	Parts per million
Artichoke, globe	6.0
Cattle, fat	0.05
Cattle, meat	0.05
Cottonseed subgroup 20C	0.20
Egg	0.07
Goat, fat	0.05
Goat, meat	0.05
Hog, fat	0.05
Hog, meat	0.05
Horse, fat	0.05
Horse, meat	0.05

Milk	0.05
Mushroom	0.2
Poultry, fat	0.10
Poultry, meat byproducts	0.08
Poultry, meat	0.05
Sheep, fat	0.05
Sheep, meat	0.05
Soybean	0.05
Soybean, hulls	0.5

(2) Tolerances are established for residues of the insecticide diflubenzuron (N-[[[(4-chlorophenyl)amino]carbonyl]-2,6-difluorobenzamide), in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of diflubenzuron (N-[[[(4-chlorophenyl)amino]carbonyl]-2,6-difluorobenzamide), 4-chlorophenylurea and 4-chloroaniline, calculated as the stoichiometric equivalent of diflubenzuron, in or on the commodity.

Commodity	Parts per million
Almond, hulls	6.0
Barley, grain	0.06
Barley, hay	3.0
Barley, straw	1.8
Brassica, leafy greens, subgroup 5B	9.0
Carrot, roots	0.20
Cattle, meat byproducts	0.15
Citrus, oil	32
Fruit, citrus, group 10-10	3.0
Goat, meat byproducts	0.15
Grain, aspirated fractions	11
Grass, forage, fodder, and hay, group 17	6.0
Hog, meat byproducts	0.15
Horse, meat byproducts	0.15
Oat, forage	7.0
Oat, grain	0.06
Oat, hay	6.0
Oat, straw	3.5
Peanut	0.10
Peanut, hay	55
Peanut, refined oil	0.20
Peach subgroup 12-12B	0.50
Pear	0.50
Pepper/Eggplant subgroup 8-10B	1.0
Plum Subgroup 12-12C	0.50
Nut, tree, group 14-12	0.20
Rice, grain	0.02
Sheep, meat byproducts	0.15
Turnip greens	9.0
Wheat, forage	7.0
Wheat, grain	0.06
Wheat, hay	6.0
Wheat, straw	3.5

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of the insecticide diflubenzuron (N-[[[(4-chlorophenyl)amino]carbonyl]-2,6-difluorobenzamide) and its metabolites, in connection with use of the pesticide under section 18 emergency exemptions granted by EPA. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of diflubenzuron (N-[[[(4-chlorophenyl)amino]carbonyl]-2,6-difluorobenzamide), 4-chlorophenylurea and 4-chloroaniline, calculated as the stoichiometric equivalent of diflubenzuron, in or on the commodity. The tolerances are specified in the following table, and will expire and are revoked on the dates specified.

Commodity	Parts per million	Expiration/revocation date
Alfalfa, forage	6.0	12/31/17
Alfalfa, hay	6.0	12/31/17
Lemon	0.8	12/31/10

(c) *Tolerances with regional registrations.* Tolerances with regional registration are established for residues of the insecticide diflubenzuron (N-[[[(4-chlorophenyl)amino]carbonyl]-2,6-difluorobenzamide), in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of diflubenzuron (N-[[[(4-chlorophenyl)amino]carbonyl]-2,6-difluorobenzamide), 4-chlorophenylurea and 4-chloroaniline, calculated as the stoichiometric equivalent of diflubenzuron, in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	6.0

Alfalfa, hay	20
Alfalfa, seed	0.90

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33699, May 24, 2000]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.377, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.378 Permethrin; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the insecticide cis- and trans-permethrin isomers [cis-(3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropane carboxylate] and [trans-(3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropane carboxylate] in/on the following food commodities:

Commodity	Parts per million
Alfalfa, forage	20
Alfalfa, hay	45
Almond	0.05
Almond, hulls	20
Artichoke, globe	5.0
Asparagus	2.0
Avocado	1.0
Broccoli	2.0
Brussels sprouts	1.0
Cabbage	6.0
Cattle, fat	1.5
Cattle, meat	0.10
Cattle, meat byproducts	0.10
Cauliflower	0.5
Cherry, sweet	4.0
Cherry, tart	4.0
Corn, field, forage	50
Corn, field, grain	0.05
Corn, field, stover	30
Corn, pop, grain	0.05
Corn, pop, stover	30
Corn, sweet, forage	50
Corn, sweet, kernel plus cob with husks removed	0.10
Corn, sweet, stover	30
Egg	0.10
Eggplant	0.50
Fruit, pome, group 11	0.05
Garlic, bulb	0.10
Grain, aspirated fractions	0.50
Goat, fat	1.5
Goat, meat	0.10
Goat, meat byproducts	0.10
Hazelnut	0.05
Hog, fat	0.05
Hog, meat	0.05
Hog, meat byproducts	0.05
Horse, fat	1.5
Horse, meat	0.10
Horse, meat byproducts	0.10
Horseradish	0.50
Kiwifruit	2.0
Leaf petioles subgroup 4B	5.0
Leafy greens subgroup 4A	20
Lettuce, head	20
Milk, fat (reflecting 0.88 ppm in whole milk)	3.0
Mushroom	5.0
Onion, bulb	0.10
Peach	1.0
Pepper, bell	0.50
Pistachio	0.10
Potato	0.05
Poultry, fat	0.15
Poultry, meat	0.05

Poultry, meat byproducts	0.05
Sheep, fat	1.5
Sheep, meat	0.10
Sheep, meat byproducts	0.10
Soybean, seed	0.05
Spinach	20
Tomato	2.0
Vegetable, cucurbit, group 9	1.5
Walnut	0.05
Watercress	5.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l) are established for the combined residues of the insecticide cis- and trans-permethrin isomers [cis-(3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropane carboxylate] and [trans-(3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropane carboxylate] in/on the following food commodities:

Commodity	Parts per million
Collards	15
Grass, forage	15
Grass, hay	15
Papaya	1.0
Turnip, tops	10
Turnip, roots	0.20

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 52019, Sept. 12, 2007]

[↑ Back to Top](#)

### §180.380 Vinclozolin; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the fungicide vinclozolin (3-(3,5-dichlorophenyl)-5-ethenyl-5-methyl-2,4-oxazolidinedione) and its metabolites containing the 3,5-dichloroaniline moiety in or on the food commodities in the table below. There are no U.S. registrations for grape (wine) as of July 30, 1997.

Commodity	Parts per million	Expiration/Revocation Date
Bean, succulent	2.0	11/30/05
Canola, seed	1.0	11/30/08
Cattle, fat	0.05	11/30/08
Cattle, meat	0.05	11/30/08
Cattle, meat byproducts	0.05	11/30/08
Egg	0.05	11/30/08
Goat, fat	0.05	11/30/08
Goat, meat	0.05	11/30/08
Goat, meat byproducts	0.05	11/30/08
Grape, wine	6.0	None
Hog, fat	0.05	11/30/08
Hog, meat	0.05	11/30/08
Hog, meat byproducts	0.05	11/30/08
Horse, fat	0.05	11/30/08
Horse, meat	0.05	11/30/08
Horse, meat byproducts	0.05	11/30/08
Lettuce, head	10.0	11/30/05
Lettuce, leaf	10.0	11/30/05
Milk	0.05	11/30/08
Poultry, fat	0.1	11/30/08
Poultry, meat	0.1	11/30/08
Poultry, meat byproducts	0.1	11/30/08
Sheep, fat	0.05	11/30/08
Sheep, meat	0.05	11/30/08
Sheep, meat byproducts	0.05	11/30/08

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

(e) *Revoked tolerances subject to the channel of trade provisions.* The following table lists commodities with residues of vinclozolin resulting from lawful use are subject to the channels of trade provisions of section 408(l)(5) of the FFDC: A:

Commodity	Parts per million
Cucumber	1.0
Fruit, stone, except plum, prune, fresh	25.0
Pepper, bell	3.0
Strawberry	10.0

[62 FR 38474, July 18, 1997, as amended at 63 FR 7308, Feb. 13, 1998; 65 FR 44468, July 18, 2000; 67 FR 40189, June 12, 2002; 68 FR 56189, Sept. 30, 2003; 68 FR 69323, Dec. 12, 2003; 70 FR 55268, Sept. 21, 2005]

[↑ Back to Top](#)

### §180.381 Oxyfluorfen; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide oxyfluorfen [2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4-(trifluoromethyl)benzene] in or on the following food commodities:

Commodity	Parts per million
Almond, hulls	0.1
Artichoke, globe	0.05
Avocado	0.05
Banana	0.05
Broccoli	0.05
Cabbage	0.05
Cacao bean, dried bean	0.05
Cattle, fat	0.01
Cattle, meat	0.01
Cattle, meat byproducts	0.01
Cauliflower	0.05
Coffee, bean, green	0.05
Corn, field, grain	0.05
Cotton, undelinted seed	0.05
Date, dried fruit	0.05
Egg	0.03
Feijoa	0.05
Fig	0.05
Fruit, pome, group 11	0.05
Fruit, stone, group 12	0.05
Goat, fat	0.01
Goat, meat	0.01
Goat, meat byproducts	0.01
Grape	0.05
Hog, fat	0.01
Hog, meat	0.01
Hog, meat byproducts	0.01
Horse, fat	0.01
Horse, meat	0.01
Horse, meat byproducts	0.01
Horseradish	0.05
Kiwifruit	0.05
Milk	0.01
Nut, tree, group 14	0.05
Olive	0.05
Onion, bulb	0.05
Peppermint, tops	0.05
Persimmon	0.05
Pistachio	0.05
Pomegranate	0.05
Poultry, fat	0.2
Poultry, meat	0.01
Poultry, meat byproducts	0.01
Sheep, fat	0.01
Sheep, meat	0.01
Sheep, meat byproducts	0.01
Soybean	0.05
Spearmint, tops	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration are established for residues of the herbicide oxyfluorfen [2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4-(trifluoromethyl)benzene] in or on the following food commodities:

Commodity	Parts per million
Blackberry	0.05
Chickpea, seed	0.05
Grass, forage	0.05
Grass, hay	0.05
Grass, seed screenings	0.05
Guava	0.05
Papaya	0.05
Raspberry	0.05
Taro, corm	0.05
Taro, leaves	0.05

(d) *Indirect or inadvertent residues.* [Reserved]

[45 FR 85022, Dec. 24, 1980]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.381, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.383 Sodium salt of acifluorfen; tolerances for residues.

(a) *General.* Tolerances are established for combined residues of the herbicide sodium salt of acifluorfen, sodium 5-[2-chloro-4-(trifluoromethyl)phenoxy]-2-nitrobenzoate, and its metabolites (the corresponding acid, methyl ester, and amino analogues) in or on the following raw agricultural commodities:

Commodity	Parts per million
Peanut	0.1
Rice, grain	0.1
Soybean, seed	0.1
Strawberry	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional restrictions.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[45 FR 24877, Apr. 11, 1980, as amended at 46 FR 61272, Dec. 16, 1981; 47 FR 39490, Sept. 8, 1982; 61 FR 30165, June 14, 1996; 62 FR 39974, July 25, 1997; 67 FR 35048, May 17, 2002; 69 FR 6567, Feb. 11, 2004; 71 FR 54434, Sept. 15, 2006; 80 FR 72598, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.384 Mepiquat (N,N-dimethylpiperidinium); tolerances for residues.

(a) *General.* Tolerances are established for residues of the plant growth regulator mepiquat, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only mepiquat, *N,N*-dimethylpiperidinium, in or on the commodity.

Commodity	Parts per million
Cattle, meat byproducts	0.1
Cotton, gin byproducts	6.0
Cotton, undelinted seed	2.0
Goat, meat byproducts	0.1
Grape	1.0
Grape, raisin	5.0
Hog, meat byproducts	0.1
Horse, meat byproducts	0.1
Sheep, meat byproducts	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[67 FR 3118, Jan. 23, 2002, as amended at 80 FR 72598, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.385 Diclofop-methyl; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the herbicide diclofop-methyl (methyl 2-[4-(2,4-dichlorophenoxy)phenoxy]propanoate) and its metabolites, 2-[4-(2,4-dichlorophenoxy)phenoxy]propanoic acid and 2-[4-(2,4-dichloro-5-hydroxyphenoxy)phenoxy]propanoic acid, in or on the following raw agricultural commodities:

Commodity	Parts per million
Barley, grain	0.1
Barley, straw	0.1
Wheat, grain	0.1
Wheat, straw	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[45 FR 23425, Apr. 7, 1980, as amended at 50 FR 20211, May 15, 1985; 51 FR 3599, Jan. 29, 1986; 51 FR 19176, May 28, 1986; 63 FR 57077, Oct. 26, 1998; 72 FR 41931, Aug. 1, 2007]

[↑ Back to Top](#)

### §§180.388-180.389 [Reserved]

[↑ Back to Top](#)

### §180.390 Tebuthiuron; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues of the herbicide tebuthiuron (N-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N,N'-dimethylurea) and its metabolites N-(5-(2-hydroxy-1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N,N'-dimethylurea, N-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N-methylurea, and N-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N'-hydroxymethyl-N-methylurea in or on the following raw agricultural commodities:

Commodity	Parts per million
Grass, forage	10.0
Grass, hay	10.0

(2) Tolerances are established for the combined residues of the herbicide tebuthiuron (N-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N,N'-dimethylurea) and its metabolites N-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N-methylurea, N-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)urea, 2-dimethylethyl-5-amino-1,3,4-thiadiazole, and N-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N'-hydroxymethyl-N-methylurea in or on the following raw agricultural commodities:

Commodity	Parts per million
Cattle, fat	1.0
Cattle, meat	1.0
Cattle, meat byproducts	5.0
Goat, fat	1.0
Goat, meat	1.0
Goat, meat byproducts	5.0
Horse, fat	1.0
Horse, meat	1.0
Horse, meat byproducts	5.0
Sheep, fat	1.0
Sheep, meat	1.0
Sheep, meat byproducts	5.0

(3) A tolerance is established for the combined residues of the herbicide tebuthiuron (N-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N,N'-dimethylurea) and its metabolites N-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N-methylurea, N-(5-(2-hydroxy-1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N-methylurea, N-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)urea, N-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N'-hydroxymethyl-N-methylurea, and N-(5-(2-hydroxy-1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-N'-hydroxymethyl-N-methylurea in or on the following raw agricultural commodities:



Commodity	Parts per million
Milk	0.8

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 53461, Sept. 19, 2007]

[↑ Back to Top](#)

### §180.395 Hydramethylnon; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide tetrahydro-5,5-dimethyl-2(1*H*)-pyrimidinone(3-(4-(trifluoromethyl)phenyl)-1-(2-(4-(trifluoromethyl)phenyl)ethenyl)-2-propenylidene)hydrazone in or on the following raw agricultural commodities:

Commodity	Parts per million
Grass, forage	2.0
Grass, hay	2.0
Pineapple	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[45 FR 55198, Aug. 19, 1980, as amended at 63 FR 10543, Mar. 4, 1998; 63 FR 65073, Nov. 25, 1998; 66 FR 28672, May 24, 2001; 68 FR 37764, June 25, 2003; 68 FR 48312, Aug. 13, 2003; 72 FR 41931, Aug. 1, 2007]

[↑ Back to Top](#)

### §180.396 Hexazinone; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide hexazinone, 3-cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of hexazinone, 3-cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, and its plant metabolites: metabolite A, 3-(4-hydroxycyclohexyl)-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, metabolite B, 3-cyclohexyl-6-(methylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, metabolite C, 3-(4-hydroxycyclohexyl)-6-(methylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, metabolite D, 3-cyclohexyl-1-methyl-1,3,5-triazine-2,4,6-(1*H*, 3*H*, 5*H*)-trione, and metabolite E, 3-(4-hydroxycyclohexyl)-1-methyl-1,3,5-triazine-2,4,6-(1*H*, 3*H*, 5*H*)-trione, calculated as the stoichiometric equivalent of hexazinone, in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	2.0
Alfalfa, hay	4.0
Alfalfa, seed	2.0
Blueberry	0.6
Grass, forage	250
Grass, hay	230
Pineapple	0.6
Sugarcane, cane	0.6
Sugarcane, molasses	4.0

(2) Tolerances are established for residues of the herbicide hexazinone, 3-cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of hexazinone, 3-cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, and its animal tissue metabolites: metabolite B, 3-cyclohexyl-6-(methylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, and metabolite F, 3-cyclohexyl-6-amino-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, calculated as the stoichiometric equivalent of hexazinone, in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.1
Cattle, meat	0.5

Cattle, meat byproducts	4.0
Goat, fat	0.1
Goat, meat	0.5
Goat, meat byproducts	4.0
Hog, fat	0.1
Hog, meat	0.5
Hog, meat byproducts	4.0
Horse, fat	0.1
Horse, meat	0.5
Horse, meat byproducts	4.0
Sheep, fat	0.1
Sheep, meat	0.5
Sheep, meat byproducts	4.0

(3) A tolerance is established for residues of the herbicide hexazinone, 3-cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, including its metabolites and degradates, in or on the commodity in the following table. Compliance with the tolerance level specified in this paragraph is to be determined by measuring only the sum of hexazinone, 3-cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, and its metabolites: metabolite B, 3-cyclohexyl-6-(methylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, metabolite C, 3-(4-hydroxycyclohexyl)-6-(methylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, metabolite C-2, 3-(3-hydroxycyclohexyl)-6-(methylamino)-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, and metabolite F, 3-cyclohexyl-6-amino-1-methyl-1,3,5-triazine-2,4-(1*H*, 3*H*)-dione, calculated as the stoichiometric equivalent of hexazinone, in or on the commodity.

Commodity	Parts per million
Milk	11

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33713, May 24, 2000, as amended at 71 FR 56399, Sept. 27, 2006; 75 FR 60244, Sept. 29, 2010]

[↑ Back to Top](#)

### §180.399 Iprodione; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues of the fungicide iprodione [3-(3,5-dichlorophenyl)-*N*-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide], its isomer 3-(1-methylethyl)-*N*-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide, and its metabolite 3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidine-carboxamide in or on the following food commodities:

Commodity	Parts per million
Almond, hulls	2.0
Almond	0.3
Apricot	20.0
Bean, dry, seed	2.0
Bean, forage	90.0
Bean, succulent	2.0
Blueberry	15.0
Boysenberry	15.0
Broccoli	25.0
Caneberry subgroup 13A	25.0
Carrot, roots	5.0
Cherry, sweet, postharvest	20.0
Cherry, tart	20.0
Cotton, undelinted seed	0.10
Cowpea, hay	90.0
Currant	15.0
Garlic	0.1
Ginseng	2.0
Ginseng, dried root	4.0
Grape	60.0
Grape, raisin	300
Kiwifruit	10.0
Lettuce	25.0
Nectarine, postharvest	20.0
Onion, bulb	0.5
Peach, postharvest	20.0

Peanut	0.5
Peanut, hay	150.0
Plum, postharvest	20.0
Plum, prune	20.0
Potato	0.5
Raspberry	15.0
Rice, bran	30.0
Rice, grain	10.0
Rice, hulls	50.0
Strawberry	15.0

(2) Tolerances are established for the combined residues of iprodione [3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide], its isomer [3-(1-methylethyl)-N-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide], and its metabolites [3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidine-carboxamide] and [N-(3,5-dichloro-4-hydroxyphenyl)-ureido-carboxamide], all expressed as iprodione equivalents in or on the following food commodities of animal origin:

Commodity	Parts per million
Cattle, fat	0.5
Cattle, kidney	3.0
Cattle, liver	3.0
Cattle, meat	0.5
Cattle, meat byproducts, except kidney and liver	0.5
Egg	1.5
Goat, fat	0.5
Goat, kidney	3.0
Goat, liver	3.0
Goat, meat	0.5
Goat, meat byproducts, except kidney and liver	0.5
Hog, fat	0.5
Hog, kidney	3.0
Hog, liver	3.0
Hog, meat	0.5
Hog, meat byproducts, except kidney and liver	0.5
Horse, fat	0.5
Horse, kidney	3.0
Horse, liver	3.0
Horse, meat	0.5
Horse, meat byproducts, except kidney and liver	0.5
Milk	0.5
Poultry, fat	3.5
Poultry, liver	5.0
Poultry, meat	1.0
Poultry, meat byproducts, except liver	1.0
Sheep, fat	0.5
Sheep, kidney	3.0
Sheep, liver	3.0
Sheep, meat	0.5
Sheep, meat byproducts, except kidney and liver	0.5

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for the combined residues of the fungicide iprodione [3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide], its isomer [3-(1-methylethyl)-N-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide], and its metabolite [3-(3,5-dichlorophenyl)-2,4-dioxo-1-imidazolidinecarboxamide] in or on the following food commodity:

Commodity	Parts per million
Mustard greens	15.0

(d) *Indirect or inadvertent residues.* [Reserved]

[48 FR 40385, Sept. 7, 1983]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.399, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.401 Thiobencarb; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the herbicide thiobencarb (S-[(4-chlorophenyl)methyl]diethyl-carbamothioate) and its chlorobenzyl and chlorophenyl moiety-containing metabolites in or on the following raw agricultural commodities:

Commodity	Part per million
Cattle, fat	0.2
Cattle, meat byproducts	0.2
Cattle, meat	0.2
Egg	0.2
Goat, fat	0.2
Goat, meat byproducts	0.2
Goat, meat	0.2
Hog, fat	0.2
Hog, meat byproducts	0.2
Hog, meat	0.2
Horse, fat	0.2
Horse, meat byproducts	0.2
Horse, meat	0.2
Milk	0.05
Poultry, fat	0.2
Poultry, meat byproducts	0.2
Poultry, meat	0.2
Rice, grain	0.2
Sheep, fat	0.2
Sheep, meat byproducts	0.2
Sheep, meat	0.2

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of the herbicide thiobencarb (S-[(4-chloro-phenyl)methyl]diethylcarbamothioate) and its chlorobenzyl and chlorophenyl moiety-containing metabolites in or on the following raw agricultural commodities:

Commodity	Parts per million
Celery	0.2
Endive	0.2
Lettuce	0.2

(d) *Indirect or inadvertent residues.* [Reserved]

[47 FR 6833, Feb. 17, 1982, as amended at 56 FR 2440, Jan. 23, 1991; 76 FR 34885, June 15, 2011; 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.403 Thidiazuron; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the defoliant thidiazuron (N-phenyl-N-1,2,3-thiadiazol-5-ylurea) and its aniline containing metabolites in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	0.4
Cattle, meat	0.4
Cattle, meat byproducts	0.4
Cotton, gin byproducts	24.0
Cotton, undelinted seed	0.3
Goat, fat	0.4
Goat, meat	0.4
Goat, meat byproducts	0.4
Hog, fat	0.4
Hog, meat	0.4
Hog, meat byproducts	0.4
Horse, fat	0.4
Horse, meat	0.4
Horse, meat byproducts	0.4
Milk	0.05
Sheep, fat	0.4
Sheep, meat	0.4
Sheep, meat byproducts	0.4

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33700, May 24, 2000, as amended at 72 FR 53462, Sept. 19, 2007]

[↑ Back to Top](#)

#### §180.404 Profenofos; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide profenofos (O-(4-bromo-2-chlorophenyl)-O-ethyl-S-propyl phosphorothioate) in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	0.05
Cattle, meat	0.05
Cattle, meat byproducts	0.05
Cotton, gin byproducts	55.0
Cotton, undelinted seed	2.0
Goat, fat	0.05
Goat, meat	0.05
Goat, meat byproducts	0.05
Horse, fat	0.05
Horse, meat	0.05
Horse, meat byproducts	0.05
Milk	0.01
Sheep, fat	0.05
Sheep, meat	0.05
Sheep, meat byproducts	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33700, May 24, 2000, as amended at 66 FR 50833, Oct. 5, 2001; 67 FR 49617, July 31, 2002; 72 FR 54579, Sept. 26, 2007]

[↑ Back to Top](#)

#### §180.405 Chlorsulfuron; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues of chlorsulfuron (2-chloro-*N*-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)aminocarbonyl]benzenesulfonamide) and its metabolite, 2-chloro-5-hydroxy-*N*-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)aminocarbonyl] benzenesulfonamide in or on the following raw agricultural commodities:

Commodity	Parts per million
Barley, grain	0.1
Barley, straw	0.5
Oat, forage	20.0
Oat, grain	0.1
Oat, straw	0.5
Wheat, forage	20.0
Wheat, grain	0.1
Wheat, straw	0.5

(2) Tolerances are established for residues of chlorsulfuron (2-chloro-*N*-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)aminocarbonyl] benzenesulfonamide) in or on the following raw agricultural commodities.

Commodity	Parts per million
Cattle, fat	0.3
Cattle, meat	0.3
Cattle, meat byproducts	0.3
Goat, fat	0.3
Goat, meat	0.3
Goat, meat byproducts	0.3
Grass, forage	11.0
Grass, hay	19.0
Hog, fat	0.3
Hog, meat	0.3

Hog, meat byproducts	0.3
Horse, fat	0.3
Horse, meat	0.3
Horse, meat byproducts	0.3
Milk	0.1
Sheep, fat	0.3
Sheep, meat	0.3
Sheep, meat byproducts	0.3

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[67 FR 52873, Aug. 14, 2002]

[↑ Back to Top](#)

#### §180.407 Thiodicarb; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the insecticide thiodicarb (dimethyl *N,N'*-[thiobis[[methylimino]carbonyloxy]] bis[ethanimidothioate]) and its metabolite methomyl (*S*-methyl *N*-[(methylcarbamoyl)oxy]thioacetimidate) in or on the following food commodities or groups. The time-limited tolerances expire and are revoked on the dates listed in the following table:

Commodity	Parts per million	Expiration/revocation date
Broccoli	7.0	None
Cabbage	7.0	None
Cauliflower	7.0	None
Corn, sweet, kernel plus cob with husks removed	2.0	None
Cotton, undelinted seed	0.4	None
Soybean, hulls	0.8	None
Soybean	0.2	None
Vegetable, leafy, except brassica, group 4	35	None

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 44595, Aug. 22, 1997, as amended at 75 FR 60245, Sept. 29, 2010]

[↑ Back to Top](#)

#### §180.408 Metalaxyl; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the fungicide metalaxyl [*N*-(2,6-dimethylphenyl)-*N*-(methoxyacetyl) alanine methylester] and its metabolites containing the 2,6-dimethylaniline moiety, and *N*-(2-hydroxy methyl-6-methylphenyl)-*N*-(methoxyacetyl)-alanine methyl ester, each expressed as metalaxyl equivalents, in or on the following food commodities:

Commodity	Parts per million
Alfalfa, forage	6.0
Alfalfa, hay	20.0
Almond	0.5
Almond, hulls	10.0
Apple	0.2
Apple, wet pomace	0.4
Apricot, dried	4.0
Asparagus	7.0
Avocado	4.0
Beet, garden, roots	0.1
Beet, garden, tops	0.1
Beet, sugar	0.1
Beet, sugar, molasses	1.0
Beet, sugar, roots	0.5
Beet, sugar, tops	10.0
Blueberry	2.0

Broccoli	2.0
Brussels sprouts	2.0
Cabbage	1.0
Cattle, fat	0.4
Cattle, kidney	0.4
Cattle, liver	0.4
Cattle, meat	0.05
Cattle, meat byproducts, except kidney and liver	0.05
Cauliflower	1.0
Citrus, oil	7.0
Citrus, dried pulp	7.0
Clover, forage	1.0
Clover, hay	2.5
Cotton, undelinted seed	0.1
Cranberry	4.0
Egg	0.05
Fruit, citrus	1.0
Fruit, stone, group 12	1.0
Ginseng	3.0
Goat, fat	0.4
Goat, kidney	0.4
Goat, liver	0.4
Goat, meat	0.05
Goat, meat byproducts, except kidney and liver	0.05
Grain, cereal, group 15, except barley, oat and wheat	0.1
Grain, crop	0.1
Grape	2.0
Grape, raisin	6.0
Grass, forage	10.0
Grass, hay	25.0
Hog, fat	0.4
Hog, kidney	0.4
Hog, liver	0.4
Hog, meat	0.05
Hog, meat byproducts, except kidney and liver	0.05
Hop, dried cones	20
Hop, vines	2.0
Horse, fat	0.4
Horse, kidney	0.4
Horse, liver	0.4
Horse, meat	0.05
Horse, meat byproducts, except kidney and liver	0.05
Lettuce, head	5.0
Milk	0.02
Mustard greens	5.0
Onion, bulb	3.0
Onion, green	10.0
Peanut	0.2
Peanut, hay	20.0
Peanut, meal	1.0
Peanut, hulls	2.0
Pineapple	0.1
Pineapple, fodder	0.1
Pineapple, forage	0.1
Plum, prune, dried	4.0
Potato, chips	4.0
Potato, granules, flakes	4.0
Potato, processed potato waste	4.0
Potato, wet peel	4.0
Poultry, fat	0.4
Poultry, kidney	0.4
Poultry, liver	0.4
Poultry, meat	0.05
Poultry, meat byproducts, except kidney and liver	0.05
Potato	0.5
Raspberry	0.5
Sheep, fat	0.4
Sheep, kidney	0.4
Sheep, liver	0.4
Sheep, meat	0.05
Sheep, meat byproducts, except kidney and liver	0.05
Soybean, hulls	2.0
Soybean, meal	2.0

Soybean, seed	1.0
Spinach	10.0
Strawberry	10.0
Sunflower, seed	0.1
Sunflower, forage	0.1
Tomato, paste	3.0
Tomato, puree	3.0
Vegetable, brassica, leafy, group 5, except broccoli, cabbage, cauliflower, brussels sprouts, and mustard greens	0.1
Vegetable, cucurbit, group 9	1.0
Vegetable, foilage of legume, group 7	8.0
Vegetable, fruiting, group 8	1.0
Vegetable, leafy, except brassica, group 4, except spinach	5.0
Vegetable, leaves of root and tuber, group 2	15.0
Vegetable, legume, cannery waste	5.0
Vegetable, legume, group 6	0.2
Vegetable, root and tuber, group 1	0.5
Walnut	0.5

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration (refer to §180.1(m)) are established for the combined residues of the fungicide metalaxyl [*N*-(2,6-dimethylphenyl)-*N*-(methoxyacetyl) alanine methyl ester] and its metabolites containing the 2,6-dimethylaniline moiety, and *N*-(2-hydroxy methyl-6-methyl)-*N*-(methoxyacetyl)-alanine methylester, each expressed as metalaxyl, in or on the following raw agricultural commodity:

Commodity	Parts per million
Papaya	0.1

(d) *Indirect or inadvertent tolerances.* Tolerances are established for indirect or inadvertent residues of metalaxyl in or on the food commodities when present therein as a result of the application of metalaxyl to growing crops listed in paragraph (a) of this section and other non-food crops to read as follows:

Commodity	Part per million
Barley, bran	1.0
Barley, flour	1.0
Barley, grain	0.2
Barley, pearled barley	1.0
Barley, straw	2.0
Grain, cereal, forage, fodder and straw, group 16, except barley, oat, and wheat; forage	1.0
Grain, cereal, forage, fodder and straw, group 16, except barley, oat, and wheat; stover	1.0
Grain, cereal, forage, fodder and straw, group 16, except barley, oat, and wheat; straw	1.0
Oat, flour	1.0
Oat, forage	2.0
Oat, grain	0.2
Oat, groats, rolled oats	1.0
Oat, straw	2.0
Wheat, bran	1.0
Wheat, flour	1.0
Wheat, forage	2.0
Wheat, germ	1.0
Wheat, grain	0.2
Wheat, middlings	1.0
Wheat, shorts	1.0
Wheat, straw	2.0

[65 FR 33700, May 24, 2000, as amended at 72 FR 35666, June 29, 2007; 74 FR 46374, Sept. 9, 2009; 75 FR 56015, Sept. 15, 2010]

[↑ Back to Top](#)

#### §180.409 Pirimiphos-methyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide pirimiphos-methyl (O-(2-diethylamino-6-methyl-4-pyrimidinyl) O,O-dimethyl phosphorothioate) in or on the following raw agricultural commodities:

Commodity	Parts per million
Cattle, fat	0.02
Cattle, meat byproducts	0.02
Corn, field, grain	8.0
Corn, pop, grain	8.0
Goat, fat	0.02
Goat, meat byproducts	0.02



Grain, aspirated fractions	20.0
Hog, fat	0.02
Hog, meat byproducts	0.02
Horse, fat	0.02
Horse, meat byproducts	0.02
Poultry, fat	0.02
Sheep, fat	0.02
Sheep, meat byproducts	0.02
Sorghum, grain, grain	8.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33714, May 24, 2000, as amended at 67 FR 41807, June 19, 2002; 67 FR 49617, July 31, 2002; 70 FR 44492, Aug. 3, 2005; 72 FR 53462, Sept. 19, 2007]

[↑ Back to Top](#)

#### §180.410 Triadimefon; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the fungicide triadimefon, 1-(4-chlorophenoxy)-3,3-dimethyl-1-(1*H*-1,2,4-triazol-1-yl)-2-butanone, and triadimenol,  $\beta$ -(4-chlorophenoxy)- $\alpha$ -(1,1-dimethylethyl)-1*H*-1,2,4-triazole-1-ethanol, expressed as triadimefon, in or on the following food commodities:

Commodity	Parts per million	Expiration/Revocation Date
Pineapple	2.0	None

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 54962, Sept. 24, 2008, as amended at 76 FR 34885, June 15, 2011]

[↑ Back to Top](#)

#### §180.411 Fluazifop-P-butyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide fluazifop-P-butyl, including its metabolites and degradates, in or on the following commodities in the table. Compliance with the tolerance levels specified in the table below is to be determined by measuring only the sum of fluazifop-P-butyl, butyl(R)-2-[4-[[5-(trifluoromethyl)-2-pyridinyl]oxy]phenoxy]propanoate, and the free and conjugated forms of the resolved isomer of fluazifop, (R)-2-[4-[[5-(trifluoromethyl)-2-pyridinyl]oxy]phenoxy]propanoic acid, calculated as the stoichiometric equivalent of fluazifop, in or on the commodity.

Commodity	Parts per million
Banana	0.01
Beans, dry, seed	50
Beet, sugar, dried pulp	1.0
Beet, sugar, molasses	3.5
Beet, sugar, roots	0.25
Bushberry subgroup 13-07B	0.30
Caneberry subgroup 13-07A	0.08
Carrot, roots	2.0
Cattle, fat	0.05
Cattle, meat	0.05
Cattle, meat byproducts	0.05
Citrus, dried pulp	0.40
Citrus, juice	0.06
Citrus, oil	30.0
Cotton, gin byproducts	1.5
Cotton, refined oil	1.3
Cotton, undelinted seed	1.0
Egg	0.05
Endive	6.0
Fruit, citrus, group 10	0.03

Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.03
Fruit, stone	0.05
Goat, fat	0.05
Goat, meat	0.05
Goat, meat byproducts	0.05
Hog, fat	0.05
Hog, meat	0.05
Hog, meat byproducts	0.05
Horse, fat	0.05
Horse, meat	0.05
Horse, meat byproducts	0.05
Lettuce, head	3.0
Lettuce, leaf	5.0
Milk	0.05
Nut, macadamia	0.1
Onion, bulb, subgroup 3-07A	0.50
Onion, green	1.5
Peanut	1.5
Peanut, meal	2.2
Pecans	0.05
Poultry, fat	0.05
Poultry, meat	0.05
Poultry, meat byproducts	0.05
Potato <sup>1</sup>	1.0
Potato, chips <sup>1</sup>	2.0
Potato, granules/flakes <sup>1</sup>	4.0
Rhubarb	0.50
Sheep, fat	0.05
Sheep, meat	0.05
Sheep, meat byproducts	0.05
Soybean, seed	2.5
Strawberry	3.0
Vegetable, tuberous and corm, except potato, subgroup 1D	1.5

<sup>1</sup>No U.S. registrations.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registrations are established for residues of the herbicide fluazifop-P-butyl, including its metabolites and degradates, in or on the following commodities in the table. Compliance with the tolerance levels specified in the table below is to be determined by measuring only the sum of fluazifop-P-butyl, butyl(R)-2-[4-[[5-(trifluoromethyl)-2-pyridinyl]oxy]phenoxy]propanoate, and the free and conjugated forms of the resolved isomer of fluazifop, (R)-2-[4-[[5-(trifluoromethyl)-2-pyridinyl]oxy]phenoxy]propanoic acid, calculated as the stoichiometric equivalent of fluazifop, in or on the commodity.

Commodity	Parts per million
Asparagus	3.0
Coffee, bean	0.1
Fescue, forage	4.0
Fescue, hay	15
Pepper, tabasco	1.0

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33714, May 24, 2000, as amended at 74 FR 9372, Mar. 4, 2009; 74 FR 46374, Sept. 9, 2009; 74 FR 47457, Sept. 16, 2009; 76 FR 5703, Feb. 2, 2011; 76 FR 59908, Sept. 28, 2011; 80 FR 46822, Aug. 6, 2015; 82 FR 44942, Sept. 27, 2017]

[↑ Back to Top](#)

### §180.412 Sethoxydim; tolerances for residues.

(a) Tolerances are established for the herbicide sethoxydim, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of the herbicide 2-[1-(ethoxyimino)butyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one (CAS Reg. No. 74051-80-2) and its metabolites containing the 2-cyclohexen-1-one moiety, calculated as the stoichiometric equivalent of sethoxydim, in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	40

Alfalfa, hay	40
Almond, hulls	2.0
Apricot	0.2
Apple, wet pomace	0.8
Asparagus	4.0
Bean, succulent	15
Beet, sugar, molasses	10
Beet, sugar, tops	3.0
Berry, low growing, subgroup 13-07H, except strawberry	2.5
Borage, meal	40
Buckwheat, flour	25
Buckwheat, grain	19
Bushberry subgroup 13-07B	4.0
Calendula, meal	20
Caneberry subgroup 13-07A	5.0
Canola, meal	40
Castor oil plant, meal	20
Cattle, fat	0.2
Cattle, meat	0.2
Cattle, meat byproducts	1.0
Cherry, sweet	0.2
Cherry, tart	0.2
Chinese tallowtree, meal	20
Citrus, dried pulp	1.5
Clover, forage	35
Clover, hay	55
Coriander, leaves	4.0
Corn, field, forage	2.0
Corn, field, grain	0.5
Corn, field, stover	2.5
Corn, sweet, forage	3.0
Corn, sweet, kernel plus cob with husk removed	0.4
Corn, sweet, stover	3.5
Cottonseed subgroup 20C	5.0
Cowpea, forage	15
Cowpea, hay	50
Crambe, meal	40
Cuphea, meal	40
Dillweed, fresh leaves	10
Echium, meal	40
Egg	2.0
Euphorbia, meal	20
Evening primrose, meal	20
Flax seed, meal	40
Fruit, citrus, group 10-10	0.5
Fruit, pome, group 11-10	0.2
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	1.0
Goat, fat	0.2
Goat, meat	0.2
Goat, meat byproducts	1.0
Gold of pleasure, meal	40
Grape, raisin	2.0
Hare's ear mustard, meal	40
Hog, fat	0.2
Hog, meat	0.2
Hog, meat byproducts	1.0
Horse, fat	0.2
Horse, meat	0.2
Horse, meat byproducts	1.0
Joboba, meal	20
Juneberry <sup>1</sup>	5.0
Lesquerella, meal	40
Lingonberry <sup>1</sup>	5.0
Lunaria, meal	40
Meadowfoam, meal	40
Milk	0.5
Milkweed, meal	40
Mustard, meal	40
Nectarine	0.2
Niger seed, meal	20
Nut, tree, group 14	0.2
Oil radish, meal	40

Pea and bean, dried shelled, except soybean, subgroup 6C	25
Pea, field, hay	40
Pea, field, vines	20
Pea, succulent	10
Peach	0.2
Peanut	25
Peppermint, tops	30
Pistachio	0.2
Poppy seed, meal	40
Potato granules/flakes	8.0
Potato waste, processed	8.0
Poultry, fat	0.2
Poultry, meat	0.2
Poultry, meat byproducts	2.0
Radish, tops	4.5
Rapeseed, meal	40
Rapeseed subgroup 20A	35
Rose hip, meal	20
Safflower, seed	15
Salal <sup>1</sup>	5.0
Sesame, meal	40
Sheep, fat	0.2
Sheep, meat	0.2
Sheep, meat byproducts	1.0
Soybean, hay	10
Soybean, seed	16
Spearmint, tops	30
Strawberry	10
Stokes aster, meal	20
Sunflower, meal	20
Sunflower subgroup 20B, except safflower	7.0
Sweet rocket, meal	40
Tallowwood, meal	20
Tea oil plant, meal	20
Turnip, tops	5.0
Vegetable, brassica, leafy, group 5	5.0
Vegetable, bulb, group 3-07	1.0
Vegetable, cucurbit, group 9	4.0
Vegetable, fruiting, group 8-10	4.0
Vegetable, leafy, except brassica, group 4	4.0
Vegetable, root and tuber, group 1	4.0
Vernonia, meal	20

<sup>1</sup>The individual tolerances for Juneberry, Lingonberry, and Salal expire on December 15, 2015.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registration.* Tolerances are established for the herbicide sethoxydim, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of the herbicide 2-[1-(ethoxyimino)butyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one) and its metabolites containing the 2-cyclohexen-1-one moiety, calculated as the stoichiometric equivalent of sethoxydim, in or on the commodity.

Commodity	Parts per million
Artichoke, globe	5.0
Fescue, forage	7.0
Fescue, hay	4.0
Rhubarb	0.3

(d) *Indirect and inadvertent residues.* [Reserved]

[80 FR 34077, June 15, 2015]

[↑ Back to Top](#)

### §180.413 Imazalil; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues of the fungicide imazalil, 1-[2-(2,4-dichlorophenyl)-2-(2-propenyloxy)ethyl]-1*H*-imidazole, and its metabolite, 1-(2,4-dichlorophenyl)-2-(1*H*-imidazole-1-yl)-1-ethanol, in or on the following food commodities:

Commodity	Parts per million
Banana	3.0
Barley, grain	0.1
Barley, hay	0.5
Barley, straw	0.5
Citrus, dried pulp	25.0
Citrus, oil	200.0
Fruit, citrus, postharvest	10.0
Wheat, forage	0.5
Wheat, grain	0.1
Wheat, hay	0.5
Wheat, straw	0.5

(2) Tolerances are established for the combined residues of the fungicide imazalil, 1-[2-(2,4-dichlorophenyl)-2-(2-propenyloxy)ethyl]-1*H*-imidazole, and its metabolites, 3-[2-(2,4-dichlorophenyl)-2-(2,3-dihydroxypropoxy)ethyl]-2,4-imidazolidinedione (FK772) and 3-[2-(2,4-dichlorophenyl)-2-(hydroxy)]-2,4-imidazolidinedione (FK284), in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	0.01
Cattle, meat	0.01
Cattle, meat byproducts	0.2
Goat, fat	0.01
Goat, meat	0.01
Goat, meat byproducts	0.2
Horse, fat	0.01
Horse, meat	0.01
Horse, meat byproducts	0.2
Milk	0.02
Sheep, fat	0.01
Sheep, meat	0.01
Sheep, meat byproducts	0.2

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33715, May 24, 2000, as amended at 67 FR 46893, July 17, 2002; 71 FR 54434, Sept. 15, 2006]

[↑ Back to Top](#)

#### §180.414 Cyromazine; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide cyromazine, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only cyromazine, *N*-cyclopropyl-1,3,5-triazine-2,4,6-triamine, in or on the commodity.

Commodity	Parts per million
Bean, dry, except cowpea	3.0
Bean, lima	1.0
Bean, succulent	2.0
Broccoli	1.0
Cabbage, abyssinian	10.0
Cabbage, seakale	10.0
Cattle, fat	0.05
Cattle, kidney	0.2
Cattle, meat	0.05
Cattle, meat byproducts, except kidney	0.05
Egg	0.25
Garlic	0.2
Garlic, great-headed, bulb	0.2
Goat, fat	0.05
Goat, kidney	0.2
Goat, meat	0.05
Goat, meat byproducts, except kidney	0.05
Hanover salad, leaves	10.0
Hog, fat	0.05
Hog, kidney	0.2

Hog, meat	0.05
Hog, meat byproducts, except kidney	0.05
Horse, fat	0.05
Horse, kidney	0.2
Horse, meat	0.05
Horse, meat byproducts, except kidney	0.05
Leek	3.0
Mango <sup>1</sup>	0.3
Milk	0.05
Mushroom	1.0
Onion, bulb	0.2
Onion, green	3.0
Onion, potato	3.0
Onion, tree	3.0
Onion, welsh	3.0
Pepper	1.0
Potato	0.8
Poultry, fat (from chicken layer hens and chicken breeder hens only)	0.05
Poultry, meat (from chicken layer hens and chicken breeder hens only)	0.05
Poultry, meat byproducts (from chicken layer hens and chicken breeder hens only)	0.05
Rakkyo, bulb	0.2
Shallot, bulb	0.2
Shallot, fresh leaves	3.0
Sheep, fat	0.05
Sheep, kidney	0.2
Sheep, meat	0.05
Sheep, meat byproducts, except kidney	0.05
Tomato	0.5
Turnip, greens	10.0
Vegetable, brassica, leafy, group 5, except broccoli	10.0
Vegetable, leafy, except brassica, group 4	7.0
Vegetable, cucurbit, group 9	1.0

<sup>1</sup>There are no U.S. registrations on mango as of May 4, 2000.

(2) A tolerance of 5.0 parts per million is established for residues of the insecticide cyromazine, including its metabolites and degradates, in or on poultry feed when used as a feed additive only in feed for chicken layer hens and chicken breeder hens at the rate of not more than 0.01 pound of cyromazine per ton of poultry feed for control of flies in manure of treated chicken layer hens and chicken breeder hens, provided the feeding of cyromazine-treated feed must stop at least 3 days (72 hours) before slaughter. If the feed is formulated by any person other than the end user, the formulator must inform the end user, in writing, of the 3-day (72 hours) pre-slaughter interval. Compliance with the tolerance level specified in this paragraph is to be determined by measuring only cyromazine, *N*-cyclopropyl-1,3,5-triazine-2,4,6-triamine, in or on the commodity.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of the insecticide cyromazine, including its metabolites and degradates, in or on the commodities in the table in this paragraph when present therein as a result of the application of cyromazine to growing crops listed in paragraph (a)(1) of this section. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only cyromazine, *N*-cyclopropyl-1,3,5-triazine-2,4,6-triamine, in or on the commodity.

Commodity	Parts per million
Cotton, undelinted seed	0.1
Corn, sweet, kernel plus cob with husks removed	0.5
Corn, sweet, forage	0.5
Corn, sweet, stover	0.5
Radish, roots	0.5
Radish, tops	0.5

[65 FR 25860, May 4, 2000, as amended at 67 FR 72593, Dec. 6, 2002; 68 FR 55269, Sept. 24, 2003; 75 FR 22256, Apr. 28, 2010; 76 FR 23494, Apr. 27, 2011]

[↑ Back to Top](#)

#### §180.415 Aluminum tris (*O*-ethylphosphonate); tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide aluminum tris (*O*-ethylphosphonate), including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels

specified in this paragraph is to be determined by measuring only aluminum tris (*O*-ethylphosphonate), in or on the commodity.

Commodity	Parts per million
Avocado	25
Banana	3.0
Bushberry subgroup 13B	40
Caneberry subgroup 13A	0.1
Cranberry	0.5
Fruit, citrus, group 10-10	9.0
Fruit, pome, group 11	10
Ginseng	0.1
Hop, dried cones	45
Juneberry	40
Lingonberry	40
Nut, macadamia	0.20
Onion, bulb	0.5
Onion, green	10.0
Pea, succulent	0.3
Pepper/eggplant, subgroup 8-10B <sup>1</sup>	0.01
Pineapple	0.1
Salal	40
Strawberry	75
Tomato	3
Turnip, greens	40
Turnip, roots	15
Vegetable, brassica, leafy, group 5	60
Vegetable, cucurbit, group 9	15
Vegetable, leafy, except brassica, group 4	100

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of the fungicide aluminum tris (*O*-ethylphosphonate), including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only aluminum tris (*O*-ethylphosphonate), in or on the commodity.

Commodity	Parts per million
Asparagus	0.1
Grape	10

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 36801, July 8, 1999, as amended at 64 FR 37875, July 14, 1999; 65 FR 50438, Aug. 18, 2000; 67 FR 55346, Aug. 29, 2002; 68 FR 11335, Mar. 10, 2003; 70 FR 7047, Feb. 10, 2005; 76 FR 23494, Apr. 27, 2011; 80 FR 2320, Jan. 16, 2015; 83 FR 12265, Mar. 21, 2018]

[↑ Back to Top](#)

#### §180.416 Ethalfluralin; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide ethalfluralin, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the residues of ethalfluralin, *N*-ethyl-*N*-(2-methyl-2-propenyl)-2,6-dinitro-4-(trifluoromethyl)benzenamine.

Commodity	Parts per million
Bean, dry, seed	0.05
Dill, dried leaves	0.05
Dill, fresh leaves	0.05
Peanut	0.05
Pea, dry, seed	0.05
Potato	0.05
Rapeseed subgroup 20A	0.05
Soybean	0.05
Sunflower subgroup 20B	0.05
Vegetable, cucurbit, group 9	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[49 FR 391, Jan. 4, 1984, as amended at 50 FR 4976, Feb. 5, 1985; 52 FR 11262, Apr. 8, 1987; 62 FR 66014, Dec. 17, 1997; 64 FR 5191, Feb. 3, 1999; 64 FR 54782, Oct. 8, 1999; 66 FR 37598, July 19, 2001; 66 FR 41454, Aug. 8, 2001; 67 FR 2342, Jan. 17, 2002; 67 FR 49617, July 31, 2002; 72 FR 68534, Dec. 5, 2007; 78 FR 40020, July 3, 2013]

[↑ Back to Top](#)

**§180.417 Triclopyr; tolerances for residues.**

(a) *General.* (1) Tolerances are established for residues of the herbicide triclopyr, including its metabolites and degradates, in or on the commodities in the table below resulting from the application of the butoxyethyl ester of triclopyr, triethylamine salt of triclopyr, or choline salt of triclopyr. Compliance with the tolerance levels specified below is to be determined by measuring only triclopyr, 2-[(3,5,6-trichloro-2-pyridinyl)oxy]acetic acid.

Commodity	Parts per million
Egg	0.05
Fish	3.0
Grass, forage	700.0
Grass, hay	200.0
Milk	0.60
Poultry, fat	0.1
Poultry, meat	0.1
Poultry, meat byproducts, except kidney	0.1
Rice, grain	0.3
Shellfish	3.5

(2) Tolerances are established for residues of the herbicide triclopyr, including its metabolites and degradates, in or on the commodities in the table below resulting from the application of the butoxyethyl ester of triclopyr, triethylamine salt of triclopyr, or choline salt of triclopyr. Compliance with the tolerance levels specified below is to be determined by measuring the combined residues of triclopyr, 2-[(3,5,6-trichloro-2-pyridinyl)oxy]acetic acid, and its metabolite 3,5,6-trichloro-2-pyridinol (TCP), calculated as the stoichiometric equivalent of triclopyr.

Commodity	Parts per million
Cattle, fat	0.10
Cattle, meat	0.10
Cattle, meat byproducts	0.50
Goat, fat	0.10
Goat, meat	0.10
Goat, meat byproducts	0.50
Hog, fat	0.10
Hog, meat	0.10
Hog, meat byproducts	0.50
Horse, fat	0.10
Horse, meat	0.10
Horse, meat byproducts	0.50
Sheep, fat	0.10
Sheep, meat	0.10
Sheep, meat byproducts	0.50

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for residues of the triclopyr (2-[(3,5,6-trichloro-2-pyridinyl)oxy]acetic acid), including its metabolites and degradates in or on the specified agricultural commodities, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. The tolerances expire on the date specified in the table.

Commodity	Parts per million	Expiration date
Sugarcane, cane	40	12/31/20

(c) *Tolerances with regional registrations.* [Reserved](d) *Indirect or inadvertent residues.* [Reserved]

[50 FR 18486, May 1, 1985, as amended at 55 FR 26440, June 28, 1990; 60 FR 4095, Jan. 20, 1995; 62 FR 46894, Sept. 5, 1997; 63 FR 45406, Aug. 26, 1998; 67 FR 35048, May 17, 2002; 67 FR 58725, Sept. 18, 2002; 72 FR 41931, Aug. 1, 2007; 80 FR 72599, Nov. 20, 2015; 81 FR 9359, Feb. 25, 2016; 82 FR 26603, June 8, 2017]

[↑ Back to Top](#)

**§180.418 Cypermethrin and isomers alpha-cypermethrin and zeta-cypermethrin; tolerances for residues.**



(a) *General.* (1) Tolerances are established for residues of the insecticide cypermethrin ( $\pm$ )alpha cyano-(3-phenoxyphenyl)methyl( $\pm$ )cis,trans-3(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate in or on the following commodities:

Commodity	Parts per million
Brassica, head and stem, subgroup 5A	2.0
Brassica, leafy greens, subgroup 5B	14.0
Cattle, fat	1.0
Cattle, meat	0.2
Cattle, meat byproducts	0.05
Cotton, gin byproducts	11.0
Cotton, undelinted seed	0.5
Egg	0.05
Goat, fat	1.0
Goat, meat	0.2
Goat, meat byproducts	0.05
Hog, fat	0.1
Hog, meat	0.05
Horse, fat	1.0
Horse, meat	0.2
Horse, meat byproducts	0.05
Lettuce, head	4.0
Milk, fat (reflecting 0.10 in whole milk)	2.5
Onion, bulb	0.1
Onion, green	6.0
Pecan	0.05
Poultry, fat	0.05
Poultry, meat	0.05
Sheep, fat	1.0
Sheep, meat	0.2
Sheep, meat byproducts	0.05

(2) Tolerances are established for residues of zeta-cypermethrin, (S-cyano(3-phenoxyphenyl) methyl ( $\pm$ ))(cis-trans 3-(2,2-dichloroethenyl)-2,2 dimethylcyclopropanecarboxylate), including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only total cypermethrin, cyano(3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropane carboxylate, in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	15
Alfalfa, hay	30
Alfalfa, seed	0.50
Almond, hulls	6
Animal feed, nongrass, group 18, forage	8
Animal feed, nongrass, group 18, hay	40
Artichoke, globe	0.60
Avocado	0.50
Barley, grain	3.0
Barley, hay	6.0
Barley, straw	20.0
Beet, sugar, roots	0.05
Beet, sugar, tops	0.20
Berry group 13	0.8
Borage, seed	0.2
Brassica, head and stem, subgroup 5A	2.00
Brassica, leafy greens, subgroup 5B	14.00
Buckwheat, grain	3.0
Buckwheat, hay	6.0
Buckwheat, straw	20.0
Cabbage	2.00
Canistel	0.50
Castor oil plant, refined oil	0.4
Castor oil plant, seed	0.2
Cattle, fat	1.00
Cattle, meat	0.2
Cattle, meat byproducts	0.05
Chinese tallowtree, refined oil	0.4
Chinese tallowtree, seed	0.2
Cilantro, leaves	10
Citrus, dried pulp	1.8

Citrus, oil	4.0
Corn, field, forage	9.0
Corn, field, grain	0.05
Corn, field, stover	30
Corn, pop, grain	0.05
Corn, pop, stover	30
Corn, sweet, forage	15.00
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	15.00
Cotton, undelinted seed	0.5
Crambe, seed	0.2
Cuphea, seed	0.2
Echium, seed	0.2
Egg	0.05
Euphorbia, refined oil	0.4
Euphorbia, seed	0.2
Evening primrose, refined oil	0.4
Evening primrose, seed	0.2
Flax, seed	0.2
Food commodities/feed commodities (other than those covered by a higher tolerance as a result of use on growing crops) in food/feed handling establishments	0.05
Fruit, citrus, group 10	0.35
Fruit, pome, group 11	2
Fruit, stone, group 12	1
Goat, fat	1.00
Goat, meat	0.2
Goat, meat byproducts	0.05
Gold of pleasure, seed	0.2
Grain, aspirated fractions	10.0
Grape	2
Grass, forage, fodder, and hay, group 17, forage	10
Grass, forage, fodder and hay, group 17, hay	35
Hare's-ear mustard, seed	0.2
Hog, fat	0.1
Hog, meat	0.05
Horse, fat	1.00
Horse, meat	0.2
Horse, meat byproducts	0.05
Jojoba, refined oil	0.4
Jojoba, seed	0.2
Lesquerella, seed	0.2
Lunaria, seed	0.2
Mango	0.70
Meadowfoam, seed	0.2
Milk, fat (reflecting 0.10 in whole milk)	2.50
Milkweed, seed	0.2
Mustard, seed	0.2
Niger seed, refined oil	0.4
Niger seed, seed	0.2
Nut, tree, group 14	0.05
Oat, grain	3.0
Oat, hay	6.0
Oat, straw	20.0
Oil radish, seed	0.2
Okra	0.2
Onion, bulb	0.10
Onion, green	3.00
Papaya	0.50
Pea and bean, dried shelled, except soybean, subgroup 6C	0.05
Pea and bean, succulent shelled, subgroup 6B	0.1
Peanut	0.05
Pecan	0.05
Pistachio	0.05
Poppy, seed	0.2
Poultry, fat	0.05
Poultry, meat	0.05
Rapeseed	0.2
Rice, grain	1.50
Rice, hulls	6.00
Rice, wild, grain	1.5
Rose hip, refined oil	0.4
Rose hip, seed	0.2
Rye, grain	3.0

Rye, hay	6.0
Rye, straw	20.0
Safflower, seed	0.2
Sapodilla	0.50
Sapote, black	0.50
Sapote, mamey	0.50
Sesame, seed	0.2
Sheep, fat	1.00
Sheep, meat	0.2
Sheep, meat byproducts	0.05
Sorghum, grain, forage	0.1
Sorghum, grain, grain	0.5
Sorghum, grain, stover	5.0
Soybean, seed	0.05
Star apple	0.50
Stokes aster, refined oil	0.4
Stokes aster, seed	0.2
Sugarcane, cane	0.60
Sunflower, refined oil	0.5
Sunflower, seed	0.2
Sweet rocket, seed	0.2
Tallowwood, refined oil	0.4
Tallowwood, seed	0.2
Tea oil plant, refined oil	0.4
Tea oil plant, seed	0.2
Turnip, greens	14
Vegetable, cucurbit, group 9	0.2
Vegetable, fruiting, group 8	0.2
Vegetable, leafy, except brassica, group 4	10.00
Vegetable, legume, edible podded, subgroup 6A	0.5
Vegetable, root and tuber, group 1, except sugar beet	0.1
Vernonia, refined oil	0.4
Vernonia, seed	0.2
Wheat, forage	3.0
Wheat, grain	0.2
Wheat, hay	6.0
Wheat, straw	7.0

(3) Tolerances are established for residues of the insecticide, alpha-cypermethrin, (*R*)-cyano(3-phenoxyphenyl)methyl (1*S*,3*S*)-rel-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropane carboxylate, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only total cypermethrin, cyano(3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropane carboxylate, in or on the commodity.

Commodity	Parts per million
Alfalfa, hay	15
Beet, sugar, roots	0.05
Beet, sugar, tops	0.20
Brassica, head and stem, subgroup 5A	2.0
Cattle, fat	1.0
Cattle, meat	0.20
Cattle, meat byproducts	0.05
Citrus, dried pulp	1.8
Citrus, oil	4.0
Corn, field, grain	0.05
Corn, pop, grain	0.05
Corn, sweet, kernel plus cob with husks removed	0.05
Cotton, undelinted seed	0.50
Egg	0.05
Food commodities/feed commodities (other than those covered by a higher tolerance as a results of use on growing crops) in food/feed handling establishments	0.05
Fruit, citrus, group 10-10 <sup>1</sup>	10
Fruit, citrus, group 10-10	0.35
Goat, fat	1.0
Goat, meat	0.20
Goat, meat byproducts	0.05
Hog, fat <sup>1</sup>	1.0
Hog, fat	0.10
Hog, meat	0.05
Horse, fat	1.0
Horse, meat	0.20

Horse, meat byproducts	0.05
Milk, fat, reflecting 0.10 ppm in whole milk	2.5
Nut, tree, group 14-12	0.05
Pea and bean, dried shelled, except soybean, subgroup 6C	0.05
Pea and bean, succulent shelled, subgroup 6B	0.10
Poultry, fat	0.05
Poultry, meat	0.05
Rice, grain	1.5
Sheep, fat	1.0
Sheep, meat	0.20
Sheep, meat byproducts	0.05
Sorghum, grain, grain	0.50
Soybean, seed	0.05
Vegetable, cucurbit, group 9	0.20
Vegetable, fruiting, group 8-10	0.20
Vegetable, leafy, group 4	10
Vegetable, legume, edible podded, subgroup 6A	0.50
Vegetable, root and tuber, group 1, except sugar beet	0.10
Wheat, grain	0.20

<sup>1</sup>This tolerance expires on December 5, 2018.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 63235, 63243, Nov. 26, 1997, as amended at 63 FR 48586, Sept. 11, 1998; 66 FR 47993, Sept. 17, 2001; 67 FR 6430, Feb. 12, 2002; 67 FR 56495, Sept. 4, 2002; 69 FR 71717, Dec. 10, 2004; 71 FR 78382, Dec. 29, 2006; 72 FR 53462, Sept. 19, 2007; 72 FR 71801, Dec. 19, 2007; 73 FR 1525, Jan. 9, 2008; 77 FR 72984, Dec. 7, 2012; 78 FR 7275, Feb. 1, 2013; 79 FR 73213, Dec. 10, 2014; 79 FR 77394, Dec. 24, 2014; 80 FR 45438, July 30, 2015; 80 FR 72599, Nov. 20, 2015; 83 FR 25943, June 5, 2018]

[↑ Back to Top](#)

#### §180.419 Chlorpyrifos-methyl; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues of the insecticide chlorpyrifos-methyl [O,-O,-dimethyl O-(3,5,6-trichloro-2-pyridyl)] phosphorothioate and its metabolite (3,5,6-trichloro-2-pyridinol) in or on the following food commodities:

Commodity	Parts per million
Barley, grain	6.0
Cattle, fat	0.5
Cattle, meat	0.5
Cattle, meat byproducts	0.5
Egg	0.1
Goat, fat	0.5
Goat, meat	0.5
Goat, meat byproducts	0.5
Hog, fat	0.5
Hog, meat	0.5
Hog, meat byproducts	0.5
Horse, fat	0.5
Horse, meat	0.5
Horse, meat byproducts	0.5
Milk, fat (0.05 ppm (N) in whole milk	1.25
Oat, grain	6.0
Poultry, fat	0.5
Poultry, meat	.5
Poultry, meat byproducts	.5
Rice, grain	6.0
Sheep, fat	0.5
Sheep, meat	0.5
Sheep, meat byproducts	0.5
Sorghum, grain	6.0
Wheat, grain	6.0

(2) Tolerances are established for the combined residues of the insecticide chlorpyrifos-methyl (O,-O- dimethyl-O-(3,5,6-trichloro-2-pyridyl) phosphorothioate and its metabolite (3,5,6-trichloro-2-pyridinol) in or on the following food commodities when present therein as a result of application to stored grains:

Commodity	Parts per million
Barley, bran	90
Barley, pearled barley	90
Rice, bran	30
Rice, hulls	30
Rice, polished rice	30
Sorghum, grain, bran	90
Wheat, bran	30
Wheat, germ	30
Wheat, middlings	30
Wheat, shorts	30

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33715, May 24, 2000, as amended at 74 FR 46374, Sept. 9, 2009]

[↑ Back to Top](#)

#### §180.420 Fluridone; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide fluridone, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of fluridone, 1-methyl-3-phenyl-5-(3-(trifluoromethyl)phenyl)-4(1*H*)-pyridinone, and its bound residues, calculated as the stoichiometric equivalent of fluridone, in or on the commodity.

Commodity	Parts per million
Crayfish	0.5
Fish	0.5

(2) Tolerances are established for residues of the herbicide fluridone, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only fluridone, 1-methyl-3-phenyl-5-(3-(trifluoromethyl)phenyl)-4(1*H*)-pyridinone, in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.05
Cattle, kidney	0.1
Cattle, liver	0.1
Cattle, meat	0.05
Cattle, meat byproducts	0.05
Cotton, gin byproducts	0.1
Cotton, undelinted seed	0.1
Egg	0.05
Goat, fat	0.05
Goat, kidney	0.1
Goat, liver	0.1
Goat, meat	0.05
Goat, meat byproducts	0.05
Hog, fat	0.05
Hog, kidney	0.1
Hog, liver	0.1
Hog, meat	0.05
Hog, meat byproducts	0.05
Horse, fat	0.05
Horse, kidney	0.1
Horse, liver	0.1
Horse, meat	0.05
Horse, meat byproducts	0.05
Milk	0.05
Poultry, fat	0.05
Poultry, kidney	0.01
Poultry, liver	0.01
Poultry, meat	0.05
Poultry, meat byproducts	0.05
Sheep, fat	0.05
Sheep, kidney	0.1
Sheep, liver	0.1
Sheep, meat	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of the herbicide fluridone, including its metabolites and degradates, in or on the irrigated crop commodities and crop groupings in the table in this paragraph, resulting from use of irrigation water containing residues of 0.15 parts per million following applications of fluridone on or around aquatic sites. Where tolerances are established at higher levels from other uses of fluridone on the crops in the table in this paragraph, the higher tolerance also applies to residues in or on the irrigated commodity. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only fluridone, 1-methyl-3-phenyl-5-(3-(trifluoromethyl)phenyl)-4(1*H*)-pyridinone, in or on the commodity.

Commodity	Parts per million
Animal feed, nongrass, group 18	0.15
Avocado	0.1
Berry, group 13	0.1
Cranberry	0.1
Fruit, citrus, group 10	0.1
Fruit, pome, group 11	0.1
Fruit, stone, group 12	0.1
Grain, cereal, forage, fodder and straw, group 16	0.1
Grain, cereal, group 15	0.1
Grape	0.1
Grass, forage	0.15
Hop, dried cones	0.1
Nut, tree, group 14	0.1
Okra	0.1
Strawberry	0.1
Vegetable, brassica, leafy, group 5	0.1
Vegetable, cucurbit, group 9	0.1
Vegetable, fruiting, group 8	0.1
Vegetable, leafy, except brassica, group 4	0.1
Vegetable, leaves of root and tuber, group 2	0.1
Vegetable, legume, group 6	0.1
Vegetable, root and tuber, group 1	0.1

[76 FR 23495, Apr. 27, 2011, as amended at 77 FR 66720, Nov. 7, 2012; 80 FR 18143, Apr. 3, 2015; 81 FR 7987, Feb. 17, 2016; 81 FR 72539, Oct. 20, 2016]

[↑ Back to Top](#)

#### §180.421 Fenarimol; tolerances for residues.

(a) *General.* Tolerances are established for residues of fenarimol, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only fenarimol alpha-(2 chlorophenyl)-alpha-(4-chlorophenyl)-5-pyrimidinemethanol.

Commodity	Parts per million	Expiration/revocation date
Apple	0.3	7/31/16
Apple, wet pomace	0.3	7/31/16
Banana <sup>1</sup>	0.25	None
Cattle, fat	0.01	7/31/16
Cattle, kidney	0.01	7/31/16
Cattle, meat	0.01	7/31/16
Cattle, meat byproducts, except kidney	0.05	7/31/16
Cherry, sweet	1.0	7/31/16
Cherry, tart	1.0	7/31/16
Goat, fat	0.01	7/31/16
Goat, kidney	0.01	7/31/16
Goat, meat	0.01	7/31/16
Goat, meat byproducts, except kidney	0.05	7/31/16
Grape	0.1	7/31/16
Hazelnut	0.02	7/31/16
Hop, dried cones	5.0	7/31/16
Horse, fat	0.01	7/31/16
Horse, kidney	0.01	7/31/16
Horse, meat	0.01	7/31/16

Horse, meat byproducts, except kidney	0.05	7/31/16
Pear	0.1	7/31/16
Pecan	0.02	7/31/16
Sheep, fat	0.01	7/31/16
Sheep, kidney	0.01	7/31/16
Sheep, meat	0.01	7/31/16
Sheep, meat byproducts, except kidney	0.05	7/31/16
Vegetable, cucurbit, group 9 <sup>2</sup>	0.20	None

<sup>1</sup>There are no U.S. registrations for bananas as of April 26, 1995.

<sup>2</sup>There are no U.S. registrations for cucurbit vegetable group 9 as of August 27, 2010.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[51 FR 39662, Oct. 30, 1986, as amended at 53 FR 27349, July 20, 1988; 53 FR 44403, Nov. 3, 1988; 54 FR 45734, Oct. 31, 1989; 60 FR 33354, June 28, 1995; 62 FR 49937, Sept. 24, 1997; 62 FR 61447, Nov. 18, 1997; 67 FR 35048, May 17, 2002; 67 FR 41807, June 19, 2002; 69 FR 6567, Feb. 11, 2004; 71 FR 32846, June 7, 2006; 71 FR 54434, Sept. 15, 2006; 74 FR 68173, Dec. 23, 2009; 75 FR 56897, Sept. 17, 2010; 81 FR 34905, June 1, 2016]

[↑ Back to Top](#)

#### §180.425 Clomazone; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide clomazone, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only clomazone, 2-[(2-chlorophenyl)methyl]-4,4-dimethyl-3-isoxazolidinone, in or on the commodity.

Commodity	Parts per million
Bean, asparagus, dry seed	0.05
Bean, broad, dry seed	0.05
Bean, broad, succulent seed	0.05
Bean, kidney, dry seed	0.05
Bean, lima, dry seed	0.05
Bean, lima, succulent seed	0.05
Bean, mung, dry seed	0.05
Bean, navy, dry seed	0.05
Bean, pinto, dry seed	0.05
Bean, snap, succulent	0.05
Bean, wax, succulent seed	0.05
Broccoli, Chinese	0.10
Chickpea, dry seed	0.05
Cilantro, dried leaves	0.30
Cilantro, fresh leaves	0.05
Coriander, seed	0.05
Cottonseed subgroup 20C	0.05
Cowpea, forage	0.05
Cowpea, hay	0.05
Cucumber*	0.1
Dill, dried leaves	0.40
Dill, fresh leaves	0.08
Dill, oil	0.07
Dill, seed	0.05
Grain lupin, dry seed	0.05
Kohlrabi	0.10
Pea, southern, dry seed	0.05
Pea, southern, succulent seed	0.05
Pea, succulent	0.05
Pepper	0.05
Peppermint, tops	0.05
Pumpkin*	0.1
Rapeseed subgroup 20A	0.05
Rhubarb	0.30
Rice, grain	0.02
Soybean	0.05
Soybean, vegetable, succulent	0.05
Spearmint, tops	0.05

Squash, summer*	0.1
Squash, winter*	0.1
Stalk and stem vegetable subgroup 22A, except kohlrabi	0.05
Sugarcane, cane	0.05
Sweet lupin, dry seed	0.05
Vegetable, <i>Brassica</i> , head and stem, group 5-16	0.10
Vegetable, cucurbit, group 9	0.05
Vegetable, tuberous and corm, except potato, subgroup 1D	0.05
White lupin, dry seed	0.05
White sweet lupin, dry seed	0.05

\* This tolerance expires on June 5, 2019.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[51 FR 9446, Mar. 19, 1986]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.425, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

#### §180.426 2-[4,5-Dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-quinoline carboxylic acid; tolerance for residues.

A tolerance is established for residues of the herbicide 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-quinoline carboxylic acid, in or on the raw agricultural commodity soybean at 0.05 part per million.

[51 FR 13309, Apr. 2, 1986]

[↑ Back to Top](#)

#### §180.427 Tau-Fluvalinate; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide tau-fluvalinate, including its metabolites and degradates, in or on commodities in the table below. Compliance with the specified tolerance level is to be determined by measuring only tau-fluvalinate, (cyano-(3-phenoxyphenyl)methylN-[2-chloro-4-(trifluoromethyl)phenyl]-D-valinate), in or on the commodity.

Commodity	Parts per million
Grape, wine <sup>1</sup>	1.0
Honey	0.02

<sup>1</sup>There is no U.S. registration for use of tau-fluvalinate on wine grapes.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect and inadvertent residues.* [Reserved]

[65 FR 33701, May 24, 2000, as amended at 67 FR 49617, July 31, 2002; 73 FR 52616, Sept. 10, 2008; 81 FR 87462, Dec. 5, 2016]

[↑ Back to Top](#)

#### §180.428 Metsulfuron methyl; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues of the herbicide metsulfuron methyl (methyl 2-[[[[[4-methoxy-6-methyl-1,3,5- triazin- 2-yl)amino]carbonyl]amino] sulfonyl] benzoate) and its metabolite methyl 2-[[[[[4-methoxy-6-methyl-1-,3,5- triazin-2-yl)amino]carbonyl]amino] sulfonyl]-4-hydroxybenzoate in or on the following raw material agricultural commodities:

Commodity	Parts per million
Barley, grain	0.1
Barley, hay	20.0



Barley, straw	0.3
Grass, forage	15.0
Grass, hay	15.0
Grass, straw	15.0
Sorghum, grain, forage	0.2
Sorghum, grain, grain	0.1
Sorghum, grain, stover	0.2
Sugarcane, cane	0.05
Wheat, forage	5.0
Wheat, grain	0.1
Wheat, hay	20.0
Wheat, straw	0.3

(2) Tolerances are established for residues of metsulfuron methyl (methyl-2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]benzoate) in or on the following raw agricultural commodities:

Commodity	Parts per million
Cattle, fat	0.1
Cattle, kidney	0.5
Cattle, meat	0.1
Cattle, meat byproducts	0.1
Goat, fat	0.1
Goat, kidney	0.5
Goat, meat	0.1
Goat, meat byproducts	0.1
Hog, fat	0.1
Hog, kidney	0.5
Hog, meat	0.1
Hog, meat byproducts	0.1
Horse, fat	0.1
Horse, kidney	0.5
Horse, meat	0.1
Horse, meat byproducts	0.1
Milk	0.05
Sheep, fat	0.1
Sheep, kidney	0.5
Sheep, meat	0.1
Sheep, meat byproducts	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 70191, Dec. 16, 1999, as amended at 66 FR 64773, Dec. 14, 2001; 67 FR 51097, Aug. 7, 2002]

[↑ Back to Top](#)

#### §180.429 Chlorimuron ethyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide chlorimuron ethyl, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified in the following table is to be determined by measuring only chlorimuron ethyl, ethyl 2-[[[(4-chloro-6-methoxypyrimidin-2-yl)amino]carbonyl]sulfonyl]benzoate] in or on the following commodities:

Commodity	Parts per million
Berry, low growing, except strawberry, subgroup 13-07H	0.02
Corn, field, forage	0.5
Corn, field, grain	0.01
Corn, field, stover	2.0
Grain, aspirated fractions	3.0
Peanut	0.02
Soybean, forage	0.45
Soybean, hay	1.8
Soybean, seed	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[74 FR 10494, Mar. 11, 2009, as amended at 74 FR 67087, Dec. 18, 2009]

[↑ Back to Top](#)**§180.430 Fenoxaprop-ethyl; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the herbicide fenoxaprop-ethyl, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of fenoxaprop-ethyl, (±)-ethyl 2-[4-[(6-chloro-2-benzoxazolyl)oxy]phenoxy]propanoate, and its metabolites, 2-[4-[(6-chloro-2-benzoxazolyl)oxy]phenoxy]propanoic acid and 6-chloro-2,3-dihydrobenzoxazol-2-one, calculated as the stoichiometric equivalent of fenoxaprop-ethyl, in or on the commodity.

Commodity	Parts per million
Barley, grain	0.05
Barley, straw	0.1
Cattle, fat	0.05
Cattle, meat byproducts	0.05
Cattle, meat	0.05
Cotton, undelinted seed	0.05
Goat, fat	0.05
Goat, meat byproducts	0.05
Goat, meat	0.05
Hog, fat	0.05
Hog, meat byproducts	0.05
Hog, meat	0.05
Horse, fat	0.05
Horse, meat byproducts	0.05
Horse, meat	0.05
Milk	0.02
Peanut	0.05
Peanut, hulls	0.05
Rice, grain	0.05
Sheep, fat	0.05
Sheep, meat byproducts	0.05
Sheep, meat	0.05
Soybean	0.05
Wheat, grain	0.05
Wheat, straw	0.50

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of the herbicide fenoxaprop-ethyl, including its metabolites and degradates, in or on the commodities in the table in this paragraph in connection with use of fenoxaprop-ethyl under section 18 emergency exemptions granted by EPA. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of fenoxaprop-ethyl, (±)-ethyl 2-[4-[(6-chloro-2-benzoxazolyl)oxy]phenoxy]propanoate, and its metabolites, 2-[4-[(6-chloro-2-benzoxazolyl)oxy]phenoxy]propanoic acid and 6-chloro-2,3-dihydrobenzoxazol-2-one, calculated as the stoichiometric equivalent of fenoxaprop-ethyl, in or on the commodity. The tolerances expire and are revoked on the dates specified in the table in this paragraph.

Commodity	Parts per million	Expiration/revocation date
Grass, forage	0.05	12/31/16
Grass, hay	0.05	12/31/16

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of the herbicide fenoxaprop-ethyl, including its metabolites and degradates, in or on the commodities in the table in this paragraph when fenoxaprop-ethyl is used in the states of Oregon, Washington, and Utah. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of fenoxaprop-ethyl, (±)-ethyl 2-[4-[(6-chloro-2-benzoxazolyl)oxy]phenoxy]propanoate, and its metabolites, 2-[4-[(6-chloro-2-benzoxazolyl)oxy]phenoxy]propanoic acid and 6-chloro-2,3-dihydrobenzoxazol-2-one, calculated as the stoichiometric equivalent of fenoxaprop-ethyl, in or on the commodity

Commodity	Parts per million
Grass, hay	0.09

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 1377, Jan. 9, 1998, as amended at 63 FR 19837, Apr. 22, 1998; 73 FR 33718, June 13, 2008; 75 FR 80346, Dec. 22, 2010; 76 FR 23495, Apr. 27, 2011; 78 FR 78748, Dec. 27, 2013; 79 FR 26164, May 7, 2014]

[↑ Back to Top](#)**§180.431 Clopyralid; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the herbicide clopyralid, including its metabolites and degradates, in or on the commodities in the table below from its application in the acid form or in the form of its salts. Compliance with the tolerance levels specified below is to be determined by measuring only clopyralid, (3,6-dichloro-2-pyridinecarboxylic acid), in or on the following commodities:

Commodity	Parts per million
Barley, bran	12
Barley, grain	3.0
Barley, hay	9.0
Barley, pearled barley	12
Barley, straw	9.0
Beet, garden, roots	4.0
Beet, sugar, molasses	10
Beet, sugar, roots	2.0
Berry, low growing, subgroup 13-07G	4.0
Brassica, leafy greens, subgroup 4-16B	5.0
Broccoli, Chinese	2.0
Bushberry subgroup 13-07B	0.50
Canola, meal	6.0
Cattle, fat	1.0
Cattle, liver	3.0
Cattle, meat	1.0
Cattle, meat byproducts, except liver	36.0
Corn, field, forage	3.0
Corn, field, grain	1.0
Corn, field, milled byproducts	1.5
Corn, field, stover	10.0
Corn, pop, grain	1.0
Corn, pop, stover	10.0
Corn, sweet, forage	7.0
Corn, sweet, kernel plus cob with husks removed	1.0
Corn, sweet, stover	10.0
Egg	0.1
Flax, meal	6.0
Fruit, pome, group 11-10	0.05
Fruit, stone, group 12-12	0.50
Goat, fat	1.0
Goat, liver	3.0
Goat, meat	1.0
Goat, meat byproducts, except liver	36.0
Grass, forage	500.0
Grass, hay	500.0
Hog, fat	0.2
Hog, meat	0.2
Hog, meat byproducts	0.2
Hop, dried cones	5.0
Horse, fat	1.0
Horse, liver	3.0
Horse, meat	1.0
Horse, meat byproducts, except liver	36.0
Kohlrabi	2.0
Milk	0.2
Oat, forage	9.0
Oat, grain	3.0
Oat, groats/rolled oats	12
Oat, straw	9.0
Peppermint, tops	3.0
Plum, prune, dried	1.5
Poultry, fat	0.2
Poultry, meat	0.2
Poultry, meat byproducts	0.2
Radish, roots	0.30
Rapeseed, forage	3.0
Rapeseed, meal	6.0
Rapeseed, subgroup 20A, except gold of pleasure	3.0
Sheep, fat	1.0
Sheep, liver	3.0
Sheep, meat	1.0

Sheep, meat byproducts, except liver	36.0
Spearmint, tops	3.0
Spinach	5.0
Stalk and stem vegetable subgroup 22A	1.0
Swiss chard	3.0
Teff, forage	9.0
Teff, grain	3.0
Teff, hay	9.0
Teff, straw	9.0
Turnip, roots	1.0
Vegetable, <i>Brassica</i> , head and stem, group 5-16	2.0
Vegetable, leaves of root and tuber, group 2	5.0
Wheat, bran	12
Wheat, forage	9.0
Wheat, germ	12
Wheat, grain	3.0
Wheat, middling	12
Wheat, shorts	12
Wheat, straw	9.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[52 FR 10566, Apr. 2, 1987]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.431, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

#### §180.432 Lactofen; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide lactofen, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only lactofen, 2-ethoxy-1-methyl-2-oxoethyl 5-[2-chloro-4-(trifluoromethyl)phenoxy]-2-nitrobenzoate, in or on the commodity.

Commodity	Parts per million
Beans, snap, succulent, except lima bean	0.01
Cotton, gin byproducts	0.02
Cotton, undelinted seed	0.01
Peanut	0.01
Soybean, seed	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of the herbicide lactofen, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only lactofen, 2-ethoxy-1-methyl-2-oxoethyl 5-[2-chloro-4-(trifluoromethyl)phenoxy]-2-nitrobenzoate, in or on the commodity.

Commodity	Parts per million
Okra	0.02
Vegetables, fruiting, group 08	0.02

(d) *Indirect or inadvertent residues.* [Reserved]

[69 FR 57216, Sept. 24, 2004, as amended at 72 FR 33906, June 20, 2007; 76 FR 23496, Apr. 27, 2011]

[↑ Back to Top](#)

#### §180.433 Fomesafen; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide fomesafen, including its metabolites and degradates, in or on the following commodities. Compliance with the tolerance levels specified in the following table below is to be determined by measuring only fomesafen, 5-[2-chloro-4-(trifluoromethyl)phenoxy]-N-(methylsulfonyl)-2-nitrobenzamide, in or on the commodity.

Commodity	Parts per million
Berry, low growing, subgroup 13-07G, except cranberry	0.02
Cantaloupe	0.025
Cotton, gin byproducts	0.025
Cotton, undelinted seed	0.025
Cucumber	0.025
Pepper, bell	0.025
Pepper, non-bell	0.025
Pumpkin	0.025
Squash, summer	0.025
Squash, winter	0.025
Tomato	0.025
Vegetable, legume, group 6	0.05
Vegetable, tuberous and corm, subgroup 1C	0.025
Watermelon	0.025

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 25951, May 3, 2006, as amended at 72 FR 52020, Sept. 12, 2007; 76 FR 12882, Mar. 9, 2011; 78 FR 65570, Nov. 1, 2013; 80 FR 9391, Feb. 23, 2015; 83 FR 5316, Feb. 7, 2018]

[↑ Back to Top](#)

#### §180.434 Propiconazole; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of propiconazole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only those propiconazole residues convertible to 2,4-dichlorobenzoic acid (2,4-DCBA), expressed as the stoichiometric equivalent of propiconazole, in or on the commodity in the table below:

Commodity	Parts per million
Almond, hulls	7.0
Avocado	0.2
Banana	0.2
Barley, bran	6.0
Barley, grain	3.0
Barley, hay	30
Barley, straw	20
Bean, dry seed	0.40
Bean, snap	0.70
Bean, succulent shelled	0.10
Beet, garden, tops	5.5
Beet, sugar, dried pulp	1.0
Beet, sugar, molasses	1.5
Beet, sugar, roots	0.3
Beet, sugar, tops	10
Brassica, leafy greens, subgroup 4-16B, except watercress	20
Bushberry, subgroup 13-07B	1.0
Caneberry, subgroup 13-07A	1.0
Cattle, fat	0.05
Cattle, kidney	2.0
Cattle, liver	2.0
Cattle, meat	0.05
Cattle, meat byproducts, except liver and kidney	0.05
Celtuce	5
Cilantro, leaves	13
Citrus, oil	1000
Corn, field, forage	12
Corn, field, grain	0.2
Corn, field, stover	30
Corn, pop, grain	0.2
Corn, pop, stover	30
Corn, sweet, forage	6.0
Corn, sweet, kernel plus cob with husks removed	0.1
Corn, sweet, stover	30
Dill, seed	15
Dillweed, dried leaves	80

Dillweed, fresh leaves	30
Fennel, Florence, fresh leaves and stalk	5
Fruit, citrus, group 10-10	8.0
Fruit, stone, group 12-12, except plum	4.0
Goat, fat	0.05
Goat, kidney	2.0
Goat, liver	2.0
Goat, meat	0.05
Goat, meat byproducts, except liver and kidney	0.05
Grain, aspirated fractions	110
Grass, forage	0.5
Grass, hay	0.5
Grass, straw	40
Hog, kidney	0.2
Hog, liver	0.2
Horse, fat	0.05
Horse, kidney	2.0
Horse, liver	2.0
Horse, meat	0.05
Horse, meat byproducts, except liver and kidney	0.05
Leaf petiole vegetable subgroup 22B	5
Low growing berry subgroup 13-07G, except cranberry	1.3
Milk	0.05
Mushroom	0.1
Nut, tree, group 14-12	0.10
Oat, forage	4.0
Oat, grain	3.0
Oat, hay	15
Oat, straw	10
Onion, bulb subgroup 3-07A	0.2
Onion, green, subgroup 3-07B	9.0
Parsley, fresh leaves	13
Parsley, dried leaves	35
Peanut	0.2
Peanut, hay	20
Peppermint, tops	10.0
Pineapple	4.5
Pineapple, process residue	7.0
Plum	0.60
Rapeseed subgroup 20A	0.30
Quinoa, grain	3.0
Radish, tops	0.20
Rice, bran	15
Rice, grain	7.0
Rice, hulls	20
Rye, bran	0.6
Rye, forage	9.0
Rye, grain	0.3
Rye, straw	10
Sheep, fat	0.05
Sheep, kidney	2.0
Sheep, liver	2.0
Sheep, meat	0.05
Sheep, meat byproducts, except liver and kidney	0.05
Sorghum, grain, forage	12
Sorghum, grain, grain	3.5
Sorghum, grain, stover	15
Soybean, forage	11
Soybean, hay	30
Soybean, seed	2.0
Spearmint, tops	10.0
Sugarcane, cane	0.4
Swiss chard	5
Ti palm, leaves	10
Ti palm, roots	0.30
Tomato	3.0
Vegetable, foliage of legume, group 7	30
Vegetable, root, except sugar beet, subgroup 1B	0.3
Watercress	6.0
Wheat, bran	0.6
Wheat, forage	15
Wheat, grain	0.3
Wheat, hay	30

(2) Tolerances are established for propiconazole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only propiconazole, 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole, in or on the commodity.

Commodity	Parts per million
Tea <sup>1</sup>	4.0

<sup>1</sup>There are no United States registrations for use of propiconazole on tea as of December 24, 2015.

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of propiconazole (1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl] methyl]-1H-1,2,4-triazole) and its metabolites determined as 2,4-dichlorobenzoic acid and expressed as parent compound, in connection with use of the pesticide under section 18 emergency exemptions granted by EPA. The tolerances will expire and are revoked on the dates specified in the following table:

Commodity	Parts per million	Expiration/revocation date
Nectarine	2.0	12/31/13
Peach	2.0	12/31/13

(c) *Tolerances with regional registrations.* A tolerance with regional registration, as defined in §180.1(l), is established for residues of 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole and its metabolites determined as 2,4-dichlorobenzoic acid and expressed as parent compound, in or on the following commodities:

Commodity	Parts per million
Cranberry	1.0
Rice, wild, grain	0.5

(d) *Indirect or inadvertent residues.* Tolerances are established for the combined residues of the fungicide 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl] methyl]-1H-1,2,4-triazole and its metabolites determined as 2,4-dichlorobenzoic acid and expressed as parent compound in or on the following commodities when present therein as a result of application of propiconazole to growing crops in paragraphs (a) and (c) of this section:

Commodity	Parts per million
Alfalfa, forage	0.1
Alfalfa, hay	0.1

[71 FR 55306, Sept. 22, 2006, as amended at 72 FR 20439, Apr. 25, 2007; 74 FR 12613, Mar. 25, 2009; 75 FR 80346, Dec. 22, 2010; 76 FR 27268, May 11, 2011; 77 FR 38204, June 27, 2012; 77 FR 75044, Dec. 19, 2012; 78 FR 23503, Apr. 19, 2013; 78 FR 78748, Dec. 27, 2013; 79 FR 18467, Apr. 2, 2014; 80 FR 72599, Nov. 20, 2015; 80 FR 79718, Dec. 23, 2015; 80 FR 80275, Dec. 24, 2015; 82 FR 1210, Jan. 5, 2017; 84 FR 39774, Aug. 12, 2019]

[↑ Back to Top](#)

#### §180.435 Deltamethrin; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of deltamethrin, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified is to be determined by measuring only deltamethrin, (1*R*,3*R*)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylic acid (*S*)-*alpha*-cyano-3-phenoxybenzyl ester, and its major metabolites, *trans*-deltamethrin, (*S*)-*alpha*-cyano-*m*-phenoxybenzyl(1*R*,3*S*)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate, and *alpha*-*R*-deltamethrin, (*R*)-*alpha*-cyano-*m*-phenoxybenzyl-(1*R*,3*R*)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate, in or on the commodity.

Commodity	Parts per million
Almond, hulls	2.5
Apple, wet pomace	1.0
Artichoke, globe	0.5
Barley, bran	5.0
Cattle, fat	0.05
Cattle, meat	0.02
Cattle, meat byproducts	0.05
Citrus, dried pulp*	3.0
Citrus, oil*	50
Corn, field, forage	0.7
Corn, field, refined oil	2.5
Corn, field, stover	5.0
Corn, pop, stover	5.0
Corn, sweet, forage	10

Corn, sweet, kernel plus cob with husks removed	0.03
Corn, sweet, stover	15
Cotton, refined oil	0.2
Cotton, undelinted seed	0.04
Egg	0.02
Fish—freshwater finfish	0.01
Fish—freshwater finfish, farm raised	0.01
Fish—saltwater finfish, other	0.01
Fish—saltwater finfish, tuna	0.01
Fruit, pome, Group 11	0.2
Goat, fat	0.05
Goat, meat	0.02
Goat, meat byproducts	0.05
Grain, aspirated fractions	65
Grain, cereal, Group 15, except sweet corn	1.0
Hog, fat	0.05
Horse, fat	0.05
Horse, meat	0.02
Horse, meat byproducts	0.05
Lychee*	0.2
Milk, fat (reflecting 0.02 ppm in whole milk)	0.1
Nut, tree, Group 14	0.1
Onion, bulb	0.1
Onion, green	1.5
Orange*	0.30
Poultry, fat	0.05
Poultry, meat	0.02
Poultry, meat byproducts	0.02
Radish, tops	4.0
Rapeseed	0.2
Rice, hulls	2.5
Rye, bran	5.0
Sheep, fat	0.05
Sheep, meat	0.02
Sheep, meat byproducts	0.05
Sorghum, grain, forage	0.5
Sorghum, grain, stover	1.0
Soybean, seed	0.1
Soybean, hulls	0.2
Starfruit*	0.2
Sunflower, seed	0.1
Tomato	0.2
Tomato, paste	1.0
Tomato, puree	1.0
Vegetable, cucurbit, Group 9	0.2
Vegetable, fruiting, Group 8	0.3
Vegetable, root, except sugar beet, Subgroup IB	0.2
Vegetable, tuberous and corm, Subgroup IC	0.04
Wheat, bran	5.0

\*There are no U.S. registrations for use of deltamethrin on starfruit and lychee.

\*There are no U.S. registrations.

(2) A tolerance of 0.05 ppm is established for residues of the insecticide deltamethrin, including its metabolites and degradates, in or on all food/feed items (other than those covered by a higher tolerance as a result of use on growing crops) when deltamethrin is used in food/feed handling establishments or as a wide-area mosquito adulticide. Compliance with the tolerance levels specified is to be determined by measuring only deltamethrin, (1*R*,3*R*)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylic acid (*S*)-*alpha*-cyano-3-phenoxybenzyl ester, and its major metabolites, *trans*-deltamethrin, (*S*)-*alpha*-cyano-*m*-phenoxybenzyl(1*R*,3*S*)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate, and *alpha*-*R*-deltamethrin, (*R*)-*alpha*-cyano-*m*-phenoxybenzyl-(1*R*,3*R*)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate, in or on the commodity.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 63001, Nov. 26, 1997, as amended at 63 FR 45414, Aug. 26, 1998; 69 FR 62614, Oct. 27, 2004; 74 FR 46375, Sept. 9, 2009; 76 FR 34885, June 15, 2011; 79 FR 66301, Nov. 7, 2014; 80 FR 16302, Mar. 27, 2015; 82 FR 18580, Apr. 20, 2017]



[↑ Back to Top](#)**§180.436 Cyfluthrin and the isomer beta-cyfluthrin; tolerances for residues.**

(a) *General.* (1) Tolerances are established for residues of the insecticide cyfluthrin (cyano(4-fluoro-3-phenoxyphenyl)methyl-3-(2,2-dichloroethyl)-2,2-dimethyl-cyclopropane-carboxylate; CAS No. 68359-37-5) in or on the following raw agricultural commodities:

Commodity	Parts per million
Alfalfa	5.0
Alfalfa, forage	5.0
Alfalfa, hay	13
Almond, hulls	0.5
Barley, bran	0.5
Barley, grain	0.15
Beet, sugar, dried pulp	1.0
Beet, sugar, roots	0.10
Brassica, head and stem, subgroup 5A	2.5
Brassica, leafy greens, subgroup 5B	7.0
Buckwheat, grain	0.15
Carrot, roots	0.20
Cattle, fat	2.0
Cattle, meat	0.10
Cattle, meat byproducts	0.10
Citrus, dried pulp	0.3
Citrus, oil	0.3
Corn, field, grain	0.05
Corn, pop, grain	0.05
Corn, sweet, kernel plus cob with husks removed	0.05
Cotton, hulls	2.0
Cotton, refined oil	2.0
Cotton, undelinted seed	1.0
Egg	0.01
Fruit, citrus, group 10	0.2
Fruit, pome, group 11	0.5
Fruit, stone, group 12	0.3
Goat, fat	2.0
Goat, meat	0.05
Goat, meat byproducts	0.05
Grain, aspirated fractions	150
Grain, cereal, forage, fodder and hay, group 16, forage, except rice	25
Grain, cereal, forage, fodder and hay, group 16, hay, except rice	6.0
Grain, cereal, forage, fodder and hay, group 16, stover, except rice	30
Grain, cereal, forage, fodder and hay, group 16, straw, except rice	7.0
Grape	1.0
Grape, raisin	3.5
Grass, forage, fodder and hay, group 17, forage	12
Grass, forage, fodder and hay, group 17, hay	50
Hog, fat	0.5
Hog, meat	0.01
Hog, meat byproducts	0.01
Hop, dried cones	20.0
Hop, vines	4.0
Horse, fat	2.0
Horse, meat	0.05
Horse, meat byproducts	0.05
Lettuce, head	2.0
Lettuce, leaf	3.0
Milk	0.2
Milk, fat	5.0
Millet, grain	0.15
Mustard greens	7.0
Nut, tree, group 14	0.01
Oat, bran	0.5
Oat, grain	0.15
Pea and bean, dried shelled, except soybean, subgroup 6C	0.15
Pea, dry, seed	0.15
Pea, southern, succulent	0.25
Peanut	0.01
Peanut, hay	6.0
Pepper	0.50
Pistachio	0.01

Poultry, fat	0.01
Poultry, meat	0.01
Poultry, meat byproducts	0.01
Radish, roots	1.0
Rye, bran	0.5
Rye, grain	0.15
Sheep, fat	2.0
Sheep, meat	0.05
Sheep, meat byproducts	0.05
Sorghum, grain, grain	3.5
Soybean, forage	8.0
Soybean, hay	4.0
Soybean, seed	0.03
Sugarcane, cane	0.05
Sugarcane, molasses	0.20
Sunflower, forage	5.0
Sunflower, seed	0.02
Teosinte, grain	0.05
Tomato	0.20
Tomato, dry pomace	5.0
Tomato, paste	0.5
Tomato, wet pomace	5.0
Triticale, grain	0.15
Turnip, greens	7.0
Vegetable, cucurbit, group 9	0.1
Vegetable, fruiting, group 8	0.5
Vegetable, leafy, except brassica, group 4	6.0
Vegetable, tuberous and corm, subgroup 1C	0.01
Wheat, bran	0.5
Wheat, grain	0.15
Wheat, shorts	0.5

(2) A tolerance of 0.05 ppm is established for residues of the insecticide cyfluthrin (cyano(4-fluoro-3-phenoxyphenyl)methyl-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate; CAS Reg. No. 69359-37-5) in food commodities exposed to the insecticide during treatment of food-handling establishments where food and food products are held, processed, prepared, or served. Treatments may be made by general surface, spot, and/or crack and crevice applications.

(i) General surface treatments shall be limited to a maximum of 3.8 grams of active ingredient per 1,000 square feet, applying to walls, floors, and ceilings with a low-pressure system. Cover or remove all food processing and/or handling equipment during application. Do not apply directly to food products. Reapplications may be made at 10-day intervals.

(ii) Crack and crevice or spot treatments shall be limited to a maximum of 0.1 percent of the active ingredient weight, applied with a low-pressure system with a pinpoint or variable-pattern nozzle. Dust formulation shall be limited to a maximum of 0.1 percent of the active ingredient by weight, applied using a hand duster, power duster, or other equipment capable of applying dust insecticide directly into voids and cracks and crevices. Dust applications should be made in a manner to avoid deposits on exposed surfaces or introducing the material into the air. Cover exposed food or remove food from premises. Do not apply directly to food. Reapplications may be made at 10-day intervals.

(iii) To ensure safe use of the insecticide, its label and labeling shall conform to that registered by the Environmental Protection Agency, and it shall be used in accordance with such label and labeling.

(3) A tolerance of 0.05 part per million is established for residues of the insecticide cyfluthrin (cyano(4-fluoro-3-phenoxyphenyl)methyl-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate; CAS Reg. No. 68359-37-5) in feed commodities exposed to the insecticide during treatment of feed-handling establishments where feed and feed products are held, processed, prepared, or served. Treatments may be made by general surface, spot, and/or crack and crevice applications.

(i) General surface treatments shall be limited to a maximum of 3.8 grams of active ingredient per 1,000 square feet, applying to walls, floors, and ceilings with a low-pressure system. Cover or remove all feed processing and/or handling equipment during application. Do not apply directly to feed products. Reapplications may be made at 10-day intervals.

(ii) Crack and crevice or spot treatments shall be limited to a maximum of 0.1 percent of the active ingredient by weight, applied with a low-pressure system with a pinpoint or variable-pattern nozzle. Dust formulation shall be limited to a maximum of 0.1 percent of the active ingredient by weight, applied using a hand duster, power duster, or other equipment capable of applying dust insecticide directly into voids and cracks and crevices. Dust applications should be made in a manner to avoid deposits on exposed surfaces or introducing the material into the air. Cover exposed feed or remove feed from premises. Do not apply directly to feed. Reapplications may be made at 10-day intervals.

(iii) To ensure safe use of the insecticide, its label and labeling shall conform to that registered by EPA, and it shall be used in accordance with such label and labeling.

(4) Tolerances are established for residues of the isomer, beta-cyfluthrin, cyano(4-fluoro-3-phenoxyphenyl)methyl-3-(2,2-dichloroethenyl)-2,2-dimethyl-cyclopropanecarboxylate [mixture comprising the enantiomeric pair (*R*)- $\alpha$ -cyano-4-fluoro-3-phenoxybenzyl (1*S*,3*S*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate and (*S*)- $\alpha$ -cyano-4-fluoro-3-phenoxybenzyl (1*R*,3*R*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate with the enantiomeric pair (*R*)- $\alpha$ -cyano-4-fluoro-3-phenoxybenzyl (1*S*,3*R*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate and (*S*)- $\alpha$ -cyano-4-fluoro-3-phenoxybenzyl (1*R*,3*S*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate], in or on the following raw agricultural commodities:

Commodity	Parts per million
Alfalfa	5.0
Alfalfa, forage	5.0
Alfalfa, hay	13
Almond, hulls	0.5
Barley, bran	0.5
Barley, grain	0.15
Beet, sugar, dried pulp	1.0
Beet, sugar, roots	0.10
Brassica, head and stem, subgroup 5A	2.5
Brassica, leafy greens, subgroup 5B	7.0
Buckwheat, grain	0.15
Carrot, roots	0.20
Cattle, fat	2.0
Cattle, meat	0.10
Cattle, meat byproducts	0.10
Citrus, dried pulp	0.3
Citrus, oil	0.3
Corn, field, grain	0.05
Corn, pop, grain	0.05
Corn, sweet, kernel plus cob with husks removed	0.05
Cotton, hulls	2.0
Cotton, refined oil	2.0
Cotton, undelinted seed	1.0
Egg	0.01
Fruit, citrus, group 10	0.2
Fruit, pome, group 11	0.5
Fruit, stone, group 12	0.3
Goat, fat	2.0
Goat, meat	0.05
Goat, meat byproducts	0.05
Grain, aspirated fractions	150
Grain, cereal, forage, fodder and hay, group 16, forage, except rice	25
Grain, cereal, forage, fodder and hay, group 16, hay, except rice	6.0
Grain, cereal, forage, fodder and hay, group 16, stover, except rice	30
Grain, cereal, forage, fodder and hay, group 16, straw, except rice	7.0
Grape	1.0
Grape, raisin	3.5
Grass, forage, fodder and hay, group 17, forage	12
Grass, forage, fodder and hay, group 17, hay	50
Hog, fat	0.5
Hog, meat	0.01
Hog, meat byproducts	0.01
Hop, dried cones	20.0
Hop, vines	4.0
Horse, fat	2.0
Horse, meat	0.05
Horse, meat byproducts	0.05
Lettuce, head	2.0
Lettuce, leaf	3.0
Milk	0.2
Milk, fat	5.0
Millet, grain	0.15
Mustard greens	7.0
Nut, tree, group 14	0.01
Oat, bran	0.5
Oat, grain	0.15
Pea and bean, dried shelled, except soybean, subgroup 6C	0.15
Pea, dry, seed	0.15
Pea, southern, succulent	0.25
Peanut	0.01

Peanut, hay	6.0
Pepper	0.50
Pistachio	0.01
Poultry, fat	0.01
Poultry, meat	0.01
Poultry, meat byproducts	0.01
Radish, roots	1.0
Rye, bran	0.5
Rye, grain	0.15
Sheep, fat	2.0
Sheep, meat	0.05
Sheep, meat byproducts	0.05
Sorghum, grain, grain	3.5
Soybean, forage	8.0
Soybean, hay	4.0
Soybean, seed	0.03
Sugarcane, cane	0.05
Sugarcane, molasses	0.20
Sunflower, forage	5.0
Sunflower, seed	0.02
Teosinte, grain	0.05
Tomato	0.20
Tomato, paste	0.5
Tomato, pomace	5.0
Triticale, grain	0.15
Turnip, greens	7.0
Vegetable, cucurbit, group 9	0.1
Vegetable, fruiting, group 8	0.5
Vegetable, leafy greens, except Brassica, group 4	6.0
Vegetable, tuberous and corm, subgroup 1C	0.01
Wheat, bran	0.5
Wheat, grain	0.15
Wheat, shorts	0.5

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[53 FR 1924, Jan. 25, 1988]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.436, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.437 Imazamethabenz-methyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide imazamethabenz-methyl, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only imazamethabenz-methyl (methyl 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-4-methylbenzoate) or (methyl 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-methylbenzoate), as the sum of its para- and meta-isomers in or on the commodity.

Commodity	Parts per million	Expiration/revocation date
Barley, grain	0.10	12/31/16
Barley, straw	2.00	12/31/16
Sunflower, seed	0.10	12/31/16
Wheat, grain	0.10	12/31/16
Wheat, straw	2.00	12/31/16

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[81 FR 34906, June 1, 2016]

[↑ Back to Top](#)**§180.438 Lambda-cyhalothrin and an isomer gamma-cyhalothrin; tolerances for residues.**

(a) *General.* (1) Tolerances are established for the combined residues of the pyrethroid lambda-cyhalothrin, 1:1 mixture of (S)- $\alpha$ -cyano-3-phenoxybenzyl-(Z)-(1R,3R)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate and (R)- $\alpha$ -cyano-3-phenoxybenzyl-(Z)-(1S,3S)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate and its epimer expressed as epimer of lambda-cyhalothrin, a 1:1 mixture of (S)- $\alpha$ -cyano-3-phenoxybenzyl-(Z)-(1S,3S)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate and (R)- $\alpha$ -cyano-3-phenoxybenzyl-(Z)-(1R,3R)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate, on plants and livestock, as indicated in the following table.

Commodity	Parts per million
Alfalfa, forage	5.0
Alfalfa, hay	6.0
Almond, hulls	1.5
Apple, wet pomace	2.50
Avocado, imported	0.20
Barley, bran	0.2
Barley, grain	0.05
Barley, hay	2.0
Barley, straw	2.0
Brassica, head and stem, subgroup 5A	0.4
Buckwheat, grain	0.05
Canola, refined oil	2.0
Canola, seed	1.0
Cattle, fat	3.0
Cattle, meat	0.2
Cattle, meat byproducts	0.2
Corn, field, flour	0.15
Corn, field, forage	6.0
Corn, field, grain	0.05
Corn, field, stover	1.0
Corn, pop, grain	0.05
Corn, pop, grain, flour	0.05
Corn, pop, stover	1.0
Corn, sweet, forage	6.0
Corn, sweet, stover	1.0
Corn, sweet, kernel plus cob with husks removed	0.05
Cotton, undelinted seed	0.05
Egg	0.01
Fruit, pome, group 11	0.30
Fruit, stone, group 12	0.50
Garlic	0.1
Goat, fat	3.0
Goat, meat	0.2
Goat, meat byproducts	0.2
Grain, aspirated fractions	2.0
Grass, forage, fodder and hay, group 17	7.0
Hog, fat	0.2
Hog, meat	0.01
Hog, meat byproducts	0.02
Hop, dried cones	10.0
Horse, fat	3.0
Horse, meat	0.2
Horse, meat byproducts	0.2
Lettuce, head	2.0
Lettuce, leaf	2.0
Milk, fat (reflecting 0.4 ppm in whole milk)	10.0
Nut, tree, group 14	0.05
Oat, grain	0.05
Oat, forage	2.0
Oat, hay	2.0
Oat, straw	2.0
Onion, bulb	0.1
Pea and bean, dried shelled, except soybean, subgroup 6C	0.10
Pea and bean, succulent shelled, subgroup 6B	0.01
Peanut	0.05
Peanut, hay	3.0
Pistachio	0.05
Poultry, fat	0.03
Poultry, meat	0.01

Poultry, meat byproducts	0.01
Rice, grain	1.0
Rice, hulls	5.0
Rice, wild, grain	1.0
Rye, bran	0.2
Rye, grain	0.05
Rye, forage	2.0
Rye, straw	2.0
Sheep, fat	3.0
Sheep, meat	0.2
Sheep, meat byproducts	0.2
Soybean	0.01
Sorghum, grain, grain	0.2
Sorghum, grain, forage	0.30
Sorghum, grain, stover	0.50
Sugarcane, cane	0.05
Sunflower, forage	0.2
Sunflower, seed, hulls	0.50
Sunflower, refined oil	0.30
Sunflower, seed	0.2
Tomato	0.1
Tomato, dry pomace	6.0
Tomato, wet pomace	6.0
Vegetable, cucurbit, group 9	0.05
Vegetable, fruiting, group 8	0.20
Vegetable, legume, edible podded, subgroup 6A	0.20
Vegetable, tuberous and corm, subgroup 1C	0.02
Wheat, grain	0.05
Wheat, forage	2.0
Wheat, hay	2.0
Wheat, straw	2.0
Wheat, bran	0.2

(2) Tolerances<sup>1</sup> are established for the combined residues of the pyrethroid [gamma-cyhalothrin (the isolated active isomer of lambda-cyhalothrin) (S)-'-cyano-3-phenoxybenzyl (Z)-(1*R*,3*R*)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate) and its epimer (R)-'-cyano-3-phenoxybenzyl (Z)-(1*R*,3*R*)-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate in/on the following commodities:

Commodity	Parts per million
Alfalfa, forage	5
Alfalfa, hay	6
Almond, hulls	1.5
Apple, pomace, wet	2.50
Avocado, imported	0.20
Brassica, head and stem, subgroup 5A	0.4
Canola, seed	0.15
Cattle, fat	3
Cattle, meat	0.2
Cattle, meat byproducts	0.2
Corn, field, flour	0.15
Corn, field, forage	6.0
Corn, field, grain	0.05
Corn, field, stover	1.0
Corn, pop, grain	0.05
Corn, pop, stover	1.0
Corn, sweet, forage	6.0
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	1.0
Cotton, undelinted seed	0.05
Egg	0.01
Fruit, pome, group 11	0.30
Fruit, stone, group 12	0.50
Garlic	0.10
Goat, fat	3.0
Goat, meat	0.2
Goat, meat byproducts	0.2
Grain, aspirated fractions	2.0
Hog, fat	3.0
Hog, meat	0.2
Hog, meat byproducts	0.2
Horse, fat	3.0
Horse, meat	0.2

Horse, meat byproducts	0.2
Lettuce, head	2.0
Lettuce, leaf	2.0
Milk, fat (reflecting 0.20 ppm in whole milk)	5.0
Nut, tree, group 14	0.05
Okra	0.20
Onion, bulb	0.1
Pea and bean, dried shelled, except soybean, subgroup 6C	0.10
Pea and bean, succulent shelled, subgroup 6B	0.01
Peanut	0.05
Peanut, hay	3.0
Pistachio	0.05
Poultry, fat	0.03
Poultry, meat	0.01
Poultry, meat byproducts	0.01
Rice, grain	1.0
Rice, hulls	5.0
Sheep, fat	3.0
Sheep, meat	0.2
Sheep, meat byproducts	0.2
Sorghum, grain, forage	0.30
Sorghum, grain, grain	0.20
Sorghum, grain, stover	0.50
Soybean	0.01
Sugarcane	0.05
Sunflower, forage	0.20
Sunflower, refined oil	0.30
Sunflower, seed	0.20
Sunflower, seed, hulls	0.50
Tomato	0.10
Tomato, dry pomace	6.0
Tomato, wet pomace	6.0
Vegetables, fruiting, group 8	0.20
Vegetable, legume, edible podded, subgroup 6A	0.20
Wheat, bran	2.0
Wheat, forage	2.0
Wheat, grain	0.05
Wheat, hay	2.0
Wheat, straw	2.0

<sup>1</sup> The analytical enforcement methods for lambda-cyhalothrin are applicable for determination of gamma-cyhalothrin residues in plant and animal commodities.

(3) A tolerance of 0.01 part per million is established for residues of the insecticide lambda-cyhalothrin and an isomer gamma-cyhalothrin in or on all food commodities (other than those already covered by a higher tolerance as a result of use on growing crops) in food-handling establishments where food products are held, processed, or prepared.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 74817, Dec. 13, 2006, as amended at 72 FR 45663, Aug. 15, 2007; 73 FR 39264, July 9, 2008; 76 FR 34885, June 15, 2011; 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.439 Thifensulfuron methyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of thifensulfuron methyl, including its metabolites and degradates, in or on the commodities listed in the following table [below]. Compliance with the tolerance levels specified in the following table [below] is to be determined by measuring only thifensulfuron methyl (methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino] sulfonyl]-2-thiophenecarboxylate).

Commodity	Parts per million
Barley, grain	0.05
Barley, hay	0.8
Barley, straw	0.10
Canola, seed	0.02
Chicory, roots	0.01

Chicory, tops	0.01
Corn, field, forage	0.10
Corn, field, grain	0.05
Corn, field, stover	0.10
Cotton, gin byproducts	0.02
Cotton, undelinted seed	0.02
Flax, seed	0.02
Oat, forage	0.2
Oat, grain	0.05
Oat, hay	0.05
Oat, straw	0.10
Rice, grain	0.05
Sorghum, grain, forage.	0.05
Sorghum, grain, grain	0.05
Sorghum, grain, stover	0.05
Soybean	0.10
Wheat, forage	2.5
Wheat, grain	0.05
Wheat, hay	0.7
Wheat, straw	0.10

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances are established for residues of thifensulfuron methyl, including its metabolites and degradates, in or on the commodities listed in the following table [below]. Compliance with the tolerance levels specified in the following table [below] is to be determined by measuring only thifensulfuron methyl (methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino] sulfonyl]-2-thiophenecarboxylate).

Commodity	Parts per million
Safflower, seed	0.05

(d) *Indirect or inadvertent residues.* [Reserved]

[69 FR 55982, Sept. 17, 2004, as amended at 69 FR 63957, Nov. 3, 2004; 72 FR 13184, Mar. 21, 2007; 73 FR 47075, Aug. 13, 2008; 75 FR 19277, Apr. 14, 2010; 77 FR 52240, Aug. 29, 2012; 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

#### §180.440 Tefluthrin; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the insecticide tefluthrin (2,3,5,6 tetrafluoro-4-methylphenyl)methyl-(1 alpha, 3 alpha)-(Z)-(±)-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate) and its metabolite (Z)-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylic acid in or on the following commodities:

Commodity	Parts per million
Corn, field, forage	0.06
Corn, field, grain	0.06
Corn, field, stover	0.06
Corn, pop, grain	0.06
Corn, pop, stover	0.06
Corn, sweet, forage	0.06
Corn, sweet, kernel plus cob with husks removed	0.06
Corn, sweet, stover	0.06

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 62961, Nov. 26, 1997, as amended at 74 FR 46375, Sept. 9, 2009]

[↑ Back to Top](#)

#### §180.441 Quizalofop ethyl; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide quizalofop ethyl, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table



is to be determined by measuring only those quizalofop ethyl residues convertible to 2-methoxy-6-chloroquinoxaline, expressed as the stoichiometric equivalent of quizalofop ethyl, in or on the commodity.

Commodity	Parts per million
Barley, grain	0.05
Barley, hay	0.05
Barley, straw	0.05
Bean, dry, seed	0.4
Bean, succulent	0.25
Beet, sugar, molasses	0.2
Beet, sugar, roots	0.1
Beet, sugar, tops	0.5
Corn, field, forage	0.02
Corn, field, grain	0.02
Corn, field, stover	0.03
Cotton, undelinted seed	0.1
Cowpea, forage	3.0
Cowpea, hay	3.0
Crambe, meal	2.0
Flax, seed	0.05
Gold of pleasure, meal	2.0
Lentil, seed	0.05
Pea, dry	0.25
Pea, field, hay	3.0
Pea, field, vines	3.0
Pea, succulent	0.3
Peppermint, tops	2.0
Rapeseed, meal	2.0
Rapeseed subgroup 20A, except flax, seed	1.5
Rice, grain	0.05
Sorghum, grain, aspirated grain fractions	1.0
Sorghum, grain, forage	0.20
Sorghum, grain, grain	0.20
Sorghum, grain, stover	0.30
Soybean, flour	0.5
Soybean, hulls	0.02
Soybean, meal	0.5
Soybean, seed	0.05
Spearmint, tops	2.0
Sunflower, seed	1.9
Wheat, forage	2.0
Wheat, germ	0.40
Wheat, grain	0.05
Wheat, hay	2.0
Wheat, milled byproducts	0.40
Wheat, straw	0.80

(2) Tolerances are established for residues of the herbicide quizalofop ethyl, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only those quizalofop ethyl residues convertible to quizalofop (2-[4-(6-chloroquinoxalin-2-yl-oxy)phenoxy]propanoic acid), expressed as quizalofop, in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.05
Cattle, meat	0.02
Cattle, meat byproducts	0.05
Egg	0.02
Goat, fat	0.05
Goat, meat	0.02
Goat, meat byproducts	0.05
Hog, fat	0.05
Hog, meat	0.02
Hog, meat byproducts	0.05
Horse, fat	0.05
Horse, meat	0.02
Horse, meat byproducts	0.05
Milk	0.01
Milk, fat	0.25
Poultry, fat	0.05
Poultry, meat	0.02
Poultry, meat byproducts	0.05

Sheep, fat	0.05
Sheep, meat	0.02
Sheep, meat byproducts	0.05

(3) Tolerances are established for residues of the herbicide quizalofop-P-ethyl, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring quizalofop ethyl and quizalofop acid, expressed as the stoichiometric equivalent of quizalofop ethyl, in or on the commodity.

Commodity	Parts per million
Fish-shellfish, crustacean	0.04

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration are established for residues of the herbicide quizalofop ethyl, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only those quizalofop ethyl residues convertible to 2-methoxy-6-chloroquinoxaline, expressed as the stoichiometric equivalent of quizalofop ethyl, in or on the commodity.

Commodity	Parts per million
Pineapple	0.1

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 32759, June 16, 1998, as amended at 70 FR 7870, Feb. 16, 2005; 71 FR 56378, Sept. 27, 2006; 76 FR 56045, Sept. 15, 2010; 77 FR 23630, Apr. 20, 2012; 80 FR 72599, Nov. 20, 2015; 81 FR 86586, Dec. 1, 2016; 83 FR 7115, Feb. 20, 2018; 83 FR 8011, Feb. 23, 2018]

[↑ Back to Top](#)

#### §180.442 Bifenthrin; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide bifenthrin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only bifenthrin, (2-methyl [1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate.

Commodity	Parts per million
Almond, hulls	2.0
Artichoke, globe	1.0
Banana <sup>1</sup>	0.1
Beet, garden, roots	0.45
Beet, garden, tops	15
Brassica, head and stem, subgroup 5A, except cabbage	0.6
Brassica, leafy greens, subgroup 5B	3.5
Bushberry subgroup 13-07B	1.8
Cabbage	4.0
Caneberry subgroup 13A	1.0
Cattle, fat	1.0
Cattle, meat byproducts	0.10
Cattle, meat	0.5
Coriander, dried leaves	25
Coriander, leaves	6.0
Coriander, seed	5.0
Corn, field, forage	3.0
Corn, field, grain	0.05
Corn, field, stover	5.0
Corn, pop, grain	0.05
Corn, pop, stover	5.0
Corn, sweet, forage	3.0
Corn, sweet, kernel plus cob with husk removed	0.05
Corn, sweet, stover	5.0
Cotton, undelinted seed	0.5
Eggplant	0.05
Egg	0.05
Fruit, citrus, group 10	0.05
Goat, fat	1.0
Goat, meat byproducts	0.10

Goat, meat	0.5
Grain, aspirated fractions	70
Grape	0.2
Groundcherry	0.5
Herb subgroup 19A	0.05
Hog, fat	1.0
Hog, meat byproducts	0.10
Hog, meat	0.5
Hop, dried cones	10.0
Horse, fat	1.0
Horse, meat byproducts	0.10
Horse, meat	0.5
Leafy petioles subgroup 4B	3.0
Lettuce, head	3.0
Mayhaw	1.4
Milk, fat (reflecting 0.1 ppm in whole milk)	1.0
Nut, tree, group 14	0.05
Okra	0.50
Pea and bean, dried shelled, except soybean, subgroup 6C	0.15
Pea and bean, succulent shelled, subgroup 6B	0.05
Peanut	0.05
Pear	0.5
Pepino	0.5
Pepper, bell	0.5
Pepper, nonbell	0.5
Pistachio	0.05
Poultry, fat	0.05
Poultry, meat byproducts	0.05
Poultry, meat	0.05
Radish, tops	4.5
Rapeseed, seed	0.05
Sheep, fat	1.0
Sheep, meat byproducts	0.1
Sheep, meat	0.5
Soybean, hulls	0.50
Soybean, refined oil	0.30
Soybean, seed	0.2
Spinach	0.2
Strawberry	3.0
Tea, dried <sup>1</sup>	30
Tomato	0.15
Turnip, greens	3.5
Vegetable, cucurbit, group 9	0.4
Vegetable, legume, edible podded, subgroup 6A	0.6
Vegetable, root, subgroup 1B except sugar beet and garden beet	0.10
Vegetable, tuberous and corm, subgroup 1C	0.05

<sup>1</sup>There are no U.S. registrations.

(2) A tolerance of 0.05 ppm is established for residues of the insecticide bifenthrin, (2-methyl[1,1'-biphenyl]-3-yl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropane-carboxylate, as follows:

(i) In or on all food/feed items (other than those covered by a higher tolerance as a result of use on growing crops) in food/feed handling establishments.

(ii) The insecticide may be present as a residue from application of bifenthrin in food handling establishments, including food service, manufacturing and processing establishments, such as restaurants, cafeterias, supermarkets, bakeries, breweries, dairies, meat slaughtering and packing plants, and canneries, feed handling establishments including feed manufacturing and processing establishments, in accordance with the following prescribed conditions:

(A) Application shall be limited to general surface and spot and/or crack and crevice treatment in food/feed handling establishments where food/feed and food/feed products are held, processed, prepared and served. General surface application may be used only when the facility is not in operation provided exposed food/feed has been covered or removed from the area being treated. Spot and/or crack and crevice application may be used while the facility is in operation provided exposed food/feed is covered or removed from the area being treated prior to application. Spray concentration shall be limited to a maximum of 0.06 percent active ingredient. Contamination of food/feed or food/feed contact surfaces shall be avoided.

(B) To assure safe use of the insecticide, its label and labeling shall conform to that registered with the U.S. Environmental Protection Agency and shall be used in accordance with such label and labeling.

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for residues of the bifenthrin, (2-methyl[1,1'-biphenyl]-3-yl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropane-carboxylate) in or on the specified agricultural commodities, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. The tolerances expire on the date specified in the table.

Commodity	Parts per million	Expiration date
Apple	0.5	12/31/21
Avocado	0.50	12/31/19
Nectarine	0.5	12/31/21
Peach	0.5	12/31/21
Pomegranate	0.50	12/31/19

(c) *Tolerances with regional registrations.* Tolerances with regional registrations are established for residues of the insecticide bifenthrin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only bifenthrin, (2-methyl [1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3,-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate.

Commodity	Parts per million
Grass, forage	4.0
Grass, hay	15

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 31002, June 6, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.442, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.443 Myclobutanil; tolerances for residues.

(a) *General.* Tolerances are established for combined residues of the fungicide myclobutanil alpha-butyl-alpha-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile and its alcohol metabolite (alpha-(3-hydroxybutyl)-alpha-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile (free and bound), in or on the following food commodities:

Commodity	Parts per million
Almond	0.1
Almond, hulls	2.0
Apple	0.5
Apple, dry pomace	5.0
Apple, wet pomace	5.0
Artichoke, globe	0.90
Asparagus	0.02
Banana, postharvest	4.0
Bean, snap, succulent	1.0
Caneberry subgroup 13A	2.0
Canistel	3.0
Cattle, fat	0.05
Cattle, liver	1.0
Cattle, meat	0.1
Cattle, meat byproducts, except liver	0.2
Cherry, sweet	5.0
Cherry, tart	5.0
Cilantro, leaves	9.0
Cotton, undelinted seed	0.02
Currant	3.0
Egg	0.02
Fruit, stone, except cherry	2.0
Goat, fat	0.05
Goat, liver	1.0
Goat, meat	0.1
Goat, meat byproducts, except liver	0.2
Gooseberry	2.0
Grain, aspirated fractions	35
Grape	1.0
Grape, dried pomace	10.0
Grape, raisin	10.0
Grape, raisin, waste	25.0
Grape, wet pomace	10.0
Hog, fat	0.05

Hog, liver	1.0
Hog, meat	0.1
Hog, meat byproducts, except liver	0.2
Hop, dried cones	10
Horse, fat	0.05
Horse, liver	1.0
Horse, meat	0.1
Horse, meat byproducts, except liver	0.2
Leafy greens, subgroup 4A, except spinach	9.0
Mango	3.0
Mayhaw	0.70
Milk	0.2
Okra	4.0
Papaya	3.0
Peppermint, tops	3.0
Plum, prune, dried	8.0
Poultry, fat	0.02
Poultry, meat	0.02
Poultry, meat byproducts	0.02
Sapodilla	3.0
Sapote, black	3.0
Sapote, mamey	3.0
Sheep, fat	0.05
Sheep, liver	1.0
Sheep, meat	0.1
Sheep, meat byproducts, except liver	0.2
Soybean, forage	3.5
Soybean, hay	15
Soybean, refined oil	0.40
Soybean, seed	0.25
Spearmint, tops	3.0
Star apple	3.0
Strawberry	0.50
Tomato	0.30
Tomato, puree	0.50
Tomato, paste	1.0
Vegetable, cucurbit, group 9	0.20
Vegetable, fruiting, group 8, except tomato	4.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for residues of the fungicide myclobutanil alpha-butyl-alpha-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile in or on the following food commodities:

Commodity	Parts per million
Animal feed, nongrass, group 18	0.03
Grain, cereal, forage, fodder and straw, group 16	0.03
Grain, cereal, group 15	0.03
Vegetable, brassica, leafy, group 5	0.03
Vegetable, foliage of legume, group 7	0.03
Vegetable, fruiting, group 8	0.03
Vegetable, leafy, except brassica, group 4	0.03
Vegetable, leaves of root and tuber, group 2	0.03
Vegetable, legume, group 6	0.03
Vegetable, root and tuber, group 1	0.03

[54 FR 6131, Feb. 8, 1989]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.443, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

#### §180.444 Sulfur dioxide; tolerances for residues.

(a) *General.* A tolerance is established as follows for sulfite residues of the fungicide sulfur dioxide (determined as (SO<sub>2</sub>)) in or on the following raw agricultural commodity(ies):

Commodity	Parts per million
Grape, postharvest	10.0

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for residues of sulfur dioxide, including its metabolites and degradates in or on the specified agricultural commodities, resulting from use of the pesticide pursuant to FFIFRA section 18 emergency exemptions. Compliance with the tolerance levels specified below is to be determined by measuring only sulfur dioxide (SO<sub>2</sub>). The tolerances expire on the date specified in the table.

Commodity	Parts per million	Expiration/revocation date
Fig	10	12/31/14

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[54 FR 20126, May 10, 1989, as amended at 76 FR 56648, Sept. 14, 2011]

[↑ Back to Top](#)

#### §180.445 Bensulfuron methyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide bensulfuron methyl (methyl-2[[[(4,6-dimethoxy-pyrimidin-2-yl) amino] carbonyl] amino] sulfonyl] methyl] benzoate) in or on the following raw agricultural commodities:

Commodity	Parts per million
Crayfish	0.05
Rice, grain	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 9435, Feb. 25, 1998, as amended at 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

#### §180.446 Clofentezine; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide clofentezine, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only clofentezine, 3,6-bis(2-chlorophenyl)-1,2,4,5-tetrazine, in or on the commodity.

Commodity	Parts per million
Almond, hulls	5.0
Almond	0.5
Apple, dry pomace	3.0
Apple, wet pomace	3.0
Apricot	1.0
Avocado	0.30
Cherry, subgroup 12-12A	1.0
Fruit, pome, group 11-10	0.50
Fruit, small, vine climbing, except fuzzy kiwifruit, Subgroup 13-07F	1.0
Guava	3
Persimmon	0.05
Papaya	0.30
Peach, subgroup 12-12B	1.0
Walnut	0.02

(2) Tolerances are established for residues of the insecticide clofentezine, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of clofentezine, 3,6-bis(2-chlorophenyl)-1,2,4,5-tetrazine, and its metabolite, 3-(2-chloro-4-hydroxyphenyl)-6-(2-chlorophenyl)-1,2,4,5-tetrazine, calculated as the stoichiometric equivalent of clofentezine, in or on commodity.

Commodity	Parts per million
Cattle, fat	0.05
Cattle, liver	0.4
Cattle, meat	0.05

Cattle, meat byproducts, except liver	0.05
Goat, fat	0.05
Goat, liver	0.4
Goat, meat	0.05
Goat, meat byproducts, except liver	0.05
Hog, fat	0.05
Hog, liver	0.4
Hog, meat	0.05
Hog, meat byproducts, except liver	0.05
Horse, fat	0.05
Horse, liver	0.4
Horse, meat	0.05
Horse, meat byproducts, except liver	0.05
Milk	0.01
Sheep, fat	0.05
Sheep, liver	0.4
Sheep, meat	0.05
Sheep, meat byproducts, except liver	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[56 FR 15503, Apr. 17, 1991, as amended at 56 FR 22335, May 15, 1991; 59 FR 26947, May 25, 1994; 60 FR 12709, Mar. 8, 1995; 64 FR 19050, Apr. 19, 1999; 70 FR 11572, Mar. 9, 2005; 74 FR 46375, Sept. 9, 2009; 76 FR 23496, Apr. 27, 2011; 81 FR 38609, June 14, 2016; 84 FR 24726, May 29, 2019]

[↑ Back to Top](#)

#### §180.447 Imazethapyr; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide imazethapyr, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3-pyridine carboxylic acid, applied as its acid or ammonium salt, in or on the following raw agricultural commodities:

Commodity	Parts per million
Canola, seed <sup>1</sup>	0.10
Soybean	0.1
Vegetable, legume, group 6	0.1

<sup>1</sup> There are no U.S. registrations for canola as of March 21, 2003.

(2) Tolerances are established for the sum of the residues of the herbicide imazethapyr, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3-pyridine carboxylic acid; its metabolite CL 288511, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(1-hydroxyethyl)-3-pyridine carboxylic acid; and its metabolite CL 182704, 5-[1-(beta-D-glucopyranosyloxy)ethyl]-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid, applied as its acid or ammonium salt, in or on the following commodities:

Commodity	Parts per million
Alfalfa, seed	0.15
Alfalfa, seed screenings	0.15
Animal feed, nongrass, group 18, forage	3.0
Animal feed, nongrass, group 18, hay	5.5
Peanut	0.1
Rice, bran	1.2
Rice, grain	0.3

(3) A tolerance is established for the sum of residues of the herbicide imazethapyr, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3-pyridine carboxylic acid, and its metabolite CL 288511, 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(1-hydroxyethyl)-3-pyridine carboxylic acid, applied as its acid or ammonium salt, in or on the following commodities:

Commodity	Parts per million
Cattle, meat byproducts	0.10
Corn, field, forage	0.1
Corn, field, grain	0.1
Corn, field, stover	0.1
Crayfish	0.15

Goat, meat byproducts	0.10
Hog, meat byproducts	0.10
Horse, meat byproducts	0.10
Sheep, meat byproducts	0.10

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l) of this chapter, are established for the sum of residues of the herbicide imazethapyr, 2- [4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl- 3-pyridine carboxylic acid, as its ammonium salt, and its metabolite, 2- [4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(1- hydroxyethyl)-3-pyridine carboxylic acid, both free and conjugated, applied as its acid or ammonium salt, in or on the following raw agricultural commodities:

Commodity	Parts per million
Endive	0.1
Lettuce, head	0.1
Lettuce, leaf	0.1

(d) *Indirect or inadvertent residues.* [Reserved]

[67 FR 55331, Aug. 29, 2002, as amended at 68 FR 13849, Mar. 21, 2003; 71 FR 6359, Feb. 8, 2006; 76 FR 34885, June 15, 2011; 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

#### §180.448 Hexythiazox; tolerance for residues.

(a) *General.* Tolerances are established for residues of hexythiazox, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only hexythiazox and its metabolites containing the (4-chlorophenyl)-4-methyl-2-oxo-3-thiazolidine moiety, calculated as the stoichiometric equivalent of hexythiazox.

Commodity	Parts per million
Almond, hulls	10
Apple, wet pomace	0.40
Beet, sugar, dried pulp	0.30
Beet, sugar, root	0.15
Berry, low growing, subgroup 13-07G	6
Caneberry subgroup 13-07A	1
Cattle, fat	0.05
Cattle, meat byproducts	0.5
Citrus, oil	25
Corn, field, forage	3.0
Corn, field, grain	0.02
Corn, field, stover	7.0
Cotton, gin byproducts	15
Cotton, undelinted seed	0.4
Date, dried fruit	1.0
Egg	0.05
Fruit, pome, group 11-10	0.4
Fruit, small, vine climbing, subgroup 13-07F, except fuzzy kiwifruit	1
Fruit, stone, group 12	1.0
Goat, fat	0.05
Goat, meat byproducts	0.5
Grain, aspirated fractions	5
Hog, fat	0.02
Hog, meat byproducts	0.05
Hop, dried cones	20
Horse, fat	0.05
Horse, meat byproducts	0.5
Milk	0.05
Nut, tree, group 14	0.30
Pepper/eggplant subgroup 8-10B	1.5
Peppermint, tops	2.0
Pistachio	0.30
Plum, prune, dried	1.3
Poultry, fat	0.05
Poultry, meat byproducts	0.05
Sheep, fat	0.05
Sheep, meat byproducts	0.5
Spearmint, tops	2.0



Tomato

0.50

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registrations as defined by §180.1(l), are established for residues of hexythiazox, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only hexythiazox and its metabolites containing the (4-chlorophenyl)-4-methyl-2-oxo-3-thiazolidine moiety, calculated as the stoichiometric equivalent of hexythiazox.

Commodity	Parts per million
Alfalfa, forage (EPA Regions 7-11 only)	20
Alfalfa, hay (EPA Regions 7-11 only)	60
Bean, dried, seed (EPA Regions 7-12 only)	0.4
Bean, succulent (EPA Regions 7-12 only)	0.3
Bermuda grass, forage (EPA Regions 9-10 only)	40
Bermuda grass, hay (EPA Regions 9-10 only)	70
Corn, field, forage	6.0
Corn, field, grain	0.02
Corn, field, stover	2.5
Corn, sweet, forage (EPA Regions 7-12 only)	4.0
Corn, sweet, kernel plus cob with husks removed (EPA Regions 7-12 only)	0.1
Fruit, citrus group 10-10 (CA, AZ, TX only)	0.6
Potato	0.02
Sorghum, grain, forage (EPA Regions 6-8 only)	5
Sorghum, grain, grain (EPA Regions 6-8 only)	3
Sorghum, grain, stover (EPA Regions 6-8 only)	6
Timothy, forage (EPA Regions 9-11 only)	40
Timothy, hay (EPA Regions 9-11 only)	40
Wheat, forage (EPA Regions 9-12 only)	6.0
Wheat, grain (EPA Regions 9-12 only)	0.02
Wheat, hay (EPA Regions 9-12 only)	30
Wheat, straw (EPA Regions 9-12 only)	8.0

(d) *Indirect or inadvertent residues.* [Reserved]

[54 FR 17948, Apr. 26, 1989]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.448, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

**§180.449 Avermectin B1 and its delta-8,9-isomer; tolerances for residues.**

(a) *General.* Tolerances are established for residues of abamectin, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only avermectin B1 a mixture of avermectins containing greater than or equal to 80% avermectin B1 a (5-O-demethyl avermectin A1) and less than or equal to 20% avermectin B1b (5-O-demethyl-25-de(1-methylpropyl)-25-(1-methylethyl) avermectin A1) and its delta-8,9-isomer in or on the following commodities:

Commodity	Parts per million
Acerola	0.015
Almond, hulls	0.10
Apple, wet pomace	0.10
Arugula	0.1
Avocado	0.020
Banana <sup>1</sup>	0.006
Bean	0.015
Berry, low growing, subgroup 13-07G	0.05
Black sapote	0.40
Caneberry subgroup 13-07A	0.20
Canistel	0.40
Carrot, roots	0.03
Cattle, fat	0.05
Cattle, meat	0.02
Cattle, meat byproducts	0.09
Celeriac, roots	0.05
Celeriac, tops	0.05
Celtuce	0.1

Chive, dried leaves	0.02
Chive, fresh leaves	0.01
Citrus, dried pulp	0.10
Citrus, oil	0.10
Corn, sweet, forage	0.20
Corn, sweet, kernel plus cob with husk removed	0.01
Corn, sweet, stover	0.50
Cotton, gin byproducts	1.0
Cotton, undelinted seed	0.02
Feijoa	0.015
Fennel, Florence, fresh leaves and stalk	0.1
Food products in food handling establishments (other than those already covered by higher tolerances as a result of use on growing crops, and other than those already covered by tolerances on milk, meat, and meat byproducts)	0.01
Fruit, citrus, group 10-10	0.02
Fruit, pome, group 11-10	0.02
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.02
Fruit, stone, group 12-12	0.09
Garden cress	0.1
Goat, fat	0.03
Goat, meat	0.02
Goat, meat byproducts	0.04
Grain, aspirated grain fractions	0.40
Guava	0.015
Herb subgroup 19A, except chive	0.030
Hog, fat	0.01
Hog, meat	0.02
Hog, meat byproducts	0.02
Hop, dried cones	0.20
Horse, fat	0.03
Horse, meat	0.02
Horse, meat byproducts	0.04
Jaboticaba	0.015
Leaf petiole vegetable subgroup 22B	0.1
Leafy greens subgroup 4-16A	0.1
Longan	0.01
Mamey sapote	0.40
Milk	0.015
Nut, tree, group 14-12	0.01
Onion, bulb, subgroup 3-07A	0.01
Onion, green, subgroup 3-07B	0.08
Papaya	0.40
Passionfruit	0.015
Peppermint, tops	0.010
Pineapple	0.015
Plum, prune, dried	0.025
Poultry, meat	0.02
Poultry, meat byproducts	0.02
Pulasan	0.01
Rambutan	0.01
Sapodilla	0.40
Sheep, fat	0.03
Sheep, meat	0.02
Sheep, meat byproducts	0.04
Soybean, forage	0.30
Soybean, hay	1.0
Soybean, seed	0.01
Spanish lime	0.01
Spearmint, tops	0.010
Star apple	0.40
Starfruit	0.015
Tea, dried <sup>1</sup>	1.0
Tropical and subtropical, small fruit, inedible peel, subgroup 24A	0.01
Upland cress	0.1
Vegetable, cucurbit, group 9	0.005
Vegetable, fruiting, group 8-10	0.07
Vegetable, legume, dried shelled, except soybean, subgroup 6C	0.01
Vegetable, legume, edible podded, subgroup 6A	0.08
Vegetable, legume, succulent shelled, subgroup 6B	0.08
Vegetable, tuberous and corm, subgroup 01C	0.01
Wax jambu	0.015

<sup>1</sup>There are no U.S. registrations for use of abamectin on banana or tea.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 44095, Aug. 19, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.449, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

#### §180.450 Beta-(4-Chlorophenoxy)-alpha-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the fungicide  $\beta$ -(4-chlorophenoxy)- $\alpha$ -(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol (triadimenol) and its butanediol metabolite, 4-(4-chlorophenoxy)-2,2-dimethyl-4-(1H-1,2,4-triazol-1-yl)-1,3-butanediol, calculated as triadimenol, in or on the following commodities:

Commodity	Parts per million	Expiration/Revocation Date
Banana <sup>1</sup>	0.2	None
Barley, grain	0.05	None
Barley, straw	0.2	None
Corn, field, forage	0.05	None
Corn, field, grain	0.05	None
Corn, field, stover	0.05	None
Corn, pop, grain	0.05	None
Corn, pop, stover	0.05	None
Corn, sweet, forage	0.05	None
Corn, sweet, kernel plus cob with husks removed	0.05	None
Corn, sweet, stover	0.05	None
Cotton, undelinted seed	0.02	None
Oat, forage	2.5	None
Oat, grain	0.05	None
Oat, straw	0.2	None
Rye, forage	2.5	None
Rye, grain	0.05	None
Rye, straw	0.1	None
Wheat, forage	2.5	None
Wheat, grain	0.05	None
Wheat, straw	0.2	None

<sup>1</sup>There are no U.S. registrations for banana (whole) as of September 22, 1993.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 54962, Sept. 24, 2008, as amended at 74 FR 47457, Sept. 16, 2009; 76 FR 34885, June 15, 2011]

[↑ Back to Top](#)

#### §180.451 Tribenuron methyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide tribenuron methyl and its metabolites and degradates in or on the commodities in the following table. Compliance with the tolerance levels specified below is to be determined by measuring only tribenuron methyl, methyl-2-[[[N-(4-methoxy-6-methyl-1,3,5-triazin-2-yl) methylamino] carbonyl] amino] sulfonyl] benzoate, in or on the following commodities:

Commodity	Parts per million
Barley, grain	0.05
Barley, hay	0.4
Barley, straw	0.10
Canola, seed	0.02
Corn, field, forage	0.15
Corn, field, grain	0.01
Corn, field, stover	1.1
Cotton, gin byproducts	0.02

Cotton, undelinted seed	0.02
Flax, seed	0.02
Grain, aspirated fractions	1.5
Oat, forage	0.05
Oat, grain	0.05
Oat, hay	0.05
Oat, straw	0.10
Rice, grain	0.05
Sorghum, grain, forage	0.05
Sorghum, grain, grain	0.05
Sorghum, grain, stover	0.05
Soybean, forage	0.07
Soybean, hay	0.35
Soybean, hulls	0.04
Soybean, seed	0.01
Sunflower, seed	0.05
Wheat, forage	0.3
Wheat, grain	0.05
Wheat, hay	0.5
Wheat, straw	0.10

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l) are established for residues of the herbicide tribenuron methyl (methyl-2-[[[N-(4-methoxy-6-methyl-1,3,5-triazin-2-yl) methylamino] carbonyl]amino]sulfonyl] benzoate) in or on the following raw agricultural commodities:

Commodity	Parts per million
Grass, forage, fodder and hay, group 17, except bermudagrass; forage	0.10
Grass, forage, fodder and hay, group 17, except bermudagrass; hay	0.10

(d) *Indirect or inadvertent residues.* [Reserved]

[69 FR 56718, Sept. 22, 2004, as amended at 72 FR 11789, Mar. 14, 2007; 73 FR 47065, Aug. 13, 2008; 74 FR 67128, Dec. 18, 2009; 76 FR 34885, June 15, 2011; 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

#### §180.452 Primisulfuron-methyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of primisulfuron-methyl (3-[4,6-bis-(difluoromethoxy)-pyrimidin-2-yl]-1-(2-methoxycarbonylphenylsulfonyl) urea) in or on the following raw agricultural commodities.

Commodity	Parts per million
Cattle, fat	0.10
Cattle, meat	0.10
Cattle, meat byproducts	0.10
Corn, field, forage	0.10
Corn, field, grain	0.02
Corn, field, stover	0.10
Corn, pop, grain	0.02
Corn, pop, stover	0.10
Egg	0.10
Goat, fat	0.10
Goat, meat	0.10
Goat, meat byproducts	0.10
Hog, fat	0.10
Hog, meat	0.10
Hog, meat byproducts	0.10
Horse, fat	0.10
Horse, meat	0.10
Horse, meat byproducts	0.10
Milk	0.02
Poultry, fat	0.10
Poultry, meat	0.10
Poultry, meat byproducts	0.10
Sheep, fat	0.10
Sheep, meat	0.10
Sheep, meat byproducts	0.10

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[55 FR 21548, May 25, 1990, as amended at 62 FR 66020, Dec. 17, 1997; 63 FR 66458, Dec. 2, 1998; 67 FR 35049, May 17, 2002; 74 FR 46375, Sept. 9, 2009; 74 FR 46699, Sept. 11, 2009; 77 FR 59128, Sept. 26, 2012]

[↑ Back to Top](#)

#### §180.454 Nicosulfuron; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide nicosulfuron, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only nicosulfuron, 2-[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]-*N,N*-dimethyl-3-pyridinecarboxamide.

Commodity	Parts per million
Cattle, fat	0.01
Cattle, meat	0.01
Cattle, meat byproducts	0.05
Corn, field, forage	0.1
Corn, field, grain	0.1
Corn, field, stover	0.1
Corn, pop, grain	0.1
Corn, pop, stover	0.1
Corn, sweet, forage	0.1
Corn, sweet, kernel plus cob with husks removed	0.1
Corn, sweet, stover	0.1
Goat, fat	0.01
Goat, meat	0.01
Goat, meat byproducts	0.05
Grass, forage	9.0
Grass, hay	25.0
Horse, fat	0.01
Horse, meat	0.01
Horse, meat byproducts	0.05
Milk	0.01
Sheep, fat	0.01
Sheep, meat	0.01
Sheep, meat byproducts	0.05
Sorghum, grain, forage	0.3
Sorghum, grain, grain	0.8
Sorghum, grain, stover	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[75 FR 17578, Apr. 7, 2010, as amended at 80 FR 68265, Nov. 4, 2015]

[↑ Back to Top](#)

#### §180.455 Procymidone; tolerances for residues.

A tolerance is established for the residues of the fungicide procymidone, *N*-(3,5-dichlorophenyl)-1,2-dimethylcyclopropane-1,2-dicarboximide, in or on the following raw agricultural commodity:

Commodity	Parts per million
Grape, wine	5.0

[59 FR 42514, Aug. 18, 1994]

[↑ Back to Top](#)

#### §180.457 Bitertanol; tolerances for residues.

(a) *General.* A tolerance is established for the residues of the fungicide bitertanol,  $\beta$ -([1,1'-biphenyl]-4-yloxy)- $\alpha$ -(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol, in or on the following raw agricultural commodity:

Commodity	Parts per million
Banana <sup>1</sup>	0.5

<sup>1</sup>There are no U.S. registrations as of April 1, 1992.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[74 FR 47457, Sept. 16, 2009]

[↑ Back to Top](#)

#### §180.458 Clethodim; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide clethodim, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of clethodim, 2-[(1E)-1-[[[(2E)-3-chloro-2-propenyl]oxy]imino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one, and its metabolites containing the 5-(2-ethylthiopropyl)cyclohexene-3-one and 5-(2-ethylthiopropyl)-5-hydroxycyclohexene-3-one moieties and their sulphoxides and sulphones, calculated as the stoichiometric equivalent of clethodim, in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	6.0
Alfalfa, hay	10
Almond, hulls	0.20
Artichoke, globe	1.2
Berry, low growing, subgroup 13-07G, except cranberry	3.0
Beet, sugar, molasses	1.0
Beet, sugar, roots	0.20
Beet, sugar, tops	1.0
Brassica, leafy, greens, subgroup 4-16B	3.0
Bushberry subgroup 13-07B	0.20
Caneberry subgroup 13-07A	0.30
Canola, meal	1.0
Cattle, fat	0.2
Cattle, meat	0.2
Cattle, meat byproducts	0.2
Clover, forage	10.0
Clover, hay	20.0
Corn, field, forage	0.2
Corn, field, grain	0.2
Corn, field, stover	0.2
Cotton, meal	2.0
Cottonseed subgroup 20C	1.0
Cranberry	0.50
Egg	0.2
Flax, meal	1.0
Flax, seed	0.6
Fruit, pome, group 11-10	0.20
Fruit, stone, group 12-12	0.20
Goat, fat	0.2
Goat, meat	0.2
Goat, meat byproducts	0.2
Herb subgroup 19A	12.0
Hog, fat	0.2
Hog, meat	0.2
Hog, meat byproducts	0.2
Hop, dried cones	0.5
Horse, fat	0.2
Horse, meat	0.2
Horse, meat byproducts	0.2
Kohlrabi <sup>1</sup>	3.0
Leaf petiole vegetable subgroup 22B	0.60
Leafy greens subgroup 4-16A	2.0
Melon subgroup 9A	2.0
Milk	0.05
Nut, tree, group 14-12	0.20

Okra	1.5
Onion, bulb, subgroup 3-07A	0.50
Onion, green, subgroup 3-07B	2.0
Peanut	3.0
Peanut, hay	3.0
Peanut, meal	5.0
Peppermint, tops	5.0
Potato, granules/flakes	2.0
Poultry, fat	0.2
Poultry, meat	0.2
Poultry, meat byproducts	0.2
Radish, tops	0.70
Rapeseed subgroup 20A, except flax seed	0.50
Safflower, meal	10.0
Sheep, fat	0.2
Sheep, meat	0.2
Sheep, meat byproducts	0.2
Soybean	10.0
Spearmint, tops	5.0
Squash/cucumber subgroup 9B	0.50
Stalk and stem vegetable subgroup 22A	1.7
Stevia, dried leaves	12
Sunflower, meal	10.0
Sunflower subgroup 20B	5.0
Vegetable, <i>brassica</i> , head and stem, group 5-16	3.0
Vegetable, fruiting, group 8-10, except okra	1.0
Vegetable, legume, group 6, except soybean	3.5
Vegetable, root, except sugar beet, subgroup 1B	1.0
Vegetable, tuberous and corm, subgroup 1C	1.0

<sup>1</sup>This tolerance expires on October 12, 2018.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[76 FR 23496, Apr. 27, 2011, as amended at 77 FR 59128, Sept. 26, 2012; 81 FR 27342, May 6, 2016; 83 FR 15753, Apr. 12, 2018]

[↑ Back to Top](#)

#### §180.459 Triasulfuron; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide triasulfuron [3-(6-methoxy-4-methyl-1,3,5-triazin-2-yl)-1-(2-(2-chloroethoxy)phenylsulfonyl)urea] in or on the following raw agricultural commodities:

Commodity	Parts per million
Barley, grain	0.02
Barley, straw	2.0
Cattle, fat	0.1
Cattle, kidney	0.5
Cattle, meat byproducts, except kidney	0.1
Cattle, meat	0.1
Goat, fat	0.1
Goat, kidney	0.5
Goat, meat byproducts, except kidney	0.1
Goat, meat	0.1
Grass, forage	7.0
Grass, hay	2.0
Hog, fat	0.1
Hog, kidney	0.5
Hog, meat byproducts	0.1
Hog, meat	0.1
Horse, fat	0.1
Horse, kidney	0.5
Horse, meat byproducts, except kidney	0.1
Horse, meat	0.1
Milk	0.02
Sheep, fat	0.1
Sheep, kidney	0.5
Sheep, meat byproducts, except kidney	0.1

Sheep, meat	0.1
Wheat, forage	5.0
Wheat, grain	0.02
Wheat, straw	2.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[60 FR 36731, July 18, 1995, as amended at 63 FR 44152, Aug. 18, 1998; 63 FR 66449, Dec. 2, 1998]

[↑ Back to Top](#)

#### §180.460 Benoxacor; tolerances for residues.

(a) *General.* Tolerances are established for residues of the inert ingredient (safener) benoxacor (4-(dichloroacetyl)-3,4-dihydro-3-methyl-2H-1, 4-benzoxazine) at 0.01 parts per million (ppm) when used in pesticide formulations containing metolachlor or S-metolachlor in or on raw agricultural commodities for which tolerances have been established for metolachlor or S-metolachlor.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 7305, Feb. 13, 1998, as amended at 70 FR 21631, Apr. 27, 2005]

[↑ Back to Top](#)

#### §180.461 Cadusafos; tolerances for residues.

A tolerance is established for the residues of the nematocide/insecticide cadusafos, O-ethyl S,S-di-sec-butyl phosphorodithioate, in or on the following raw agricultural commodity:

Commodity	Parts per million
Banana	0.01

There are no U.S. registrations as of May 10, 1994, for the nematocide/insecticide cadusafos.

[59 FR 39467, Aug. 3, 1994]

[↑ Back to Top](#)

#### §180.462 Pyridate; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide pyridate, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of pyridate, O-(6-chloro-3-phenyl-4-pyridazinyl)-S-octyl-carbonothioate, and its metabolites, 6-chloro-3-phenyl-pyridazine-4-ol and conjugates of 6-chloro-3-phenyl-pyridazine-4-ol, calculated as the stoichiometric equivalent of pyridate, in or on the commodity.

Commodity	Parts per million
Brassica, head and stem, subgroup 5A	0.03
Cabbage	0.03
Chickpea, seed	0.1
Collards	0.03
Corn, field, forage	0.03
Corn, field, grain	0.03
Corn, field, stover	0.03
Corn, pop, grain	0.03
Corn, pop, stover	0.03
Peanut	0.03
Peppermint, tops	0.20
Spearmint, tops	0.20

(b) *Section 18 emergency exemptions.* [Reserved]



(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[57 FR 54303, Nov. 18, 1992, as amended at 62 FR 44558, Aug. 22, 1997; 63 FR 53844, Oct. 7, 1998; 64 FR 46298, Aug. 25, 1999; 65 FR 25652, May 3, 2000; 67 FR 35049, May 17, 2002; 72 FR 35665, June 29, 2007; 74 FR 46376, Sept. 9, 2009; 76 FR 23496, Apr. 27, 2011]

[↑ Back to Top](#)

### §180.463 Quinclorac; tolerances for residues.

(a)(1) *General.* Tolerances are established for residues of the herbicide quinclorac, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only quinclorac, 3,7-dichloro-8-quinolinecarboxylic acid, in or on the commodity.

Commodity	Parts per million
Asparagus	0.08
Bushberry, subgroup 13-07B	0.08
Caneberry subgroup 13-07A	0.08
Barley, grain	2.0
Berry, low growing, except strawberry, subgroup 13-07H	1.5
Cattle, fat	0.7
Cattle, meat byproducts	1.5
Cattle, meat	0.05
Egg	0.05
Goat, fat	0.7
Goat, meat byproducts	1.5
Goat, meat	0.05
Grain, aspirated fractions	1200
Grass, forage	150
Grass, hay	130
Hog, fat	0.7
Hog, meat byproducts	1.5
Hog, meat	0.05
Horse, fat	0.7
Horse, meat byproducts	1.5
Horse, meat	0.05
Milk	0.05
Poultry, fat	0.05
Poultry, meat byproducts	0.1
Poultry, meat	0.05
Rhubarb	0.5
Rice, bran	15.0
Rice, grain	5.0
Sheep, fat	0.7
Sheep, meat byproducts	1.5
Sheep, meat	0.05
Sorghum, grain, forage	3.0
Sorghum, grain, grain	6.0
Sorghum, grain, stover	1.0
Wheat, forage	1.0
Wheat, germ	0.75
Wheat, grain	0.5
Wheat, hay	0.5
Wheat, straw	0.1

(2) Tolerances are established for residues of the herbicide quinclorac, including its metabolites and degradates, in or on the commodity in the following table. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only quinclorac, 3,7-dichloro-8-quinolinecarboxylic acid, and its methyl ester, methyl-3,7-dichloro-8-quinolinecarboxylate, calculated as the stoichiometric equivalent of quinclorac, in or on the commodity.

Commodity	Parts per million
Rapeseed, subgroup 20A <sup>1</sup>	1.5

<sup>1</sup>There are no U.S. Registrations.

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of the herbicide quinclorac, including its metabolites and degradates, in or on the commodity in the table in this paragraph. Compliance with the tolerance

level specified in this paragraph is to be determined by measuring only quinclorac, 3,7-dichloro-8-quinolinecarboxylic acid, in or on the commodity. The tolerance expires and is revoked on the date specified in the table in this paragraph.

Commodity	Parts per million	Expiration/revocation date
Cranberry	15.0	12/31/12

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[57 FR 47996, Oct. 21, 1992, as amended at 64 FR 6548, 6549, Feb. 10, 1999; 64 FR 14632, Mar. 26, 1999; 65 FR 33701, May 24, 2000; 67 FR 35049, May 17, 2002; 72 FR 55073, Sept. 28, 2007; 74 FR 51490, Oct. 7, 2009; 74 FR 67090, Dec. 18, 2009; 76 FR 23497, Apr. 27, 2011; 77 FR 75566, Dec. 21, 2012; 78 FR 71528, Nov. 29, 2013; 80 FR 72599, Nov. 20, 2015; 82 FR 57149, Dec. 4, 2017]

[↑ Back to Top](#)

#### §180.464 Dimethenamid; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide dimethenamid, 1(R,S)-2-chloro-N-[(1-methyl-2-methoxy)ethyl]-N-(2,4-dimethylthien-3-yl)-acetamide, applied as either the 90:10 or 50:50 S:R isomers, in or on the following food commodities:

Commodity	Parts per million
Bean, dry, seed	0.01
Beet, garden, roots	0.01
Beet, garden, tops	0.01
Beet, sugar, dried pulp	0.01
Beet, sugar, molasses	0.01
Beet, sugar, roots	0.01
Beet, sugar, tops	0.01
Corn, field, forage	0.01
Corn, field, grain	0.01
Corn, field, stover	0.01
Corn, pop, forage	0.01
Corn, pop, grain	0.01
Corn, pop, stover	0.01
Corn, sweet, forage	0.01
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	0.01
Cotton, gin byproducts	1.5
Cottonseed subgroup 20C	0.01
Garlic	0.01
Grass, forage	0.15
Grass, hay	2.5
Grass, seed screenings	0.01
Grass, straw	0.01
Hop, dried cones	0.05
Horseradish	0.01
Leek	0.01
Onion, bulb	0.01
Onion, green	0.01
Onion, Welsh	0.01
Peanut	0.01
Peanut, hay	0.01
Radish, roots	0.01
Radish, tops	0.01
Rutabaga, roots	0.01
Rutabaga, tops	0.1
Shallot, bulb	0.01
Shallot, fresh leaves	0.01
Sorghum, grain, forage	0.01
Sorghum, grain, grain	0.01
Sorghum, grain, stover	0.01
Soybean, seed	0.01
Turnip, greens	0.1
Turnip, roots	0.01
Turnip, tops	0.1
Vegetable, tuberous and corm, subgroup 1C	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration are established for residues of dimethenamid, 1 (R,S)-2-chloro-N-[(1-methyl-2-methoxy) ethyl]-N-(2,4-dimethylthien-3-yl)-acetamide in or on the following raw agricultural commodities:

Commodity	Parts per million
Pumpkin	0.01
Squash, winter	0.01

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 51551, Aug. 24, 2000, as amended at 67 FR 46884, July 17, 2002; 69 FR 29459, May 24, 2004; 69 FR 57207, Sept. 24, 2004; 70 FR 24712, May 11, 2005; 71 FR 25942, May 3, 2006; 71 FR 49354, Aug. 23, 2006; 72 FR 44388, Aug. 8, 2007; 72 FR 73630, Dec. 28, 2007; 80 FR 9215, Feb. 20, 2015]

[↑ Back to Top](#)

#### §180.465 4-(Dichloroacetyl)-1-oxa-4-azaspiro[4.5]decane.

(a) *General.* Tolerances are established for the residues of 4-(dichloroacetyl)-1-oxa-4-azaspiro[4.5]decane, (CAS No. 71526-07-3) when used as an inert ingredient (safener) in or on the following raw agricultural commodities:

Commodity <sup>1</sup>	Parts per million
Corn, field, forage	0.005
Corn, field, grain	0.005
Corn, field, stover	0.005
Corn, pop, grain	0.005
Corn, pop, stover	0.005

<sup>1</sup>There are no U.S. registered products containing 4-(dichloroacetyl)-1-oxa-4-azaspiro[4.5]decane as of June 17, 2002.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 4392, Jan. 29, 2003]

[↑ Back to Top](#)

#### §180.466 Fenpropathrin; tolerances for residues.

(a) *General.* Tolerances are established for residues of fenpropathrin, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified below is to be determined by measuring only fenpropathrin (alpha-cyano-3-phenoxy-benzyl 2,2,3,3 tetramethylcyclopropanecarboxylate).

Commodity	Parts per million
Acerola	3.0
Almond, hulls	4.5
Atemoya	1.5
Avocado	1.0
Barley, grain	0.04
Barley, hay	3.0
Barley, straw	2.0
Berry, low growing, subgroup 13-07G	2.0
Biriba	1.5
Brassica, head and stem, subgroup 5A	3.0
Bushberry subgroup 13-07B	3.0
Caneberry subgroup 13-07A	12
Canistel	1.0
Cattle, fat	1.0
Cattle, meat byproducts	0.1
Cattle, meat	0.1
Cherimoya	1.5
Cherry, sweet	5.0
Cherry, tart	5.0
Citrus, dried pulp	4.0
Citrus, oil	75
Cotton, refined oil	3.0
Cotton, undelinted seed	1.0

Custard apple	1.5
Egg	0.05
Feijoa	3.0
Fruit, citrus, group 10-10	2.0
Fruit, pome, group 11-10	5.0
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	5.0
Fruit, stone, crop group 12, except cherry	1.4
Goat, fat	1.0
Goat, meat byproducts	0.1
Goat, meat	0.1
Grape, raisin	10.0
Guava	3.0
Hog, fat	1.0
Hog, meat byproducts	0.1
Hog, meat	0.1
Horse, fat	1.0
Horse, meat byproducts	0.1
Horse, meat	0.1
llama	1.5
Jaboticaba	3.0
Longan	7.0
Lychee	7.0
Mango	1.0
Melon subgroup 9A	0.5
Milk, fat (reflecting 0.08 ppm in whole milk)	2.0
Nut, tree, crop group 14	0.10
Olive	5.0
Papaya	1.0
Passionfruit	3.0
Pea, succulent	0.02
Peanut, hay	20.0
Peanut	0.01
Pistachio	0.10
Poultry, fat	0.05
Poultry, meat byproducts	0.05
Poultry, meat	0.05
Pulasan	7.0
Rambutan	7.0
Sapodilla	1.0
Sapote, black	1.0
Sapote, mamey	1.0
Sheep, fat	1.0
Sheep, meat byproducts	0.1
Sheep, meat	0.1
Soursop	1.5
Spanish lime	7.0
Squash/Cucumber subgroup 9B	0.5
Star apple	1.0
Starfruit	3.0
Sugar apple	1.5
Tea, dried <sup>1</sup>	2.0
Vegetable, fruiting, group 8-10	1.0
Wax jambu	3.0

<sup>1</sup>There are no U.S. registrations as of November 28, 2012, for the use of fenpropathrin on tea, dried.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 63034, Nov. 26, 1997, as amended at 63 FR 48116, Sept. 9, 1998; 64 FR 3009, Jan. 20, 1999; 65 FR 11242, Mar. 2, 2000; 65 FR 24397, Apr. 26, 2000; 65 FR 48620, Aug. 9, 2000; 66 FR 64774, Dec. 14, 2001; 67 FR 35049, May 17, 2002; 70 FR 38789, July 6, 2005; 70 FR 55747, Sept. 23, 2005; 74 FR 12606, Mar. 25, 2009; 77 FR 70908, Nov. 28, 2012; 78 FR 69569, Nov. 20, 2013]

[↑ Back to Top](#)

## §180.467 Carbon disulfide; tolerances for residues.

Tolerances are established for the nematocide, insecticide, and fungicide carbon disulfide, from the application of sodium tetrathiocarbonate, in or on the following raw agricultural commodities:

Commodity	Parts per million
Almond	0.1
Almond, hulls	0.1
Grape	0.1
Grapefruit	0.1
Lemon	0.1
Orange, sweet	0.1
Peach	0.1
Plum, prune, fresh	0.1

[58 FR 33771, June 21, 1993, as amended at 62 FR 26949, May 16, 1997]

[↑ Back to Top](#)

#### §180.468 Flumetsulam; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide flumetsulam, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only flumetsulam, *N*-(2,6-difluorophenyl)-5-methyl-(1,2,4)-triazolo-(1,5a)-pyrimidine-2-sulfonamide, in or on the commodity.

Commodity	Parts per million
Bean, dry, seed	0.05
Corn, field, forage	0.05
Corn, field, grain	0.05
Corn, field, stover	0.05
Soybean, seed	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[76 FR 23497, Apr. 27, 2011]

[↑ Back to Top](#)

#### §180.469 Dichlormid; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of dichlormid, including its metabolites and degradates, when used as an inert ingredient (herbicide safener) in pesticide formulations, in or on the commodities in the following table. Compliance with the tolerances is to be determined by measuring only dichlormid (2,2-dichloro-*N,N*-di-2-propenylacetamide).

Commodity	Parts per million
Corn, field, forage	0.05
Corn, field, grain	0.05
Corn, field, stover	0.05
Corn, pop, grain	0.05
Corn, pop, stover	0.05
Corn, sweet, forage	0.05
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	0.05

(2) Tolerances are established for residues of dichlormid, including its metabolites and degradates, at 0.05 parts per million (ppm) when used as an inert ingredient (herbicide safener) in pesticide formulations containing metolachlor or *S*-metolachlor in or on raw agricultural commodities for which tolerances have been established for metolachlor or *S*-metolachlor. Compliance with the tolerances is to be determined by measuring only dichlormid (2,2-dichloro-*N,N*-di-2-propenylacetamide).

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 16149, Mar. 27, 2000, as amended at 67 FR 51105, Aug. 7, 2002; 69 FR 58290, Sept. 30, 2004; 70 FR 76699, Dec. 28, 2005; 74 FR 37623, July 29, 2009; 76 FR 16310, Mar. 23, 2011; 81 FR 69406, Oct. 6, 2016]

[↑ Back to Top](#)

### §180.470 Acetochlor; tolerances for residues.

(a) *General.* Tolerances are established for residues of acetochlor, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only acetochlor, 2-chloro-2'-methyl-6-ethyl-*N*-ethoxymethylacetanilide, and its metabolites containing the ethyl methyl aniline (EMA) moiety and the hydroxyethyl methyl aniline (HEMA) moiety. Both parent and the named metabolites shall be determined as ethyl methyl aniline (EMA) and hydroxyethyl methyl aniline (HEMA), and calculated as the stoichiometric equivalents of acetochlor, in or on the following commodities:

Commodity	Parts per million
Alfalfa, forage	8.0
Alfalfa, hay	20
Beet, sugar, dried pulp	0.50
Beet, sugar, molasses	0.80
Beet, sugar, roots	0.30
Beet, sugar, tops	0.70
Cattle, fat	0.02
Cattle, kidney	0.03
Cattle, meat	0.02
Cattle, meat byproducts, except kidney	0.02
Corn, field, forage	4.5
Corn, field, grain	0.05
Corn, field, stover	2.5
Corn, pop, grain	0.05
Corn, pop, stover	2.5
Corn, sweet, forage	1.5
Corn, sweet, kernels plus cob with husks removed	0.05
Corn, sweet, stover	1.0
Cotton, gin byproducts	4.0
Cotton, undelinted seed	0.6
Goat, fat	0.02
Goat, kidney	0.03
Goat, meat	0.02
Goat, meat byproducts, except kidney	0.02
Hog, kidney	0.02
Horse, fat	0.02
Horse, kidney	0.03
Horse, meat	0.02
Horse, meat byproducts, except kidney	0.02
Milk	0.02
Peanut	0.20
Peanut, hay	7.0
Peanut, meal	0.25
Sheep, fat	0.02
Sheep, kidney	0.03
Sheep, meat	0.02
Sheep, meat byproducts, except kidney	0.02
Sorghum, grain, forage	1.6
Sorghum, grain, grain	0.05
Sorghum, grain, stover	1.7
Soybean, meal	1.2
Soybean, seed	1.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of acetochlor, including its metabolites and degradates, in or on the raw agricultural commodities in the table to this paragraph when present therein as a result of application of acetochlor to the growing crops in the table to paragraph (a) of this section. Compliance with the tolerance levels specified below is to be determined by measuring only acetochlor, 2-chloro-2'-methyl-6-ethyl-*N*-ethoxymethylacetanilide, and its metabolites containing the ethyl methyl aniline (EMA) moiety and the hydroxyethyl methyl aniline (HEMA) moiety. Both parent and the named metabolites shall be determined as ethyl methyl aniline (EMA) and hydroxyethyl methyl aniline (HEMA), and calculated as the stoichiometric equivalents of acetochlor, in or on the following commodities.

Commodity	Parts per million
Animal feed, nongrass, group 18, except alfalfa, forage	1.3
Animal feed, nongrass, group 18, except alfalfa, hay	3.5
Grain, cereal, forage, fodder and straw, group 16, except corn, grain sorghum, rice and wheat, forage	0.5
Grain, cereal, forage, fodder and straw, group 16, except corn, grain sorghum, rice and wheat, hay	2.0
Grain, cereal, forage, fodder and straw, group 16, except corn, grain sorghum, rice and wheat, stover	0.1
Grain, cereal, forage, fodder and straw, group 16, except corn, grain sorghum, and wheat, straw	0.3
Grain, cereal, group 15, except corn, grain sorghum, and wheat, grain	0.05
Pea and bean, dried shelled, except soybean, subgroup 6C	0.05
Potato	0.05
Soybean, forage	0.7
Soybean, hay	1.0
Sunflower, seed	0.05
Wheat, forage	0.5
Wheat, grain	0.02
Wheat, hay	2.0
Wheat, straw	0.1

[72 FR 27468, May 16, 2007, as amended at 74 FR 29969, June 24, 2009; 74 FR 47450, Sept. 16, 2009; 78 FR 13268, Feb. 27, 2013; 79 FR 3517, Jan. 22, 2014; 83 FR 29028, June 22, 2018]

[↑ Back to Top](#)

### §180.471 Furilazole; tolerances for residues.

(a) *General.* Tolerances are established for residues of furilazole, including its metabolites and degradates, when used as an inert ingredient (safener) in pesticide formulations applied to the following raw agricultural commodities. Compliance with the tolerance levels specified in the table in this paragraph (a) is to be determined by measuring only furilazole, 3-dichloroacetyl-5-(2-furanyl)-2, 2-dimethyloxazolidine (CAS Reg. No. 121776-33-8) in or on the commodity.

Commodity	Parts per million
Corn, field, forage	0.01
Corn, field, grain	0.01
Corn, field, stover	0.01
Corn, pop, grain	0.01
Corn, pop, stover	0.01
Corn, sweet, forage	0.01
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	0.01
Sorghum, forage	0.01
Sorghum, grain	0.01
Sorghum, stover	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 8867, Feb. 23, 2000, as amended at 67 FR 15735, Apr. 3, 2002; 72 FR 57492, Oct. 10, 2007; 84 FR 52774, Oct. 3, 2019]

[↑ Back to Top](#)

### §180.472 Imidacloprid; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide imidacloprid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of imidacloprid (1-[6-chloro-3-pyridinyl] methyl]-*N*-nitro-2-imidazolidinimine) and its metabolites containing the 6-chloropyridinyl moiety, calculated as the stoichiometric equivalent of imidacloprid, in or on the following commodities:

Commodity	Parts per million
Acerola	1.0
Almond, hulls	4.0
Apple	0.5
Apple, wet pomace	3.0
Artichoke, globe	2.5
Aspirated grain fractions	240
Atemoya	0.30
Avocado	1.0

Banana	0.50
Beet, sugar, molasses	0.30
Beet, sugar, roots	0.05
Beet, sugar, tops	0.50
Biriba	0.30
Blueberry	3.5
Borage, seed	0.05
Caneberry, subgroup 13-A	2.5
Canistel	1.0
Canola, seed	0.05
Cattle, fat	0.30
Cattle, meat	0.30
Cattle, meat byproducts	0.30
Cherimoya	0.30
Citrus, dried pulp	5.0
Coffee, bean, green	0.80
Cotton, gin byproducts	4.0
Cotton, meal	8.0
Cotton, undelinted seed	6.0
Crambe, seed	0.05
Cranberry	0.05
Currant	3.5
Custard apple	0.30
Egg	0.02
Elderberry	3.5
Feijoa	1.0
Fish	0.05
Fish-shellfish, mollusc	0.05
Flax, seed	0.05
Fruit, citrus, group 10	0.70
Fruit, pome, group 11	0.6
Fruit, stone, group 12	3.0
Goat, fat	0.30
Goat, meat	0.30
Goat, meat byproducts	0.30
Gooseberry	3.5
Grain, cereal, forage, fodder and straw, group 16, forage, except rice	7.0
Grain, cereal, forage, fodder and straw, group 16, hay, except rice	6.0
Grain, cereal, forage, fodder and straw, group 16, stover, except rice	0.30
Grain, cereal, forage, fodder and straw, group 16, straw, except rice	3.0
Grain, cereal, group 15, except rice	0.05
Grape	1.0
Grape, juice	1.5
Grape, raisin	1.5
Guava	1.0
Herbs subgroup 19A, dried herbs	48
Herbs subgroup 19-A, fresh herbs	8.0
Hog, fat	0.30
Hog, meat	0.30
Hog, meat byproducts	0.30
Hop, dried cones	6.0
Horse, fat	0.30
Horse, meat	0.30
Horse, meat byproducts	0.30
Huckleberry	3.5
llama	0.30
Jaboticaba	1.0
Juneberry	3.5
Kava, leaves	4.0
Kava, roots	0.40
Leaf petioles subgroup 4B	6.0
Leafy greens subgroup 4A	3.5
Lettuce, head	3.5
Lettuce, leaf	3.5
Lingonberry	3.5
Longan	3.0
Lychee	3.0
Mango	1.0
Milk	0.10
Mustard, black, seed	0.05
Mustard, field, seed	0.05
Mustard, Indian, seed	0.05
Mustard, rapeseed, seed	0.05



Mustard, seed	0.05
Nut, tree, group 14	0.05
Okra	1.0
Onion, dry bulbs, subgroup 3-07A	0.15
Onion, green, subgroup 3-07B	2.5
Papaya	1.0
Passionfruit	1.0
Peanut	0.45
Peanut, hay	35
Peanut, meal	0.75
Pecan	0.05
Persimmon	3.0
Pistachio	0.05
Pomegranate	0.90
Potato, chip	0.40
Potato, processed potato waste	0.90
Poultry, fat	0.05
Poultry, meat	0.05
Poultry, meat byproducts	0.05
Pulasan	3.0
Rambutan	3.0
Rapeseed, seed	0.05
Raspberry, wild	2.5
Safflower, seed	0.05
Salal	3.5
Sapodilla	1.0
Sapote, black	1.0
Sapote, mamey	1.0
Sheep, fat	0.30
Sheep, meat	0.30
Sheep, meat byproducts	0.30
Soursop	0.30
Soybean, forage	8.0
Soybean, hay	35
Soybean, meal	4.0
Soybean, seed	3.5
Spanish lime	3.0
Star apple	1.0
Starfruit	1.0
Strawberry	0.50
Sugar apple	0.30
Sunflower, seed	0.05
Tomato, paste	6.0
Tomato, puree	3.0
Vegetable, brassica leafy, group 5	3.5
Vegetable, cucurbit, group 9	0.5
Vegetable, fruiting, group 8	1.0
Vegetable, leaves of root and tuber, group 2	4.0
Vegetable, legume, group 6, except soybean	4.0
Vegetable, root and tuber, group 1, except sugar beet	0.40
Watercress	3.5
Watercress, upland	3.5
Wax jambu	1.0

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of the insecticide imidacloprid, including its metabolites and degradates in connection with use of the pesticide under a Section 18 emergency exemption granted by EPA. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of imidacloprid (1-[6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine) and its metabolites containing the 6-chloropyridinyl moiety, calculated as the stoichiometric equivalent of imidacloprid. These tolerances will expire and are revoked on the dates specified in the following table:

Commodity	Parts per million	Expiration/revocation date
Sugarcane, cane	6.0	12/31/18
Sugarcane, molasses	50	12/31/18

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of the insecticide imidacloprid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of imidacloprid (1-[6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine) and its metabolites containing the 6-chloropyridinyl moiety, calculated as the stoichiometric

equivalent of imidacloprid, in or on the following commodities, when present therein as a result of the application of the pesticide to growing crops listed in this section and other non-food crops as follows:

Commodity	Parts per million
Rice, grain	0.05
Vegetable, foliage of legume, group 7	2.5
Vegetable, legume, group 6	0.3

[75 FR 22251, Apr. 28, 2010, as amended at 78 FR 33743, June 5, 2013; 80 FR 78145, Dec. 16, 2015]

[↑ Back to Top](#)

### §180.473 Glufosinate ammonium; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide glufosinate ammonium, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring the sum of glufosinate ammonium, butanoic acid, 2-amino-4-(hydroxymethylphosphinyl) monoammonium salt, and its metabolites, 2-(acetilamino)-4-(hydroxymethyl phosphinyl)butanoic acid, and 3-(hydroxymethylphosphinyl)propanoic acid, expressed as 2-amino-4-(hydroxymethylphosphinyl)butanoic acid equivalents:

Commodity	Parts per million
Almond, hulls	0.50
Apple	0.05
Banana	0.30
Banana, pulp	0.20
Beet, sugar, molasses	5.0
Beet, sugar, roots	0.9
Beet, sugar, tops (leaves)	1.5
Bushberry subgroup 13B	0.15
Canola, meal	1.1
Canola, seed	0.40
Cattle, fat	0.40
Cattle, meat	0.15
Cattle, meat byproducts	6.0
Corn, field forage	4.0
Corn, field, grain	0.20
Corn, field, stover	6.0
Corn, sweet, forage	1.5
Corn, sweet, kernels plus cob with husks removed	0.30
Corn, sweet, stover	6.0
Cotton, gin byproducts	15
Cotton, undelinted seed	4.0
Egg	0.15
Fruit, citrus, group 10-10	0.15
Fruit, pome, group 11-10	0.25
Fruit, stone, group 12-12	0.30
Goat, fat	0.40
Goat, meat	0.15
Goat, meat byproducts	6.0
Grain aspirated fractions	25
Grape	0.05
Hog, fat	0.40
Hog, meat	0.15
Hog, meat byproducts	6.0
Horse, fat	0.40
Horse, meat	0.15
Horse, meat byproducts	6.0
Juneberry	0.10
Lingonberry	0.10
Milk	0.15
Nut, tree, group 14	0.50
Olive	0.50
Pistachio	0.10
Potato	0.80
Potato, chips	1.6
Potato granules/flakes	2.0
Poultry, fat	0.15
Poultry, meat	0.15
Poultry, meat byproducts	0.60
Rice, grain	1.0
Rice, hull	2.0

Salal	0.10
Sheep, fat	0.40
Sheep, meat	0.15
Sheep, meat byproducts	6.0
Soybean	2.0
Soybean, hulls	10

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional restrictions.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of glufosinate ammonium, including its metabolites and degradates, in or on the commodities in the table below, as a result of the application of glufosinate ammonium to crops listed in paragraph (a) of this section. Compliance with the tolerance levels specified below is to be determined by measuring the sum of glufosinate ammonium, butanoic acid, 2-amino-4-(hydroxymethylphosphinyl) monoammonium salt, and its metabolite, 3-(hydroxymethylphosphinyl) propanoic acid, expressed as 2-amino-4-(hydroxymethylphosphinyl)butanoic acid equivalents.

Commodity	Parts per million
Barley, hay	0.40
Barley, straw	0.40
Buckwheat, fodder	0.40
Buckwheat, forage	0.40
Oat, forage	0.40
Oat, hay	0.40
Oat, straw	0.40
Rye, forage	0.40
Rye, straw	0.40
Teosinte	0.40
Triticale	0.40
Wheat, forage	0.40
Wheat, hay	0.40
Wheat, straw	0.40

[68 FR 55849, Sept. 29, 2003, as amended at 71 FR 25945, May 3, 2006; 72 FR 72625, Dec. 21, 2007; 76 FR 23497, Apr. 27, 2011; 77 FR 59113, Sept. 26, 2012; 80 FR 72599, Nov. 20, 2015; 84 FR 21708, May 15, 2019]

[↑ Back to Top](#)

#### §180.474 Tebuconazole; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of tebuconazole, alpha-[2-(4-chlorophenyl)ethyl]-alpha-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only tebuconazole [ $\alpha$ -[2-(4-chlorophenyl)ethyl]- $\alpha$ -(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol], in or on the commodity.

Commodity	Parts per million
Almond, hulls	6.0
Apple, wet pomace	0.1
Asparagus	0.05
Banana	0.05
Barley, grain	0.3
Barley, hay	7.0
Barley, straw	3.5
Bean, dry seed	0.1
Bean, succulent	0.1
Beet, garden, roots	0.70
Beet, garden, tops	7.0
Brassica, leafy greens, subgroup 5B	2.5
Cherry, sweet, pre- and post-harvest	5.0
Cherry, tart, pre- and post-harvest	5.0
Coffee, green bean <sup>1</sup>	0.15
Coffee, roasted bean <sup>1</sup>	0.3
Corn, field, forage	4.0
Corn, field, grain	0.05
Corn, field, stover	3.5
Corn, pop, grain	0.05
Corn, pop, stover	3.5
Corn, sweet, forage	7.0
Corn, sweet, kernel plus cob with husks removed	0.5

Corn, sweet, stover	6.0
Cotton, gin byproducts	25.0
Cotton, undelinted seed	2.0
Fruit, pome, group 11	0.05
Fruit, stone, group 12, except cherry	1.0
Ginseng, dried <sup>1</sup>	0.40
Ginseng, fresh <sup>1</sup>	0.15
Grain, aspirated fractions	16.0
Grape	5.0
Grass, forage	8.0
Grass, hay	25.0
Grass, seed screenings	55.0
Grass, straw	30.0
Hop, dried cones	35.0
Lychee	1.6
Mango, postharvest	0.15
Nut, tree, group 14	0.05
Oat, forage	0.10
Oat, grain	0.15
Oat, hay	0.10
Oat, straw	0.10
Onion, bulb, subgroup 3-07A	0.2
Onion, green, subgroup 3-07B	1.3
Orange <sup>1</sup>	1.0
Orange, oil <sup>1</sup>	10
Peach	1.0
Peanut	0.1
Pistachio	0.05
Plum, pre- and post-harvest	1.0
Soybean, forage	25
Soybean, hay	50
Soybean, seed	0.08
Sunflower, seed	0.05
Sunflower, meal	0.2
Sunflower, refined oil	0.2
Vegetable, cucurbit, group 9	0.4
Vegetable, fruiting, group 8-10	1.3
Wheat, forage	3.0
Wheat, germ	0.20
Wheat, grain	0.15
Wheat, hay	7.0
Wheat, shorts	0.20
Wheat, straw	1.5

<sup>1</sup>There are no U.S. registrations.

(2) Tolerances are established for residues of the fungicide tebuconazole, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of tebuconazole (alpha-[2-(4-chlorophenyl)ethyl]-alpha-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol) and its diol metabolite (1-(4-chlorophenyl)-4,4-dimethyl-3-(1H-1,2,4-triazole-1-yl-methyl)-pentane-3,5-diol), calculated as the stoichiometric equivalent of tebuconazole, in or on the commodity.

Commodity	Parts per million
Cattle, meat byproducts	0.2
Goat, meat byproducts	0.2
Horse, meat byproducts	0.2
Milk	0.1
Sheep, meat byproducts	0.2

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances are established for residues of the fungicide tebuconazole, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified below is to be determined by measuring only tebuconazole, alpha-[2-(4-chlorophenyl)ethyl]-alpha-(1,1-dimethylethyl)-1H-1,2,4-triazole-1-ethanol, in or on the commodity.

Commodity	Parts per million
Turnip, roots	0.5
Turnip, tops	7.0

(d) *Indirect or inadvertent residues.* [Reserved]

[59 FR 39464, Aug. 3, 1994]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.474, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.475 Difenoconazole; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of difenoconazole, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified below is to be determined by measuring only difenoconazole, 1-[2-[2-chloro-4-(4-chlorophenoxy)phenyl]-4-methyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole, in or on the following raw agricultural commodities:

Commodity	Parts per million
Almond, hulls	7.0
Apple, wet pomace	25
Artichoke, globe	1.5
Aspirated grain fractions	95
Banana <sup>1</sup>	0.2
Barley, grain	0.1
Barley, hay	0.05
Barley, straw	0.05
Beet, sugar	0.3
Beet, sugar, dried pulp	1.9
Berry, low growing, subgroup 13-07G, except cranberry	2.5
Brassica, leafy greens, subgroup 4-16B	35
Bushberry subgroup 13-07B	4.0
Carrot	0.50
Citrus, dried pulp	2.0
Citrus, oil	25
Corn, sweet, forage	0.01
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	0.01
Cotton, gin byproducts	15
Cottonseed subgroup 20C	0.40
Cranberry	0.60
Dragonfruit <sup>1</sup>	1.5
Fruit, citrus, group 10-10	0.60
Fruit, pome, group 11-10	5.0
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	3.0
Fruit, stone, group 12-12	2.5
Ginseng	1.0
Grape, raisin	6.0
Guava	3.0
Kohlrabi	2.0
Mango <sup>1</sup>	0.07
Nut, tree, group 14-12	0.03
Oat, forage	0.15
Oat, grain	0.01
Oat, hay	0.05
Oat, straw	0.05
Onion, bulb, subgroup 3-07A	0.20
Onion, green, subgroup 3-07B	6.0
Papaya	0.60
Pea and bean, dried shelled, except soybean, subgroup 6C	0.20
Pea, field, hay	40
Pea, field, vines	10
Potato, wet peel	7.3
Rapeseed subgroup 20A	0.10
Rice, grain	7.0
Rice, wild, grain	7.0
Rye, forage	0.15
Rye, grain	0.01
Rye, straw	0.05
Soybean, hulls	0.20
Soybean, seed	0.15
Vegetable, Brassica, head and stem, group 5-16	2.0
Vegetable, cucurbit, group 9	0.70
Vegetable, fruiting, group 8-10	0.60

Vegetable, tuberous and corm, subgroup 1C	4.0
Wax jambu <sup>1</sup>	1.5
Wheat, forage	0.1
Wheat, grain	0.1
Wheat, hay	0.05
Wheat, straw	0.1

(2) Tolerances are established for residues of difenoconazole, including its metabolites and degradates, in the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring the sum of difenoconazole, 1-[2-[2-chloro-4-(4-chlorophenoxy)phenyl]-4-methyl-1,3-dioxolan-2-ylmethyl]-1*H*-1,2,4-triazole, and its metabolite, CGA-205375, 1-[2-chloro-4-(4-chloro-phenoxy)phenyl]-2-[1,2,4]triazol-1-yl-ethanol, calculated as the stoichiometric equivalent of difenoconazole, in the following commodities:

Commodity	Parts per million
Cattle, fat	0.10
Cattle, liver	0.40
Cattle, meat	0.05
Cattle, meat byproduct (except liver)	0.10
Egg	0.02
Goat, fat	0.10
Goat, liver	0.40
Goat, meat	0.05
Goat, meat byproduct (except liver)	0.10
Hog, fat	0.10
Hog, liver	0.40
Hog, meat	0.05
Hog, meat byproduct (except liver)	0.10
Horse, fat	0.10
Horse, liver	0.40
Horse, meat	0.05
Horse, meat byproduct (except liver)	0.10
Milk	0.02
Sheep, fat	0.10
Sheep, liver	0.40
Sheep, meat	0.05
Sheep, meat byproduct (except liver)	0.10

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 36254, July 6, 1999]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.475, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.476 Triflumizole; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the fungicide triflumizole, including its metabolites and degradates, in or on the commodities listed in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the parent compound triflumizole, 1-(1-((4-chloro-2-(trifluoromethyl)phenyl)imino)-2-propoxyethyl)-1*H*-imidazole, and its metabolites containing the 4-chloro-2-trifluoromethylaniline moiety, calculated as stoichiometric equivalent of the parent compound.

Commodity	Parts per million
Berry, low growing, subgroup 13-07G, except cranberry	2.0
Brassica, head and stem, subgroup 5A	8.0
Brassica, leafy greens, subgroup 5B	40
Canistel	2.5
Cherry, sweet	1.5
Cherry, tart	1.5
Cilantro, leaves	35
Fruit, pome, group 11-10	0.50
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2.5
Hazelnut	0.05
Hop, dried cones	50

Leafy greens subgroup 4A, except spinach	35
Mango	2.5
Papaya	2.5
Pineapple	4.0
Sapodilla	2.5
Sapote, black	2.5
Sapote, mamey	2.5
Star apple	2.5
Swiss chard	18
Tomato	1.5
Turnip, greens	40
Vegetable, cucurbit, group 9	0.5

(2) Tolerances are established for residues of the fungicide triflumizole, including its metabolites and degradates, in or on the commodities of animal origin listed in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the parent compound triflumizole, 1-(1-((4-chloro-2-(trifluoromethyl)phenyl)imino)-2-propoxyethyl)-1 *H*-imidazole, the metabolite 4-chloro-2-hydroxy-6-trifluoromethylaniline sulfate, and other metabolites containing the 4-chloro-2-trifluoromethylaniline moiety, calculated as the parent compound.

Commodity	Parts per million
Cattle, fat	0.10
Cattle, meat byproducts	0.20
Goat, fat	0.10
Goat, meat byproducts	0.20
Horse, fat	0.10
Horse, meat byproducts	0.20
Sheep, fat	0.10
Sheep, meat byproducts	0.20

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33702, May 24, 2000, as amended at 67 FR 40228, June 12, 2002; 67 FR 54587, Aug. 23, 2002; 70 FR 7047, Feb. 10, 2005; 70 FR 17915, Apr. 8, 2005; 71 FR 13279, Mar. 15, 2006; 71 FR 49358, Aug. 23, 2006; 74 FR 26543, June 3, 2009; 74 FR 46376, Sept. 9, 2009; 76 FR 34885, June 15, 2011; 79 FR 12408, Mar. 5, 2014; 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

#### §180.477 Flumiclorac pentyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide flumiclorac pentyl, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only flumiclorac pentyl, pentyl(2-chloro-4-fluoro-5-(1,3,4,5,6,7-hexahydro-1,3-dioxo-2*H*-isoindol-2-yl)phenoxy)acetate, in or on the commodity.

Commodity	Parts per million
Corn, field, forage	0.01
Corn, field, grain	0.01
Corn, field, stover	0.01
Cotton, gin byproducts	3.0
Cotton, undelinted seed	0.2
Soybean, hulls	0.02
Soybean, seed	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33702, May 24, 2000, as amended at 71 FR 11533, Mar. 8, 2006; 76 FR 23497, Apr. 27, 2011]

[↑ Back to Top](#)

#### §180.478 Rimsulfuron; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide rimsulfuron, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only rimsulfuron, N-[[[4,6-dimethoxy-2-pyrimidinyl)amino] carbonyl]-3-(ethylsulfonyl)-2-pyridinesulfonamide.

Commodity	Parts per million
Almond, hulls	0.09
Berry, low growing, except strawberry, subgroup 13-07H	0.02
Bushberry, subgroup 13-07B	0.01
Caneberry, subgroup 13-07A	0.01
Chicory, roots	0.01
Chicory, tops	0.01
Corn, field, forage	0.4
Corn, field, grain	0.1
Corn, field, stover	2.5
Fruit, citrus, group 10-10	0.01
Fruit, pome, group 11-10	0.01
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.01
Fruit, stone, group 12-12	0.01
Grain, aspirated fractions	4.5
Nut, tree, group 14-12	0.01
Potato <sup>1</sup>	0.1
Sorghum, grain, forage	0.01
Sorghum, grain, grain	0.01
Sorghum, grain, stover	0.01
Soybean, forage	0.25
Soybean, hay	1.2
Soybean, hulls	0.04
Soybean, seed	0.01
Tomato	0.05
Vegetable, tuberous and corm, subgroup 1C	0.10

<sup>1</sup>This tolerance expires on August 12, 2018.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registrations, as defined in §180.1(1), are established for residues of the herbicide rimsulfuron, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specific in the following table is to be determined by measuring only rimsulfuron, N-[[[4,6-dimethoxy-2-pyrimidinyl)amino] carbonyl]-3-(ethylsulfonyl)-2-pyridinesulfonamide.

Commodity	Parts per million
Fescue, forage	0.01
Fescue, hay	0.01
Ryegrass, perennial, forage	0.01
Ryegrass, perennial, hay	0.01

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 16696, Apr. 6, 1998, as amended at 72 FR 41913, Aug. 1, 2007; 74 FR 67137, Dec. 18, 2009; 77 FR 3625, Jan. 25, 2012; 77 FR 46306, Aug. 3, 2012; 80 FR 66805, Oct. 30, 2015; 83 FR 5947, Feb. 12, 2018]

[↑ Back to Top](#)

### §180.479 Halosulfuron-methyl; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide halosulfuron-methyl, methyl 5-[[[4,6-dimethoxy-2-pyrimidinyl)amino] carbonylamino]sulfonyl]-3-chloro-1-methyl-1H-pyrazole-4-carboxylate, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only those halosulfuron-methyl residues containing the 3-chlorosulfonamide (3-CSA) moiety, expressed as the stoichiometric equivalent of halosulfuron-methyl, in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.05
Cattle, meat	0.05
Cattle, meat byproducts	1.0
Goat, fat	0.05
Goat, meat	0.05
Goat, meat byproducts	1.0



Hog, meat byproducts	0.1
Horse, fat	0.05
Horse, meat	0.05
Horse, meat byproducts	1.0
Milk	0.05
Sheep, fat	0.05
Sheep, meat	0.05
Sheep, meat byproducts	1.0

(2) Tolerances are established for residues of the herbicide halosulfuron-methyl, methyl 5-[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonylamino]sulfonyl]-3-chloro-1-methyl-1H-pyrazole-4-carboxylate, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only halosulfuron-methyl.

Commodity	Parts per million
Alfalfa, forage	1.0
Alfalfa, hay	2.0
Almond, hulls	0.2
Artichoke	0.05
Asparagus	0.8
Bean, dry, seed	0.05
Bushberry, subgroup 13-07B	0.05
Caneberry subgroup 13-07A	0.05
Corn, field, forage	0.2
Corn, field, grain	0.05
Corn, field, stover	0.8
Corn, pop, grain	0.05
Corn, pop, stover	0.8
Corn, sweet, forage	0.2
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	0.8
Cotton, gin byproducts	0.05
Cotton, undelinted seed	0.05
Fruit, pome, group 11-10	0.05
Grass, forage, fodder, and hay, group 17, forage	20
Grass, forage, fodder, and hay, group 17, hay	0.5
Melon subgroup 9A	0.1
Millet, proso, forage	10
Millet, proso, grain	0.01
Millet, proso, hay	0.01
Millet, proso, straw	0.01
Nut, tree, group 14	0.05
Okra	0.05
Pea and bean, succulent shelled, subgroup 6	0.05
Pea and bean, succulent shelled, subgroup 6B	0.05
Pistachio	0.05
Rhubarb	0.05
Rice, grain	0.05
Sorghum, grain, forage	0.05
Sorghum, grain, grain	0.05
Sorghum, grain, stover	0.1
Soybean, seed	0.05
Squash/Cucumber subgroup 9B	0.5
Sugarcane, cane	0.05
Vegetable, fruiting, group 8	0.05
Vegetable, tuberous and corm, subgroup 1C	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registrations are established for residues of the herbicide halosulfuron-methyl, methyl 5-[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonylamino]sulfonyl]-3-chloro-1-methyl-1H-pyrazole-4-carboxylate, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only halosulfuron-methyl.

Commodity	Parts per million
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.05

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 25448, May 12, 1999, as amended at 65 FR 58433, Sept. 29, 2000; 66 FR 66340, Dec. 26, 2001; 66 FR 66786, Dec. 27, 2001; 67 FR 45649, July 10, 2002; 67 FR 59192, Sept. 20, 2002; 70 FR 51622, Aug. 31, 2005; 72 FR 8927, Feb. 28, 2007; 74 FR 48401, Sept. 23,

2009; 75 FR 46853, Aug. 4, 2010; 76 FR 34886, June 15, 2011; 77 FR 71561, Dec. 3, 2012; 78 FR 53051, Aug. 28, 2013; 80 FR 55773, Sept. 17, 2015; 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.480 Fenbuconazole; tolerances for residues.

(a) Tolerances are established for residues of the fungicide fenbuconazole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of fenbuconazole, alpha-[2-(4-chlorophenyl)-ethyl]-alpha-phenyl-3-(1H-1,2,4-triazole)-1-propanenitrile, and its metabolites RH-9129, cis-5-(4-chlorophenyl)-dihydro-3-phenyl-3-(1H-1,2,4-triazole-1-ylmethyl)-2-3 H-furanone, and RH-9130, trans-5-(4-chlorophenyl)-dihydro-3-phenyl-3-(1H-1,2,4-triazole-1-ylmethyl)-2-3 H-furanone, calculated as the stoichiometric equivalent of fenbuconazole, in or on the following agricultural commodities.

Commodity	Parts per million
Almond	0.05
Almond, hulls	1.0
Apple	0.4
Apple, wet pomace	1.0
Banana	0.3
Beet, sugar, dried pulp	1.0
Beet, sugar, molasses	0.4
Beet, sugar, roots	0.3
Beet, sugar, tops	9.0
Bushberry subgroup 13B	0.3
Cattle, meat byproducts	0.05
Citrus, dried pulp	5.0
Citrus, oil	40.0
Cranberry	0.5
Fruit, citrus, group 10	1.0
Fruit, stone, group 12	1.0
Goat, meat byproducts	0.05
Grain, aspirated fractions	6.0
Grape <sup>1</sup>	1.0
Horse, meat byproducts	0.05
Peanut	0.1
Pecan	0.05
Pepper	1.0
Sheep, meat byproducts	0.05
Wheat, forage	4.0
Wheat, grain	0.1
Wheat, hay	8.0
Wheat, straw	8.0

<sup>1</sup>There are no United States registrations for grape as of August 2006.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[60 FR 11032, Mar. 1, 1995]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.480, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.481 Prosulfuron; tolerances for residues.

(a) *General.* Tolerances are established for residues of prosulfuron, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only prosulfuron (*N*-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]-2-(3,3,3-trifluoropropyl)benzenesulfonamide] in or on the commodity.

Commodity	Parts per million
Grain, cereal, forage, fodder, and straw, group 16, forage	0.10
Grain, cereal, forage, fodder, and straw, group 16, hay	0.20

Grain, cereal, forage, fodder, and straw, group 16, stover	0.01
Grain, cereal, forage, fodder, and straw, group 16, straw	0.02
Grain, cereal, group 15	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registration.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[74 FR 67118, Dec. 18, 2009, as amended at 82 FR 31475, July 7, 2017]

[↑ Back to Top](#)

#### §180.482 Tebufenozide; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide tebufenozide, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only tebufenozide, 3,5-dimethylbenzoic acid 1-(1,1-dimethylethyl)-2-(4-ethylbenzoyl)hydrazide, in or on the commodity.

Commodity	Parts per million
Almond, hulls	30
Apple, dry pomace	3.0
Apple, wet pomace	3.0
Bushberry subgroup 13-07B	3.0
Brassica, head and stem, subgroup 5A	5.0
Brassica, leafy greens, subgroup 5B	10.0
Canola, refined oil	4.0
Canola, seed	2.0
Caneberry subgroup 13-07A	3.0
Citrus, oil	15.0
Cotton	1.5
Cotton, gin byproducts	30
Cranberry	1.0
Fruit, citrus, group 10-10	2.0
Fruit, pome <sup>1</sup>	1.5
Fruit, pome, group 11-10	1.0
Grape	3.0
Kiwifruit <sup>2</sup>	0.5
Leaf petioles subgroup 4B	2.0
Leafy greens subgroup 4A	10.0
Nut, tree, group 14-12	0.1
Peppermint, tops	10.0
Spearmint, tops	10.0
Sugarcane, cane	1.0
Sugarcane, molasses	3.0
Turnip, greens	9.0
Turnip, roots	0.3
Vegetable, fruiting, group 8-10	1.0
Vegetable, tuberous and corm, except potato, subgroup 1D	0.015

<sup>1</sup>This tolerance expires on May 16, 2018.

<sup>2</sup>There are no U.S. registrations on kiwifruit.

(2) Tolerances are established for residues of the insecticide tebufenozide, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of tebufenozide, 3,5-dimethylbenzoic acid 1-(1,1-dimethylethyl)-2-(4-ethylbenzoyl)hydrazide, and its metabolites, 3,5-dimethylbenzoic acid 1-(1,1-dimethylethyl)-2-((4-carboxymethyl)benzoyl)hydrazide, 3-hydroxymethyl-5-methylbenzoic acid 1-(1,1-dimethylethyl)-2-(4-ethylbenzoyl)hydrazide, stearic acid conjugate of 3-hydroxymethyl-5-methylbenzoic acid 1-(1,1-dimethylethyl)-2-(4-ethylbenzoyl)hydrazide, and 3-hydroxymethyl-5-methylbenzoic acid 1-(1,1-dimethylethyl)-2-(4-(1-hydroxyethyl)benzoyl)hydrazide, calculated as the stoichiometric equivalent of tebufenozide, in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.1
Cattle, meat	0.08
Cattle, meat byproducts	0.08

Goat, fat	0.1
Goat, meat	0.08
Goat, meat byproducts	0.08
Hog, fat	0.1
Hog, meat	0.08
Hog, meat byproducts	0.08
Horse, fat	0.1
Horse, meat	0.08
Horse, meat byproducts	0.08
Milk	0.04
Sheep, fat	0.1
Sheep, meat	0.08
Sheep, meat byproducts	0.08

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of the insecticide tebufenozide, including its metabolites and degradates, in or on the commodities in the table in this paragraph when present therein as a result of the application of tebufenozide to growing crops listed in the table to paragraph (a)(1) of this section. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of tebufenozide, 3,5-dimethylbenzoic acid 1-(1,1-dimethylethyl)-2-(4-ethylbenzoyl)hydrazide, and its metabolite, 3,5-dimethylbenzoic acid 1-(1,1-dimethylethyl)-2-(4-(1-hydroxyethyl)benzoyl)hydrazide, calculated as the stoichiometric equivalent of tebufenozide, in or on the commodity.

Commodity	Parts per million
Animal feed, nongrass, group 18	1.0
Grain, cereal, forage, fodder and straw, group 16	1.0
Grass, forage, fodder and hay, group 17	1.0
Vegetable, foliage of legume, group 7	0.20

[60 FR 29347, May 31, 1995]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.482, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

#### §180.484 Flutolanil; tolerances for residues.

(a) *General.* Tolerances are established for residues of flutolanil, *N*-(3-(1-methylethoxy) phenyl)-2-(trifluoromethyl)benzamide, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only flutolanil and its metabolites converted to 2-(trifluoromethyl) benzoic acid and calculated as flutolanil, in or on the following commodities:

Commodity	Parts per million
Cattle, fat	0.10
Cattle, kidney	1.00
Cattle, liver	2.00
Cattle, meat byproducts	0.05
Cattle, meat	0.05
Cotton, gin byproducts	0.20
Cotton, undelinted seed	0.20
Egg	0.05
Goat, fat	0.10
Goat, kidney	1.00
Goat, liver	2.00
Goat, meat byproducts	0.05
Goat, meat	0.05
Hog, fat	0.10
Hog, kidney	1.00
Hog, liver	2.00
Hog, meat byproducts	0.05
Hog, meat	0.05
Horse, fat	0.10
Horse, kidney	1.00
Horse, liver	2.00
Horse, meat byproducts	0.05
Horse, meat	0.05
Milk	0.05

Peanut	0.5
Peanut, hay	15.0
Peanut, meal	1.0
Potato	0.20
Potato, wet peel	0.30
Poultry, fat	0.05
Poultry, meat	0.05
Poultry, meat byproducts	0.05
Rice, bran	10.0
Rice, grain	7.0
Rice, hulls	25.0
Sheep, fat	0.10
Sheep, kidney	1.00
Sheep, liver	2.00
Sheep, meat	0.05
Sheep, meat byproducts	0.05
Soybean, forage	8.0
Soybean, hay	2.5
Soybean, seed	0.20
Turnip, greens	0.1
Vegetable, brassica, leafy, group 5	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for the indirect or inadvertent residues of flutolanil, *N*-(3-(1-methylethoxy)phenyl)-2-(trifluoromethyl)benzamide, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only flutolanil and its metabolites converted to 2-(trifluoromethyl) benzoic acid and calculated as flutolanil, in or on the following commodities.

Commodity	Parts per million
Wheat, bran	0.20
Wheat, forage	2.5
Wheat, grain	0.05
Wheat, hay	1.2
Wheat, straw	0.20

[60 FR 42458, Aug. 16, 1995, as amended at 61 FR 33044, June 26, 1996; 63 FR 42256, 42257, Aug. 7, 1998; 66 FR 10825, Feb. 20, 2001; 71 FR 74818, Dec. 13, 2006; 72 FR 35665, June 29, 2007; 73 FR 33017, June 11, 2008; 75 FR 17570, Apr. 7, 2010; 75 FR 80350, Dec. 22, 2010; 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

#### §180.485 Cyproconazole; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the free and conjugated forms of the fungicide cyproconazole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the proposed tolerance levels specified below is to be determined by measuring only cyproconazole ( $\alpha$ -(4-chlorophenyl)- $\alpha$ -(1-cyclopropylethyl)-1*H*-1,2,4-triazole-1-ethanol) in or on the following commodities:

Commodity	Parts per million
Aspirated grain fractions	2.5
Cattle, fat	0.01
Cattle, meat byproducts (except liver)	0.01
Coffee bean, green (Imported) <sup>1</sup>	0.1
Corn, field, forage	0.60
Corn, field, grain	0.01
Corn, field, stover	1.2
Goat, fat	0.01
Goat, meat byproducts (except liver)	0.01
Horse, fat	0.01
Horse, meat byproducts (except liver)	0.01
Peanut	0.01
Peanut, hay	6.0
Sheep, fat	0.01
Sheep, meat byproducts (except liver)	0.01
Soybean, forage	1.0
Soybean, hay	3.0
Soybean, oil	0.10
Soybean, seed	0.05

Wheat, forage	0.80
Wheat, grain	0.05
Wheat, grain, milled byproducts	0.10
Wheat, hay	1.3
Wheat, straw	0.90

<sup>1</sup>There are no U.S. registrations as of February 15, 2008 for use on coffee bean.

(2) A tolerance is established for the combined residues of the free and conjugated forms of the fungicide cyproconazole, including its metabolites and degradates, in or on the commodity in the table below. Compliance with the tolerance level specified below is to be determined by measuring only the sum of cyproconazole ( $\alpha$ -(4-chlorophenyl)- $\alpha$ -(1-cyclopropylethyl)-1*H*-1,2,4-triazole-1-ethanol) and its metabolite  $\delta$ -(4-chlorophenyl)- $\beta$ , $\delta$ -dihydroxy- $\gamma$ -methyl-1*H*-1,2,4-triazole-1-hexenoic acid, calculated as the stoichiometric equivalent of cyproconazole, in or on the following commodity:

Commodity	Parts per million
Milk	0.02

(3) Tolerances are established for the combined residues of the free and conjugated forms of the fungicide cyproconazole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance level specified below is to be determined by measuring only the sum of cyproconazole ( $\alpha$ -(4-chlorophenyl)- $\alpha$ -(1-cyclopropylethyl)-1*H*-1,2,4-triazole-1-ethanol) and its metabolite 2-(4-chlorophenyl)-3-cyclopropyl-1-[1,2,4]triazol-1-yl-butane-2,3-diol, calculated as the stoichiometric equivalent of cyproconazole, in or on the following commodities:

Commodity	Parts per million
Cattle, liver	0.50
Goat, liver	0.50
Hog, liver	0.01
Horse, liver	0.50
Sheep, liver	0.50

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 53835, Oct. 7, 1998, as amended at 71 FR 71058, Dec. 8, 2006; 73 FR 27760, May 14, 2008; 78 FR 37473, June 21, 2013]

[↑ Back to Top](#)

#### §180.486 Chlorethoxyfos; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide chlorethoxyfos, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only chlorethoxyfos, *O,O*-diethyl *O*-(1,2,2,2-tetrachloroethyl) phosphorothioate, in or on the commodity.

Commodity	Parts per million
Corn, field, forage	0.01
Corn, field, grain	0.01
Corn, field, stover	0.01
Corn, pop, grain	0.01
Corn, pop, stover	0.01
Corn, sweet, forage	0.01
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[76 FR 23498, Apr. 27, 2011]

[↑ Back to Top](#)

#### §180.487 Pyriithiobac sodium; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide, pyriithiobac sodium, (sodium 2-chloro-6-[(4,6-dimethoxypyrimidin-2-yl)thio]benzoate), resulting from the application of the pesticide chemical in or on the following foods/feeds:

Commodity	Parts per million
Cotton, gin byproducts	0.15
Cotton, undelinted seed	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 54783, Oct. 22, 1997, as amended at 64 FR 56469, Oct. 20, 1999; 67 FR 72110, Dec. 4, 2002]

[↑ Back to Top](#)

### §180.490 Imazapic; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide imazapic, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified is to be determined by measuring the sum of imazapic (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid) and its metabolites (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-hydroxymethyl-3-pyridinecarboxylic acid and (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(β-D-glucopyranosyloxy)methyl-3-pyridinecarboxylic acid, calculated as the stoichiometric equivalent of imazapic.

Commodity	Parts per million
Grass, forage	15
Grass, hay	30
Peanut	0.1
Soybean, seed <sup>1</sup>	0.40
Sugarcane, cane <sup>2</sup>	0.03

<sup>1</sup>There are no US registrations as of April 4, 2014.

<sup>2</sup>There are no U.S. registrations as of June 4, 2014.

(2) Tolerances are established for residues of the herbicide imazapic, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified is to be determined by measuring the sum of imazapic (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-methyl-3-pyridinecarboxylic acid) and its metabolite (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-hydroxymethyl-3-pyridinecarboxylic acid, calculated as the stoichiometric equivalent of imazapic.

Commodity	Parts per million
Cattle, fat	0.10
Cattle, kidney	1.0
Cattle, meat byproducts, except kidney	0.1
Cattle, meat	0.1
Goat, fat	0.1
Goat, kidney	1.0
Goat, meat byproducts, except kidney	0.1
Goat, meat	0.1
Horse, fat	0.1
Horse, kidney	1.0
Horse, meat byproducts, except kidney	0.1
Horse, meat	0.1
Milk	0.1
Sheep, fat	0.1
Sheep, kidney	1.0
Sheep, meat byproducts, except kidney	0.1
Sheep, meat	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 54224, Oct. 6, 1999, as amended at 66 FR 64774, Dec. 14, 2001; 66 FR 66332, Dec. 26, 2001; 78 FR 49932, Aug. 16, 2013; 79 FR 18818, Apr. 4, 2014; 79 FR 32170, June 4, 2014]

[↑ Back to Top](#)

### §180.491 Propylene oxide; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the fumigant propylene oxide, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only propylene oxide, when used as a postharvest fumigant, in or on the commodity.

Commodity	Parts per million
Cacao bean, cocoa powder	200
Cacao bean, dried bean	200
Fig	3.0
Garlic, dried	300
Grape, raisin	1.0
Herbs and spices, group 19, dried	300
Nut, pine	300
Nut, tree, group 14	300
Nutmeat, processed, except peanuts	300
Onion, dried	300
Pistachio	300
Plum, prune, dried	2.0

(2) Tolerances are established for residues of the reaction product, propylene chlorohydrin, including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only the sum of propylene chlorohydrin (1-chloro-2-propanol), and its isomer 2-chloro-1-propanol, calculated as the stoichiometric equivalent of propylene chlorohydrin (1-chloro-2-propanol), that results from the use of propylene oxide as a postharvest fumigant, in or on the commodity.

Commodity	Parts per million
Basil, dried leaves	6000
Cacao bean, cocoa powder	20.0
Cacao bean, dried bean	20.0
Fig	3.0
Garlic, dried	6000
Grape, raisin	4.0
Herbs and spices, group 19, dried, except basil	1500
Nut, pine	10.0
Nut, tree, group 14	10.0
Nutmeat, processed, except peanuts	10.0
Onion, dried	6000
Pistachio	10.0
Plum, prune, dried	2.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33702, May 24, 2000, as amended at 68 FR 39430, July 1, 2003; 72 FR 49651, Aug. 29, 2007; 73 FR 54963, Sept. 24, 2008; 76 FR 38037, June 29, 2011; 77 FR 28495, May 15, 2012]

[↑ Back to Top](#)

### §180.492 Triflurosulfuron-methyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of triflurosulfuron-methyl, including its metabolites and degradates, in or on the commodities listed in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only triflurosulfuron-methyl (methyl 2-[[[[[4-(dimethylamino)-6-(2,2,2-trifluoroethoxy)-1,3,5-triazin-2-yl]amino]carbonyl]amino]sulfonyl]-3-methylbenzoate) in or on the following commodities:

Commodity	Parts per million
Beet, garden, roots	0.01
Beet, garden, tops	0.02



Beet, sugar, roots	0.05
Beet, sugar, tops	0.05
Chicory, roots	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[67 FR 40196, June 12, 2002, as amended at 76 FR 22625, Apr. 22, 2011]

[↑ Back to Top](#)

### §180.493 Dimethomorph; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide dimethomorph, 4-[3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)-1-oxo-2-propen-1-yl]morpholine, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only dimethomorph in or on the commodities.

Commodity	Parts per million
Brassica, head and stem, subgroup 5A	6.0
Brassica, leafy greens, subgroup 5B	30.0
Ginseng	0.90
Grape	3.0
Grape, raisin	7.0
Hop, dried cones	60
Onion, bulb, subgroup 3-07A	0.6
Onion, green, subgroup 3-07B	15.0
Papaya <sup>1</sup>	1.5
Potato	0.05
Potato, wet peel	0.20
Strawberry	0.90
Taro, corm	0.5
Taro, leaves	6.0
Turnip, greens	20.0
Vegetable, cucurbit, group 9	0.5
Vegetable, fruiting, group 8	1.5
Vegetable, leafy (except Brassica) group 4	30.0

<sup>1</sup>There are no U.S. registrations as of January 20, 2015.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registrations are established for residues of the fungicide dimethomorph, 4-[3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)-1-oxo-2-propen-1-yl]morpholine, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only dimethomorph in or on the commodity.

Commodity	Parts per million
Bean, lima, succulent	0.60

(d) *Indirect or inadvertent residues.* Tolerances are established for the indirect or inadvertent residues of the fungicide dimethomorph, 4-[3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)-1-oxo-2-propen-1-yl]morpholine, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only dimethomorph in or on the commodity.

Commodity	Parts per million
Wheat, forage	0.15
Wheat, hay	0.15
Wheat, straw	0.4

[62 FR 26416, May 14, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.493, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

**§180.494 Pyridaben; tolerance for residues.**

(a) *General.* Tolerances are established for residues of the insecticide pyridaben, including its metabolites and degradates, in or on the commodities as indicated in the following table. Compliance with the tolerance levels specified below for plant commodities is to be determined by measuring the insecticide pyridaben [2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2*H*)-one] on the plant commodity. Compliance with the tolerance levels specified below for animal commodities is to be determined by measuring the insecticide pyridaben and its metabolites, [2-tert-butyl-5-(4-(1-carboxy-1-methylethyl) benzylthio)-4-chloropyridazin-3 (2*H*)one] and [2-tert-butyl-5-[4(-1, 1-dimethyl-2-hydroxyethyl)benzylthio-4-chloropyridazin-3(2*H*)one] on the animal commodity.

Commodity	Parts per million
Almond, hulls	4.0
Apple, wet pomace	0.75
Berry, low growing, subgroup 13-07G, except cranberry	2.5
Canistel	0.10
Cattle, fat	0.05
Cattle, meat	0.05
Cattle, meat byproducts	0.05
Citrus, dried pulp	1.5
Citrus, oil	10.0
Cucumber	0.50
Fruit, citrus group 10-10	0.9
Fruit, pome group 11-10	0.75
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2.0
Fruit, stone, group 12-12	3.0
Goat, fat	0.05
Goat, meat	0.05
Goat, meat byproducts	0.05
Hog, fat	0.05
Hog, meat	0.05
Hog, meat byproducts	0.05
Hop, dried cones	10.0
Horse, fat	0.05
Horse, meat	0.05
Horse, meat byproducts	0.05
Mango	0.10
Milk	0.01
Nut, tree, group 14-12	0.05
Papaya	0.10
Sapodilla	0.10
Sapote, black	0.10
Sapote, mamey	0.10
Sheep, fat	0.05
Sheep, meat	0.05
Sheep, meat byproducts	0.05
Star apple	0.10
Tomato	0.15

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(m) are established for residues of the insecticide pyridaben, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring the insecticide pyridaben [2-tert-butyl-5-(4-tert-butylbenzylthio)-4-chloropyridazin-3(2*H*)-one] on the following plant commodity.

Commodity	Parts per million
Cranberry	0.5

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 43712, July 14, 2000, as amended at 66 FR 33199, June 21, 2001; 70 FR 55769, Sept. 23, 2005; 76 FR 56015, Sept. 15, 2010; 81 FR 70979, Oct. 14, 2016]

[↑ Back to Top](#)

**§180.495 Spinosad; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the insecticide spinosad, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of spinosyn A (Factor A; CAS #131929-60-7; (2*R*,3*aS*,5*aR*,5*bS*,9*S*,13*S*,14*R*,16*aS*,16*bR*)-2-[(6-deoxy-2,3,4-tri-*O*-methyl- $\alpha$ -L-mannopyranosyl)oxy]-13-[[[(2*R*,5*S*,6*R*)-5-(dimethylamino)tetrahydro-6-methyl-2*H*-pyran-2-yl]oxy]-9-ethyl-2,3,3*a*,5*a*,5*b*,6,9,10,11,12,13,14,16*a*,16*b*-tetradecahydro-14-methyl-1*H*-as-indaceno[3,2-*d*]oxacyclododecin-7,15-dione); and Spinosyn D (Factor D; CAS #131929-63-0) or (2*S*,3*aR*,5*aS*,5*bS*,9*S*,13*S*,14*R*,16*aS*,16*bS*)-2-[(6-deoxy-2,3,4-tri-*O*-methyl- $\alpha$ -L-mannopyranosyl)oxy]-13-[[[(2*R*,5*S*,6*R*)-5-(dimethylamino)tetrahydro-6-methyl-2*H*-pyran-2-yl]oxy]-9-ethyl-2,3,3*a*,5*a*,5*b*,6,9,10,11,12,13,14,16*a*,16*b*-tetradecahydro-4,14-dimethyl-1*H*-as-indaceno[3,2-*d*]oxacyclododecin-7,15-dione), calculated as the stoichiometric equivalent of spinosad.

Commodity	Parts per million
Acerola	1.5
Alfalfa, seed	0.15
Alfalfa, seed screenings	2.0
Almond, hulls	19
Amaranth, grain, grain	1.0
Amaranth, grain, stover	10
Animal feed, nongrass, group, 18	0.02
Animal feed, nongrass, group, 18, forage	35.0
Animal feed, nongrass, group, 18, hay	30.0
Apple, dry pomace	0.5
Apple, wet pomace	0.5
Artichoke, globe	0.3
Asparagus	0.2
Atemoya	0.3
Avocado	0.3
Banana	0.25
Beet, sugar, molasses	0.75
Berry, low growing, subgroup 13-07G, except cranberry	0.90
Biriba	0.3
Brassica, head and stem, subgroup 5A	2.0
Brassica, leafy greens, subgroup 5B	10.0
Bushberry subgroup 13-07B	0.40
Caneberry subgroup 13-07A	1.0
Canistel	0.3
Cattle, fat	50
Cattle, liver	10
Cattle, meat	2.0
Cattle, meat byproducts, except liver	5.0
Cherimoya	0.3
Citrus, oil	3.0
Citrus, dried pulp	0.5
Coffee, green bean	0.04
Corn, sweet, kernel plus cob with husks removed	0.02
Cotton, gin byproducts	1.5
Cottonseed subgroup 20C	0.02
Cranberry	0.01
Custard apple	0.3
Date	0.10
Egg	0.30
Feijoa	.05
Fig	0.10
Fish	4.0
Fish-shellfish, crustacean	4.0
Fish-shellfish, mollusc	4.0
Food commodities	0.02
Fruit, citrus, group 10-10	0.30
Fruit, pome, group 11-10	0.20
Fruit, small, vine climbing, subgroup 13-07F, except fuzzy kiwifruit	0.50
Fruit, stone 12-12	0.20
Goat, fat	50
Goat, liver	10
Goat, meat	2.0
Goat, meat byproducts, except liver	5.0
Grain, aspirated fractions	200
Grain, cereal, group 15	1.5
Grain, cereal, group 16, forage, except rice	2.5
Grain, cereal, group 16, hay, except rice	10.0
Grain, cereal, group, 16, stover, except rice	10.0
Grain, cereal, group, 16, straw, except rice	1.0
Grape, raisin	1.0

Grass, forage, fodder and hay, group 17, forage	10.0
Grass, forage, fodder and hay, group 17, hay	5.0
Guava	0.3
Herb subgroup 19A, dried	22
Herb subgroup 19A, fresh	3.0
Hog, fat	5.0
Hog, meat	0.50
Hog, meat byproducts	2.0
Hop, dried cones	22
Horse, fat	50
Horse, liver	10
Horse, meat	2.0
Horse, meat byproducts, except liver	5.0
llama	0.3
Jaboticaba	0.3
Longan	0.3
Lychee	0.3
Mango	0.3
Milk	7.0
Milk, fat	85
Nut, tree, group 14-12	0.10
Onion, bulb, subgroup 3-07A	0.10
Onion, green, subgroup 3-07B	4.0
Papaya	0.3
Passionfruit	0.3
Pea and bean, dried shelled, except soybean, subgroup 6C	0.02
Pea and bean, succulent shelled, subgroup 6B	0.02
Peanut	0.02
Peanut, hay	11.0
Peppermint, tops	3.5
Pineapple	0.02
Pineapple, process residue	0.08
Pomegranate	0.30
Poultry, fat	1.3
Poultry, meat	0.10
Poultry, meat byproducts	0.20
Pulasan	0.3
Quinoa, grain	0.02
Rambutan	0.3
Rice, hulls	4.0
Sapodilla	0.3
Sapote, black	0.3
Sapote, mamey	0.3
Sapote, white	0.3
Sheep, fat	50
Sheep, liver	10
Sheep, meat	2.0
Sheep, meat byproducts, except liver	5.0
Soursop	0.3
Soybean	0.02
Spanish lime	0.3
Spearmint, tops	3.5
Spice, subgroup 19B, except black pepper	1.7
Star apple	0.3
Starfruit	0.3
Sugar apple	0.3
Tea, dried <sup>1</sup>	2
Tea, instant <sup>1</sup>	2
Ti, leaves	10.0
Vegetable, cucurbit, group 9	0.3
Vegetable, foliage of legume, group 7	8.0
Vegetable, fruiting, group 8-10	0.40
Vegetable, leafy, except brassica, group 4	8.0
Vegetable, leaves of root and tuber, group 2	10.0
Vegetable, legume, edible podded, subgroup 6A	0.30
Vegetable, root and tuber, group 1	0.10
Watercress	8.0
Wax jambu	0.3

<sup>1</sup>There are no U.S. registrations for use on tea.

(b) Section 18 emergency exemptions. [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 68540, Dec. 5, 2007, as amended at 74 FR 46376, Sept. 9, 2009; 74 FR 48408, Sept. 23, 2009; 75 FR 60327, Sept. 30, 2010; 80 FR 72599, Nov. 20, 2015; 80 FR 80672, Dec. 28, 2015; 84 FR 49201, Sept. 19, 2019]

[↑ Back to Top](#)

#### §180.498 Sulfentrazone; tolerances for residues.

(a)(1) *General.* Tolerances are established for the combined residues of the free and conjugated forms of sulfentrazone, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of sulfentrazone (*N*-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl]phenyl]methanesulfonamide) and its metabolite HMS (*N*-(2,4-dichloro-5-(4-(difluoromethyl)-4,5-dihydro-3-hydroxymethyl-5-oxo-1*H*-1,2,4-triazol-1-yl)phenyl)methanesulfonamide, calculated as the stoichiometric equivalent of sulfentrazone in or on the following commodities.

Commodity	Parts per million
Soybean, seed	0.05

(2) Tolerances are established for the combined residues of the free and conjugated forms of sulfentrazone, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of sulfentrazone (*N*-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl]phenyl]methanesulfonamide) and its metabolites HMS (*N*-(2,4-dichloro-5-(4-(difluoromethyl)-4,5-dihydro-3-hydroxymethyl-5-oxo-1*H*-1,2,4-triazol-1-yl)phenyl)methanesulfonamide) and DMS (*N*-(2,4-dichloro-5-(4-(difluoromethyl)-4,5-dihydro-5-oxo-1*H*-1,2,4-triazol-1-yl)phenyl)methanesulfonamide, calculated as the stoichiometric equivalent of sulfentrazone in or on the following commodities.

Commodity	Parts per million
Apple	0.15
Berry and small fruit, group 13-07	0.15
<i>Brassica</i> , leafy greens, subgroup 4-16B	0.60
Chia, seed	0.15
Corn, field, forage	0.20
Corn, field, grain	0.15
Corn, field, stover	0.30
Flax	0.15
Fruit, citrus, group 10-10	0.15
Horseradish	0.20
Melon, subgroup 9A	0.15
Nut, tree, group 14-12	0.15
Pea and bean, dried shelled, except soybean, subgroup 6C	0.15
Pea, succulent	0.15
Peanut	0.20
Peanut, meal	0.40
Peppermint, tops	0.30
Rhubarb	0.15
Spearmint, tops	0.30
Stalk and stem vegetable subgroup 22A	0.15
Sugarcane, cane	0.15
Sugarcane, molasses	0.20
Sunflower subgroup 20B	0.20
Teff, forage	0.50
Teff, grain	0.15
Teff, hay	0.30
Teff, straw	1.5
Turnip, roots	0.15
Vegetable, <i>Brassica</i> , head and stem, group 5-16	0.20
Vegetable, fruiting, group 8-10	0.15
Vegetable, soybean, succulent	0.15
Vegetable, tuberous and corm, subgroup 1C	0.15

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration are established for the combined residues of the free and conjugated forms of sulfentrazone, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of sulfentrazone (*N*-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl]phenyl]methanesulfonamide) and its

metabolites HMS (*N*-(2,4-dichloro-5-(4-(difluoromethyl)-4,5-dihydro-3-hydroxymethyl-5-oxo-1*H*-1,2,4-triazol-1-yl)phenyl)methanesulfonamide) and DMS (*N*-(2,4-dichloro-5-(4-(difluoromethyl)-4,5-dihydro-5-oxo-1*H*-1,2,4-triazol-1-yl)phenyl)methanesulfonamide, calculated as the stoichiometric equivalent of sulfentrazone in or on the following commodities.

Commodity	Parts per million
Bean, lima, succulent	0.15
Cowpea, succulent	0.15
Wheat, forage	0.50
Wheat, grain	0.15
Wheat, hay	0.30
Wheat, straw	1.5

(d) *Indirect or inadvertent residues.* Tolerances are established for inadvertent and indirect combined residues of the free and conjugated forms of sulfentrazone, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of sulfentrazone (*N*-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl]phenyl]methanesulfonamide) and its metabolites HMS (*N*-(2,4-dichloro-5-(4-(difluoromethyl)-4,5-dihydro-3-hydroxymethyl-5-oxo-1*H*-1,2,4-triazol-1-yl)phenyl)methanesulfonamide) and DMS (*N*-(2,4-dichloro-5-(4-(difluoromethyl)-4,5-dihydro-5-oxo-1*H*-1,2,4-triazol-1-yl)phenyl)methanesulfonamide, calculated as the stoichiometric equivalent of sulfentrazone in or on the following commodities when present therein as a result of the application of sulfentrazone to growing crops.

Commodity	Parts per million
Grain, cereal (excluding sweet corn), Hulls	0.30
Grain, cereal, forage, fodder and straw, group 16, except sweet corn; forage	0.2
Grain, cereal, forage, fodder and straw, group 16, except sweet corn; hay	0.2
Grain, cereal, forage, fodder and straw, group 16, except sweet corn; stover	0.1
Grain, cereal, forage, fodder and straw, group 16, except sweet corn; straw	0.6
Grain, cereal, group 15, except sweet corn	0.1
Grain, cereal, group 15, except sweet corn; bran	0.15

[62 FR 10708, Mar. 10, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.498, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.499 Propamocarb; tolerances for residues.

(a) *General.* Tolerances are established for the residues of propamocarb, including its metabolites and degradates, in or on the commodities specified in the following table resulting from the application of the hydrochloride salt of propamocarb. Compliance with the following tolerance levels is to be determined by measuring only propamocarb (propyl *N*-[3-(dimethylamino)propyl]carbamate):

Commodity	Parts per million
Lettuce, head	50
Lettuce, leaf	90
Potato	0.30
Tomato, paste	5.0
Vegetable, cucurbit, group 9	1.5
Vegetable, fruiting, group 8	2.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerance with regional registrations.* Tolerances with regional registrations are established for the residues of propamocarb, including its metabolites and degradates, in or on the commodities specified in the following table resulting from the application of the hydrochloride salt of propamocarb. Compliance with the following tolerance levels is to be determined by measuring only propamocarb (propyl *N*-[3-(dimethylamino)propyl]carbamate):

Commodity	Parts per million
Bean, lima, succulent	2.0

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 15620, Apr. 2, 1997, as amended at 62 FR 26966, May 16, 1997; 63 FR 32136, June 12, 1998; 64 FR 16843, Apr. 7, 1999; 65 FR 58399, Sept. 29, 2000; 66 FR 37598, July 19, 2001; 66 FR 48585, Sept. 21, 2001; 67 FR 35049, May 17, 2002; 69 FR 47022, Aug. 4, 2004; 70 FR 7047, Feb. 10, 2005; 78 FR 33736, June 5, 2013; 82 FR 9523, Feb. 7, 2017]

[↑ Back to Top](#)**§180.500 Imazapyr; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the herbicide, imazapyr, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the residues of imazapyr [2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1*H*-imidazol-2-yl]-3-pyridinecarboxylic acid].

Commodity	Parts per million
Cattle, fat	0.05
Cattle, kidney	0.20
Cattle, meat	0.05
Cattle, meat byproducts, except kidney	0.05
Corn, field, forage	0.05
Corn, field, grain	0.05
Corn, field, stover	0.05
Fish	1.0
Goat, fat	0.05
Goat, kidney	0.20
Goat, meat	0.05
Goats, meat byproducts, except kidney	0.05
Grass, forage	100
Grass, hay	30
Horse, fat	0.05
Horse, kidney	0.20
Horse, meat	0.05
Horse, meat byproducts, except kidney	0.05
Lentil <sup>1</sup>	0.2
Milk	0.01
Rapeseed subgroup 20A <sup>1</sup>	0.05
Sheep, fat	0.05
Sheep, kidney	0.20
Sheep, meat	0.05
Sheep, meat byproducts, except kidney	0.05
Shellfish	0.10
Soybean, meal <sup>1</sup>	4.5
Soybean, seed <sup>1</sup>	4.0
Sunflower subgroup 20B <sup>1</sup>	0.05

<sup>1</sup>There are no U.S. Registrations.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 55484, Sept. 26, 2003, as amended at 78 FR 66653, Nov. 6, 2013; 79 FR 19487, Apr. 9, 2014]

[↑ Back to Top](#)**§180.501 Hydroprene; tolerances for residues.**

(a) *General.* A tolerance of 0.2 part per million is established for residues of hydroprene [(S)-(Ethyl (2E,4E,7S)-3,7,11-trimethyl-2,4-dodecadienoate)], (CAS Reg. No. 65733-18-8) on food commodities in food-handling establishments in accordance with the following prescribed conditions:

(1) Application shall be limited to spot, crack and crevice, perimeter and ultra low volume (ULV) fogging treatment in food storage or food-handling establishments, including warehouses, food service, manufacturing, and processing establishments such as restaurants, cafeterias, supermarkets, bakeries, breweries, dairies, meat slaughtering and packing plants, and canneries where food and food products are held, processed, and served: Provided that the food is removed or covered prior to such use, and food-processing surfaces are covered during treatment or thoroughly cleaned before using, or in the case of point-source device treatments, devices must not come into direct contact with food preparation surfaces and must be in a minimum distance of 3 feet from exposed foods.

(2) To assure safe use of the insect growth regulator, the label and labeling shall conform to that registered by the U.S. Environmental Protection Agency, and it shall be used in accordance with such label and labeling.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 61647, Nov. 19, 1997, as amended at 71 FR 74818, Dec. 13, 2006]

[↑ Back to Top](#)

### §180.502 Aminoethoxyvinylglycine hydrochloride (aviglycine HCl); tolerances for residues.

(a) *General.* Tolerances are established for residues of aminoethoxyvinylglycine hydrochloride (aviglycine HCl) in or on the following food commodities:

Commodity	Parts per million
Apple	0.08
Fruit, stone, group 12, except cherry	0.170
Pear	0.08

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 24838, May 7, 1997, as amended at 64 FR 31129, June 10, 1999; 66 FR 36481, 36484, July 12, 2001; 69 FR 7606, Feb. 18, 2004]

[↑ Back to Top](#)

### §180.503 Cymoxanil, tolerance for residues.

(a) *General.* Tolerances are established for residues of the fungicide, cymoxanil, 2-cyano -N- [(ethylamino)carbonyl]-2-(methoxyimino) acetamide, in or on the following food commodities:

Commodity	Parts per million
Caneberry, subgroup 13A-07	4.0
Cilantro, leaves	19
Hop, dried cones	7.0
Leafy greens, subgroup 4A	19
Leaf petioles, subgroup 4B	6.0
Lychee <sup>1</sup>	1.0
Onion, bulb, subgroup 3-07A	0.05
Onion, green, subgroup 3-07B	1.1
Potato	0.05
Vegetable, cucurbit, group 9	0.05
Vegetable, fruiting, group 8	0.2

<sup>1</sup> There is no U.S. registration for lychee.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with a regional registration.* Tolerances with a regional registration as defined in §180.1(l) are established for the residues of the fungicide cymoxanil, 2-cyano -N- [(ethylamino)carbonyl]-2-(methoxyimino) acetamide) in or on the raw agricultural commodities:

Commodity	Parts per million
Grape	0.10

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 26411, May 14, 1997, as amended at 62 FR 39956, July 25, 1997; 63 FR 24949, May 6, 1998; 63 FR 66464, Dec. 2, 1998; 64 FR 6539, Feb. 10, 1999; 64 FR 47689, Sept. 1, 1999; 66 FR 37598, July 19, 2001; 67 FR 35049, May 17, 2002; 68 FR 41936, July 16, 2003; 70 FR 7047, Feb. 10, 2005; 72 FR 37646, July 11, 2007; 73 FR 58885, Oct. 8, 2008; 76 FR 34885, June 15, 2011]

[↑ Back to Top](#)

### §180.504 [Reserved]



[↑ Back to Top](#)

### §180.505 Emamectin; tolerances for residues.

(a) *General.* (1) Tolerances are established for emamectin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of emamectin (a mixture of a minimum of 90% 4'-epi-methylamino-4'-deoxyavermectin B<sub>1a</sub> and maximum of 10% 4'-epi-methylamino-4'-deoxyavermectin B<sub>1b</sub>) and its metabolites 8,9-isomer of the B<sub>1a</sub> and B<sub>1b</sub> component of the parent (8,9-ZMA), or 4'-deoxy-4'-epi-amino-avermectin B<sub>1a</sub> and 4'-deoxy-4'-epi-amino-avermectin B<sub>1b</sub>; 4'-deoxy-4'-epi-amino avermectin B<sub>1a</sub> (AB<sub>1a</sub>); 4'-deoxy-4'-epi-(*N*-formyl-*N*-methyl)amino-avermectin (MFB<sub>1a</sub>); and 4'-deoxy-4'-epi-(*N*-formyl)amino-avermectin B<sub>1a</sub> (FAB<sub>1a</sub>), calculated as the stoichiometric equivalent of emamectin.

Commodity	Parts per million
Almond, hulls	0.20
Apple, wet pomace	0.075
Artichoke, globe	0.05
Brassica, leafy greens, subgroup 4-16B	0.2
Celtuce	0.1
Cherry subgroup 12-12A	0.09
Cotton, gin byproducts	0.050
Cotton, undelinted seed	0.025
Fennel, florence, fresh leaves and stalk	0.1
Fruit, pome, group 11-10	0.02
Grape, wine <sup>1</sup>	0.03
Herb subgroup 19A	0.4
Kohlrabi	0.05
Leaf petiole vegetable subgroup 22B	0.1
Leafy greens subgroup 4-16A	1
Nut, tree, group 14-12	0.02
Tomato, paste	0.150
Vegetable, <i>brassica</i> , head and stem, group 5-16	0.05
Vegetable, cucurbit, group 9	0.02
Vegetable, fruiting, group 8-10	0.02

<sup>1</sup>There are no U.S. registrations for use of emamectin on grape, wine.

(2) Tolerances are established for emamectin, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of emamectin (MAB<sub>1a</sub> + MAB<sub>1b</sub> isomers) and the associated 8,9-Z isomers (8,9-ZB<sub>1a</sub> and 8,9-ZB<sub>1b</sub>).

Commodity	Parts per million
Cattle, fat	0.010
Cattle, liver	0.050
Cattle, meat	0.003
Cattle, meat byproducts, except liver	0.020
Goat, fat	0.010
Goat, liver	0.050
Goat, meat	0.003
Goat, meat byproducts, except liver	0.020
Hog, fat	0.003
Hog, liver	0.020
Hog, meat	0.002
Hog, meat byproducts (except liver)	0.005
Horse, fat	0.010
Horse, liver	0.050
Horse, meat	0.003
Horse, meat byproducts, except liver	0.020
Milk	0.003
Sheep, fat	0.010
Sheep, liver	0.050
Sheep, meat	0.003
Sheep, meat byproducts, except liver	0.020

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect and inadvertant residues.* [Reserved]

[71 FR 18649, Apr. 12, 2006, as amended at 74 FR 2873, Jan. 16, 2009; 78 FR 18511, Mar. 27, 2013; 78 FR 49939, Aug. 16, 2013; 84 FR 44725, Aug. 27, 2019]

[↑ Back to Top](#)

### §180.506 Cyclanilide; tolerances for residues.

(a) *General.* Tolerances are established for residues of the plant growth regulator, cyclanilide, [1-(2,4-dichlorophenylaminocarbonyl)-cyclopropane carboxylic acid] determined as 2,4-dichloroaniline (calculated as cyclanilide) in or on the following food commodities and processed feed:

Commodity	Parts Per Million
Cattle, fat	0.10
Cattle, meat	0.02
Cattle, meat byproducts, except kidney	0.2
Cattle, kidney	2.0
Cotton, undelinted seed	0.60
Cotton, gin byproducts	25.0
Goat, fat	0.10
Goat, meat	0.02
Goat, meat byproducts, except kidney	0.20
Goat, kidney	2.0
Horse, fat	0.10
Horse, meat	0.02
Horse, meat byproducts, except kidney	0.20
Horse, kidney	2.0
Hog, fat	0.10
Hog, meat	0.02
Hog, meat byproducts, except kidney	0.20
Hog, kidney	2.0
Milk	0.04
Sheep, fat	0.10
Sheep, meat	0.20
Sheep, meat byproducts, except kidney	0.20
Sheep, kidney	2.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 28355, May 23, 1997; 62 FR 34182, June 25, 1997]

[↑ Back to Top](#)

### §180.507 Azoxystrobin; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the fungicide, azoxystrobin, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the table is to be determined by measuring only the sum of azoxystrobin, [methyl(*E*)-2-(2-(6-(2-cyanophenoxy) pyrimidin-4-yloxy)phenyl)-3-methoxyacrylate], and the *Z*-isomer of azoxystrobin [methyl(*Z*)-2-(2-(6-(2-cyanophenoxy)pyrimidin-4-yloxy)phenyl)-3-methoxyacrylate] in or on the commodity.

Commodity	Parts per million
Acerola	2.0
Almond, hulls	4.0
Animal feed, nongrass, group 18, forage	45
Animal feed, nongrass, group 18, hay	120
Artichoke, globe	4.0
Asparagus	0.04
Atemoya	2.0
Avocado	2.0
Banana	*
Barley, bran	6.0
Barley, forage	25
Barley, grain	3.0
Barley, hay	10.0
Barley, straw	15.0
Beet, sugar, roots	5.0
Berry, low growing, subgroup 13-07G, except cranberry	10.0

Biriba	2.0
Brassica, head and stem, subgroup 5A	3.0
Brassica, leafy greens, subgroup 5B	25
Bushberry subgroup 13-07B	5.0
Caneberry subgroup 13-07A	5.0
Canistel	2.0
Cherimoya	2.0
Cilantro, leaves	30.0
Citrus, dried pulp	20.0
Citrus, oil	40.0
Coffee, green bean <sup>1</sup>	0.03
Corn, field, forage	12.0
Corn, field, grain	0.05
Corn, field, refined oil	0.3
Corn, field, stover	25.0
Corn, pop, grain	0.05
Corn, pop, stover	25.0
Corn, sweet, forage	12.0
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	25.0
Cotton, gin byproducts	45
Cottonseed subgroup 20C	0.7
Cranberry	0.50
Custard apple	2.0
Dragon fruit	2.0
Feijoa	2.0
Fruit, citrus, group 10-10	15.0
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2.0
Fruit, stone, group 12-12	2.0
Ginseng <sup>1</sup>	0.5
Grain, aspirated fractions	420
Grass, forage	15
Grass, hay	20
Guava	2.0
Herb Subgroup 19A, dried leaves	260
Herb Subgroup 19A, fresh leaves	50
Hop, dried cones	20.0
Ilama	2.0
Jaboticaba	2.0
Jackfruit	2.0
Longan	2.0
Loquat	2.0
Lychee	2.0
Mango	2.0
Nut, tree, group 14-12, except pistachio	0.02
Oats, forage	5.0
Oats, grain	1.5
Oats, hay	10.0
Oats, straw	3.0
Onion, bulb, subgroup 3-07A	1.0
Onion, green, subgroup 3-07B	7.5
Papaya	2.0
Passionfruit	2.0
Pawpaw	2.0
Pea and bean, dried shelled, except soybean, subgroup 6C	0.5
Pea and bean, succulent shelled, subgroup 6B	0.5
Peanut	0.2
Peanut, hay	15.0
Peanut, refined oil	0.6
Pear, Asian <sup>1</sup>	0.07
Pepper/eggplant subgroup 8-10B	3.0
Peppermint, tops	30
Persimmon	2.0
Pistachio	0.50
Pulasan	2.0
Quinoa, grain	3.0
Rambutan	2.0
Rapeseed subgroup 20A	1.0
Rice, grain	5.0
Rice, hulls	20
Rice, wild, grain	5.0
Rye, forage	7.0

Rye, grain	0.2
Rye, straw	1.5
Sapodilla	2.0
Sapote, black	2.0
Sapote, mamey	2.0
Sapote, white	2.0
Sorghum, grain, forage	25
Sorghum, grain, grain	11
Sorghum, grain, stover	40
Soursop	2.0
Soybean, hay	55.0
Soybean, hulls	1.0
Soybean, seed	0.5
Spanish lime	2.0
Spearmint, tops	30
Spice Subgroup 19B, except black pepper	38
Star apple	2.0
Starfruit	2.0
Sugar apple	2.0
Sugarcane, cane	0.2
Sunflower subgroup 20B	0.5
Tamarind	2.0
Tea, dried <sup>1</sup>	20.0
Ti, leaves	50.0
Ti, roots	0.5
Tomato, paste	0.6
Tomato subgroup 8-10A	0.2
Turnip, greens	25
Vegetable, cucurbit, group 9	0.3
Vegetable, foliage of legume, group 7	30.0
Vegetable, leafy, except brassica, group 4	30.0
Vegetable, leaves of root and tuber, group 2	50.0
Vegetable, legume, edible podded, subgroup 6A, except soybean	3.0
Vegetable, root, except sugar beet, subgroup 1B	1.0
Vegetable, tuberous and corm, subgroup 1C	8.0
Wasabi, dry	260
Wasabi, fresh	50
Watercress	3.0
Wax jambu	2.0
Wheat, forage	15.0
Wheat, grain	0.2
Wheat, hay	30.0
Wheat, straw	10.0

\*2.0 (of which not more than 0.1 is contained in the pulp)

<sup>1</sup>There are no United States registrations for use of azoxystrobin on coffee, green bean; ginseng; pear, Asian and tea, dried.

(2) Tolerances are established for residues of the fungicide, azoxystrobin, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the table is to be determined by measuring only azoxystrobin, [methyl(*E*)-2-(2-(6-(2-cyanophenoxy) pyrimidin-4-yloxy)phenyl)-3-methoxyacrylate] in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.03
Cattle, meat	0.01
Cattle, meat byproducts	0.07
Goat, fat	0.03
Goat, meat	0.01
Goat, meat byproducts	0.07
Hog, fat	0.010
Hog, meat	0.01
Hog, meat byproducts	0.010
Horse, fat	0.03
Horse, meat	0.01
Horse, meat byproducts	0.07
Milk.	0.006
Sheep, fat	0.03
Sheep, meat	0.01
Sheep, meat byproducts	0.07

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registration.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 32235, June 13, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.507, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.509 Mefenpyr-diethyl; tolerance for residues.

(a) *General.* Tolerances are established for residues of the safener, mefenpyr-diethyl, including its metabolites and degradates, when applied at a rate no greater than 0.053 pound safener per acre per growing season in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of mefenpyr-diethyl (1-(2,4-dichlorophenyl)-4,5-dihydro-5-methyl-1H-pyrazole-3,5-dicarboxylic acid, diethyl ester) and its 2,4-dichlorophenyl-pyrazoline metabolites, calculated as the stoichiometric equivalent of mefenpyr-diethyl, in or on the commodity.

Commodity	Parts per million
Barley, grain	0.05
Barley, hay	0.2
Barley, straw	0.5
Cattle, meat byproducts	0.1
Goat, meat byproducts	0.1
Grass, forage	1.6
Grass, hay	0.2
Hog, meat byproducts	0.1
Horse, meat byproducts	0.1
Sheep, meat byproducts	0.1
Sorghum, grain, forage	0.4
Sorghum, grain, grain	0.04
Sorghum, grain, stover	0.2
Wheat, forage	0.2
Wheat, grain	0.05
Wheat, hay	0.2
Wheat, straw	0.5

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for the indirect or inadvertent residues of mefenpyr-diethyl, including its metabolites and degradates, when applied at a rate no greater than 0.053 pound safener per acre per growing season in or on the commodities identified in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of mefenpyr-diethyl (1-(2,4-dichlorophenyl)-4,5-dihydro-5-methyl-1H-pyrazole-3,5-dicarboxylic acid, diethyl ester) and its 2,4-dichlorophenyl-pyrazoline metabolites, calculated as the stoichiometric equivalent of mefenpyr-diethyl, in or on the commodity.

Commodity	Parts per million
Canola, seed	0.02
Soybean, forage	0.1
Soybean, hay	0.1
Soybean, seed	0.02

[73 FR 74977, Dec. 10, 2008, as amended at 76 FR 23903, Apr. 29, 2011]

[↑ Back to Top](#)

### §180.510 Pyriproxyfen; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of pyriproxyfen, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified is determined by measuring only pyriproxyfen, 2-[1-methyl-2-(4-phenoxyphenoxy) ethoxy]pyridine, in or on the commodity.

Commodity	Parts per million
-----------	-------------------

Acerola	0.10
Almond, hulls	2.0
Animal feed, nongrass, group 18, forage	0.70
Animal feed, nongrass, group 18, hay	1.1
Animal feed, nongrass, group 18, seed	2.0
Apple, wet pomace	0.8
Artichoke, globe	2.0
Asparagus	2.0
Atemoya	0.20
Avocado	1.0
Banana	0.20
Beet, sugar, dried pulp	3.0
Berry, low growing, except strawberry, subgroup 13-07H	1.0
Biriba	0.20
Brassica, head and stem, subgroup 5A	0.70
Brassica, leafy greens, subgroup 5B	2.0
Bushberry subgroup 13-07B	1.0
Cacao bean, dried	0.02
Caneberry subgroup 13-07A	1.0
Canistel	1.0
Canola, seed	0.20
Cherimoya	0.20
Citrus, oil	20
Citrus, dried pulp	2.0
Coffee, instant	0.10
Coffee, green bean	0.02
Cotton, gin byproducts	2.0
Cotton, undelinted seed	0.05
Custard apple	0.20
Date	0.30
Feijoa	0.10
Fig	0.30
Fig, dried fruit	1.0
Fruit, citrus, group 10-10	0.50
Fruit, pome, group 11-10	0.20
Fruit, small, vine climbing, except grape, subgroup 13-07E	0.35
Fruit, stone, group 12	1.0
Grain, cereal, group 15	1.1
Grain, cereal, forage, fodder and straw, group 16	1.1
Grape	2.5
Grass, forage, fodder, and hay, group 17, forage	0.70
Grass, forage, fodder, and hay, group 17, hay	1.1
Guava	0.10
Herb subgroup 19A	100
llama	0.20
Jaboticaba	0.10
Lychee	0.30
Mango	1.0
Nut, tree, group 14	0.02
Olive	1.0
Olive, oil	2.0
Papaya	1.0
Passionfruit	0.10
Pawpaw	1.0
Peanut	0.20
Pineapple	0.30
Pineapple, process residue	1.1
Pistachio	0.02
Pomegranate	0.20
Potato, chips	0.75
Potato, granules/flakes	0.75
Potato, wet peel	0.75
Pulasan	0.30
Rambutan	0.30
Rice, hulls	5.5
Safflower, seed	0.20
Sapodilla	1.0
Sapote, black	1.0
Sapote, mamey	1.0
Sapote, white	0.30
Sesame, seed	0.02
Soursop	0.20
Spanish lime	0.30

Star apple	1.0
Starfruit	0.10
Strawberry	0.30
Sugar apple	0.20
Sugarcane	1.1
Tea	15
Vegetable, bulb, group 3-07	0.70
Vegetable, cucurbit, group 9	0.10
Vegetable, foliage of legume, group 7	2.0
Vegetable, fruiting, group 8-10	0.80
Vegetable, leafy, except Brassica, group 4	3.0
Vegetable, leaves of root and tuber, group 2	2.0
Vegetable, legume, group 6	0.20
Vegetable, root and tuber, group 1	0.15
Walnut	0.02
Watercress	2.0
Wax jambu	0.10

(2) A tolerance of 0.10 parts per million is established for all food commodities as a result of the proposed use of NYLAR in food handling establishments where food and food products are held, prepared, processed or served. Application is limited to space, general surface, spot, and/or crack and crevice treatment in food handling establishments where food and food products are held, processed, prepared and served. Space and general surface application may be used only when the facility is not in operation provided exposed food is covered or removed from the area being treated prior to application. Spot, and/or crack and crevice treatment may be used while the facility is in operation provided exposed food is covered or removed from the area being treated prior to application. Food contact surfaces should be thoroughly washed with an effective cleaning compound and rinsed with potable water after use of the product. To assure safe use of this additive, its label and labeling shall conform to that registered with the U.S. Environmental Protection Agency, and shall be used in accordance with such label and labeling.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 10233, Mar. 3, 1999]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.510, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.511 Buprofezin; tolerances for residues.

(a) *General.* Tolerances are established for residues of buprofezin, including its metabolites and degradates in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the buprofezin, 2-[(1,1-dimethylethyl)imino]tetrahydro-3(1-methylethyl)-5-phenyl-4H-1,3,5-thiadiazin-4-one, in the commodity.

Commodity	Parts per million
Almond, hulls	2.0
Apricot <sup>3</sup>	9.0
Atemoya	0.30
Avocado	0.30
Banana	0.20
Bean, snap, succulent	0.02
Bean, succulent	0.02
Berry, low growing, subgroup 13-07G	2.5
Birida	0.30
Brassica, leafy greens, subgroup 4-16B	60
Canistel	0.90
Cattle, fat	0.05
Cattle, kidney	0.05
Cattle, liver	0.05
Cattle, meat	0.05
Cattle, meat byproducts	0.05
Celtuce	35
Cherimoya	0.30
Citrus, dried pulp	7.5
Citrus, oil	80
Coffee, green bean	0.35
Cotton, gin byproducts	20.0

Cottonseed subgroup 20C	0.35
Custard apple	0.30
Feijoa	0.30
Fennel, Florence, fresh leaves and stalk	35
Fig	0.7
Fruit, citrus, group 10-10	4
Fruit, pome, group 11-10, except pear and pear, Asian	3.0
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	1
Fruit, stone, group 12-12, except nectarine and peach	2
Goat, fat	0.05
Goat, kidney	0.05
Goat, liver	0.05
Goat, meat	0.05
Goat, meat byproducts	0.05
Grape <sup>3</sup>	2.5
Grape, raisin	2
Guava	0.3
Hog, fat	0.05
Hog, kidney	0.05
Hog, liver	0.05
Hog, meat	0.05
Hog, meat byproducts	0.05
Horse, fat	0.05
Horse, kidney	0.05
Horse, liver	0.05
Horse, meat	0.05
Horse, meat byproducts	0.05
llama	0.30
Jaboticaba	0.30
Kohlrabi	12
Leaf petiole vegetable subgroup 22B	35
Leafy greens subgroup 4-16A	35
Mango	0.90
Milk	0.01
Nut, tree, group 14-12	0.05
Papaya	0.90
Passionfruit	0.30
Peach	9.0
Pear	6.0
Pear, Asian	6.0
Persimmon	1.9
Pomegranate	1.9
Pulasan	0.30
Rambutan	0.30
Rice, grain <sup>1</sup>	1.5
Sapodilla	0.90
Sapote, black	0.90
Sapote, mamey	0.90
Sheep, fat	0.05
Sheep, kidney	0.05
Sheep, liver	0.05
Sheep, meat	0.05
Sheep, meat byproducts	0.05
Soursop	0.30
Star apple	0.90
Starfruit	0.30
Sugar apple	0.30
Tea <sup>2</sup>	20
Tropical and subtropical, small fruit, edible peel, subgroup 23A	5
Tropical and subtropical, small fruit, inedible peel, subgroup 24A	0.3
Vegetable, <i>Brassica</i> , head and stem, group 5-16	12
Vegetable, cucurbit, group 9	0.50
Vegetable, fruiting, group 8-10	2.0

<sup>1</sup>There are no U.S. registrations as of July 10, 2017 for use on rice.

<sup>2</sup>There are no U.S. registrations at this time.

<sup>3</sup>This tolerance expires on March 2, 2020.

(b) Section 18 emergency exemption. [Reserved]



(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 40741, July 30, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.511, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

## §180.512 [Reserved]

[↑ Back to Top](#)

## §180.513 Chlorfenapyr; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of chlorfenapyr, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only chlorfenapyr, 4-bromo-2-(4-chlorophenyl)-1-(ethoxymethyl)-5-(trifluoromethyl)-1*H*-pyrrole-3-carbonitrile, in or on the commodity.

Commodity	Parts per million
Tea, dried <sup>1</sup>	70
Vegetable, fruiting, group 8-10	1.0

<sup>1</sup>There are no U.S. registrations for Tea, dried as of January 26, 2018.

(2) A tolerance of 0.01 parts per million is established for residues of chlorfenapyr in or on all food commodities (other than those covered by a higher tolerance as a result of use on growing crops) in food/feed handling areas where food/feed products are prepared, held, processed, or served and in accordance with the following prescribed conditions:

(i) Application shall be no greater than a 0.5% active ingredient solution for spot crack and crevice use in food/feed handling establishments, where food and food products are held, processed, prepared and/or served.

(ii) Application may only be undertaken when the facility is not in operation, and provided exposed food has been covered, or removed from the area being treated prior to application.

(iii) Food contact surfaces and equipment should be thoroughly washed with an effective cleaning compound, and rinsed with potable water after each use of the product.

(iv) Contamination of food or food contact surfaces shall be avoided. Application excludes any direct application to any food, food packaging, or any food contact surfaces.

(v) To assure safe use, the label and labeling shall conform to that registered by the U.S. Environmental Protection Agency, and it shall be used in accordance with such label and labeling.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 55527, Sept. 26, 2003, as amended at 70 FR 3654, Jan. 26, 2005; 83 FR 3610, Jan. 26, 2018]

[↑ Back to Top](#)

## §180.514 Cloransulam-methyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide, cloransulam-methyl, *N*-(2-carboxymethyl-6-chlorophenyl)-5-ethoxy-7-fluoro-(1,2,4)-triazolo[1,5*c*]-pyrimidine-2-sulfonamide, plus its acid, cloransulam, calculated as parent ester in or on the following raw agricultural commodities:

Commodity	Parts per million
Soybean, forage	0.1
Soybean, hay	0.2
Soybean, seed	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 49163, Sept. 19, 1997]

[↑ Back to Top](#)

### §180.515 Carfentrazone-ethyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide carfentrazone-ethyl, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the following tolerance levels is to be determined by measuring only the sum of carfentrazone-ethyl (ethyl-alpha-2-dichloro-5-[-4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzenepropanoate) and its metabolite carfentrazone-chloropropionic acid (alpha, 2-dichloro-5-[-4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzenepropanoic acid), calculated as the stoichiometric equivalent of carfentrazone-ethyl, in or on the following commodities:

Commodity	Parts per million
Acerola	0.10
Almond, hulls	0.20
Animal feed, nongrass, crop group 18, forage	2.0
Animal feed, nongrass, crop group 18, hay	5.0
Animal feed, nongrass, crop group 18, seed	15.0
Artichoke, globe	0.10
Asparagus	0.10
Atemoya	0.10
Avocado	0.10
Banana	0.10
Berry, low growing, subgroup 13-07G	0.10
Birida	0.10
Bushberry subgroup 13-07B	0.10
Cacao bean, bean	0.10
Cactus	0.10
Caneberry subgroup 13-07A	0.10
Canistel	0.10
Cattle, fat	0.10
Cattle, meat	0.10
Cattle, meat byproducts	0.10
Cherimoya	0.10
Coffee, bean, green	0.10
Cotton, gin byproducts	10
Cottonseed subgroup 20C	0.20
Custard apple	0.10
Date, dried fruit	0.10
Feijoa	0.10
Fig	0.10
Fish	0.30
Fruit, citrus, group 10-10	0.10
Fruit, pome, group 11-10	0.10
Fruit, small vine climbing, subgroup 13-07F, except Fuzzy kiwifruit	0.10
Fruit, stone, group 12-12	0.10
Goat, fat	0.10
Goat, meat	0.10
Goat, meat byproducts	0.10
Grain, aspirated grain fractions	1.8
Grain, cereal, group 15 (except rice grain and sorghum grain)	0.10
Grain, cereal, group 16, forage	1.0
Grain, cereal, group 16, hay	0.30
Grain, cereal, group 16, stover	0.80
Grain, cereal, group 16, straw	3.0
Grass, forage	5.0
Grass, hay	8.0
Guava	0.10
Herbs and spices group 19	2.0
Hog, fat	0.10
Hog, meat	0.10
Hog, meat byproducts	0.10
Hop, dried cones	0.10
Horse, fat	0.10

Horse, meat	0.10
Horse, meat byproducts	0.10
Horseradish	0.10
llama	0.10
Jaboticaba	0.10
Kava, roots	0.10
Kiwifruit	0.10
Longan	0.10
Lychee	0.10
Mango	0.10
Milk	0.05
Noni	0.10
Nut, tree, group 14-12	0.10
Olive	0.10
Palm heart	0.10
Palm heart, leaves	0.10
Papaya	0.10
Passionfruit	0.10
Pawpaw	0.10
Peanut	0.10
Peanut, hay	0.10
Peppermint, tops	0.10
Persimmon	0.10
Pomegranate	0.10
Poultry, meat byproducts	0.10
Psyllium, seed	0.10
Pulasan	0.10
Quinoa, grain	0.10
Rambutan	0.10
Rapeseed, forage	0.10
Rapeseed subgroup 20A	0.10
Rice, grain	1.3
Sapodilla	0.10
Sapote, black	0.10
Sapote, mamey	0.10
Sheep, fat	0.10
Sheep, meat	0.10
Sheep, meat byproducts	0.10
Shellfish	0.30
Sorghum, grain	0.25
Soursop	0.10
Soybean, seed	0.10
Spanish lime	0.10
Spearmint, tops	0.10
Star apple	0.10
Starfruit	0.10
Stevia	0.10
Strawberrypear	0.10
Sugar apple	0.10
Sugarcane	0.15
Sunflower, subgroup 20B	0.10
Tea, dried	0.10
Teff, forage	1.0
Teff, grain	0.25
Teff, hay	0.30
Teff, straw	3.0
Ti, leaves	0.10
Ti, roots	0.10
Vanilla	0.10
Vegetable, brassica, leafy, group 5	0.10
Vegetable, bulb, group 3-07	0.10
Vegetable, cucurbit, group 9	0.10
Vegetable, foliage of legume, except soybean, subgroup 7A	0.10
Vegetable, fruiting, group 8-10	0.10
Vegetable, leafy, except brassica, group 4	0.10
Vegetable, leaves of root and tuber, group 2	0.10
Vegetable, legume, group 6	0.10
Vegetable, root and tuber, group 1	0.10
Wasaba, roots	0.10
Wax jambu	0.10

<sup>1</sup>Effective Date to be removed: May 18, 2016.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 52180, Sept. 30, 1998]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.515, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.516 Fludioxonil; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the fungicide fludioxonil, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only fludioxonil, 4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1-*H*-pyrrole-3-carbonitrile).

Commodity	Parts per million
Acerola	5.0
Animal feed, nongrass, group 18	0.01
Atemoya	20
Avocado	5.0
Bean, dry	0.4
Bean, succulent	0.4
Beet, sugar, roots	4.0
Berry, low growing, subgroup 13-07G, except cranberry	3.0
Biriba	20
Brassica, head and stem, subgroup 5A	2.0
Brassica, leafy greens, subgroup 5B	10
Bushberry subgroup 13-07B	2.0
Caneberry subgroup 13-07A	5.0
Canistel	5.0
Carrots	7.0
Cherimoya	20
Citrus, oil	500
Cotton, gin byproducts	0.05
Cotton, undelinted seed	0.05
Custard apple	20
Dragon fruit	1.0
Feijoa	5.0
Flax, seed	0.05
Fruit, citrus, group 10-10	10
Fruit, pome, group 11-10	5.0
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2.0
Fruit, stone, group 12-12	5.0
Ginseng	4.0
Grain, cereal, group 15	0.02
Grain, cereal, forage, fodder, and straw, group 16	0.01
Grass, forage, fodder and hay, group 17	0.01
Guava	5.0
Herb subgroup 19A, dried leaves	65
Herb subgroup 19A, fresh leaves	10
Ilama	20
Jaboticaba	5.0
Kiwifruit, fuzzy	20
Leaf petioles subgroup 4B	15
Leafy greens subgroup 4A	30
Longan	20
Lychee	20
Mango	5.0
Melon subgroup 9A	0.03
Onion, bulb, subgroup 3-07A	0.50
Onion, green, subgroup 3-07B	7.0
Papaya	5.0
Passionfruit	5.0
Peanut	0.01
Peanut, hay	0.01
Pineapple	20
Pistachio	0.10
Pomegranate	5.0

Pulasan	20
Rambutan	20
Rapeseed, forage	0.01
Rapeseed subgroup 20A, except flax seed	0.01
Safflower, seed	0.01
Sapodilla	5.0
Sapote, black	5.0
Sapote, mamey	5.0
Soursop	20
Spanish lime	20
Spice subgroup 19B	0.02
Star apple	5.0
Starfruit	5.0
Sugar apple	20
Sunflower, seed	0.01
Tomato	5.0
Turnip, greens	10
Vegetable, cucurbit, group 9	0.45
Vegetable, foliage of legume, group 7	0.01
Vegetable, fruiting, group 8-10, except tomato	0.50
Vegetable, leaves of root and tuber, group 2	30
Vegetable, legume, group 6	0.01
Vegetable, root, except sugar beet, subgroup 1B	0.75
Vegetable, tuberous and corm, subgroup 1C	6.0
Watercress	7.0
Wax jambu	5.0
Yam, true, tuber	8.0

(2) Tolerances are established for residues of the fungicide fludioxonil, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of fludioxonil, 4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1-*H*-pyrrole-3-carbonitrile, and its metabolites converted to 2,2-difluoro-1,3-benzodioxole-4-carboxylic acid, calculated as the stoichiometric equivalent of fludioxonil.

Commodity	Parts per million
Cattle, fat	0.05
Cattle, meat	0.01
Cattle, meat byproducts	0.05
Goat, fat	0.05
Goat, meat	0.01
Goat, meat byproducts	0.05
Horse, fat	0.05
Horse, meat	0.01
Horse, meat byproducts	0.05
Milk	0.01
Sheep, fat	0.05
Sheep, meat	0.01
Sheep, meat byproducts	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 56082, Oct. 29, 1997]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.516, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.517 Fipronil; tolerances for residues.

(a) *General.* Therefore, tolerances are established for combined residues of the insecticide fipronil (5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(1R,S)-(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile) and its metabolites 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl) sulfonyl]-1H-pyrazole-3-carbonitrile and 5-amino-1-[2,6-dichloro-4-(trifluoromethyl) phenyl]-4-[(trifluoromethyl)thio]-1H-pyrazole-3-carbonitrile and its photodegradate 5-amino-1-(2,6-dichloro-4-(trifluoromethyl)phenyl)-4-[(1R,S)-(trifluoromethyl)]-1H-pyrazole-3-carbonitrile in or on the following items at the levels specified:

Commodity	Parts per million
Cattle, fat	0.40

Cattle, liver	0.10
Cattle, meat	0.04
Cattle, meat byproducts, except liver	0.04
Corn, field, grain	0.02
Corn, field, stover	0.30
Corn, field, forage	0.15
Egg	0.03
Goat, fat	0.40
Goat, liver	0.10
Goat, meat	0.04
Goat, meat byproducts, except liver	0.04
Hog, fat	0.04
Hog, liver	0.02
Hog, meat	0.01
Hog, meat byproducts, except liver	0.01
Horse, fat	0.40
Horse, liver	0.10
Horse, meat	0.04
Horse, meat byproducts, except liver	0.04
Milk, fat (reflecting 0.05 ppm in whole milk)	1.50
Potato	0.03
Potato, wet peel	0.10
Poultry, fat	0.05
Poultry, meat	0.02
Poultry, meat byproducts	0.02
Rice, grain	0.04
Sheep, fat	0.40
Sheep, liver	0.10
Sheep, meat	0.04
Sheep, meat byproducts, except liver	0.04

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for combined residues of the insecticide, fipronil, 5-amino-1-(2,6-dichloro-4-(trifluoromethyl) phenyl)-4-((1R,S)-trifluoromethyl)sulfinyl)-1H-pyrazole-3-carbonitrile and its 2 metabolites MB45950 (5-amino-1-(2,6-dichloro-4-(trifluoromethyl)phenyl)-4-[(trifluoromethyl)thio]-1H-pyrazole-3-carbonitrile) and MB46136 (5-amino-1-(2,6-dichloro-4-(trifluoromethyl)phenyl)-4-[(trifluoromethyl)sulfonyl]-1H-pyrazole-3-carbonitrile) and its photodegradate MB46513 (5-amino-1-(2,6-dichloro-4-(trifluoromethyl)phenyl)-4-[(1R,S)-(trifluoromethyl)]-1H-pyrazole-3-carbonitrile), in connection with use of the pesticide under Section 18 emergency exemptions granted by EPA. The tolerances expire and are revoked on the dates specified in the table for this paragraph.

Commodity	Parts per million	Expiration/revocation date
Rutabaga	1.0	12/31/16
Turnip	1.0	12/31/16

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for combined indirect or inadvertent residues of the insecticide fipronil and its metabolites and photodegradate in or on food commodities when present therein as a result of the application of fipronil to growing crops listed in paragraphs (a) and (b) of this section and other nonfood crops to read as follows:

Commodity	Parts per million
Wheat, forage	0.02
Wheat, grain	0.005
Wheat, hay	0.03
Wheat, straw	0.03

[62 FR 62979, Nov. 26, 1997, as amended at 63 FR 38495, July 17, 1998; 72 FR 46913, Aug. 22, 2007; 74 FR 46377, Sept. 9, 2009; 75 FR 80346, Dec. 22, 2010; 78 FR 78748, Dec. 27, 2013; 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.518 Pyrimethanil; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the fungicide pyrimethanil, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only pyrimethanil (4,6-dimethyl-*N*-phenyl-2-pyrimidinamine).

Commodity	Parts per million
Almond	0.20
Almond, hulls	12

Apple, wet pomace	40
Banana	0.10
Berry, low growing, subgroup 13-07G	3.0
Bushberry subgroup 13-07B	8.0
Caneberry subgroup 13-07A	15
Citrus, oil	150
Cucumber	1.5
Fruit, citrus, group 10-10	10
Fruit, pome, group 11-10	15
Fruit, small, vine climbing, subgroup 13-07F, except fuzzy kiwifruit	5.0
Fruit, stone, group 12-12	10
Ginseng	1.5
Grape, raisin	8.0
Onion, bulb, subgroup 3-07A	0.2
Onion, green, subgroup 3-07B	3.0
Pistachio	0.20
Pomegranate	5.0
Tomato subgroup 8-10A	0.50
Vegetable, tuberous and corm, subgroup 1C	0.05

(2) Tolerances are established for residues of the fungicide pyrimethanil, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of pyrimethanil and its metabolite 4-[4,6-dimethyl-2-pyrimidinyl)amino]phenol, calculated as the stoichiometric equivalent of pyrimethanil.

Commodity	Parts per million
Cattle, fat	0.01
Cattle, kidney	2.5
Cattle, meat	0.01
Cattle, meat byproducts, except kidney	0.01
Goat, fat	0.01
Goat, kidney	2.5
Goat, meat	0.01
Goat, meat byproducts, except kidney	0.01
Horse, fat	0.01
Horse, kidney	2.5
Horse, meat	0.01
Horse, meat byproducts, except kidney	0.01
Sheep, fat	0.01
Sheep, kidney	2.5
Sheep, meat	0.01
Sheep, meat byproducts, except kidney	0.01

(3) Tolerances are established for residues of the fungicide pyrimethanil, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of pyrimethanil and its metabolite 4,6-dimethyl-2-(phenylamino)-5-pyrimidinol, calculated as the stoichiometric equivalent of pyrimethanil.

Commodity	Parts per million
Milk	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[62 FR 63669, Dec. 2, 1997, as amended at 69 FR 52443, Aug. 26, 2004; 73 FR 64251, Oct. 29, 2008; 74 FR 32448, July 8, 2009; 77 FR 45503, Aug. 1, 2012; 80 FR 7975, Feb. 13, 2015; 80 FR 63691, Oct. 21, 2015]

[↑ Back to Top](#)

### §180.519 Bromide ion and residual bromine; tolerances for residues.

(a) *General.* The food additives, bromide ion and residual bromine, may be present in water, potable in accordance with the following conditions:

(1) The food additives are present as a result of treating water aboard ships with a polybrominated ion-exchange resin (as a source of bromine) under the supervision of trained personnel.

(2) Residual bromine levels are controlled to not exceed 1.0 part per million (ppm) in the final treated water. Control is effected using calibrated recirculating or proportioning bromine feeder equipment and periodic checks of residual bromine using a bromine test kit. To assure safe use of the additives, the label and labeling of the disinfectant formulation containing the food additives shall conform to the label and labeling registered by the U.S. Environmental Protection Agency.

(3) No tolerance is established for bromide ion levels.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[41 FR 17893, Apr. 29, 1976. Redesignated at 41 FR 26568, June 28, 1976, and at 53 FR 24667, June 29, 1988. Redesignated and amended at 63 FR 34319, June 24, 1998; 71 FR 74818, Dec. 13, 2006]

[↑ Back to Top](#)

### **§180.521 Fumigants for grain-mill machinery; tolerances for residues.**

(a) *General.* Fumigants may be safely used in or on grain-mill machinery in accordance with the following prescribed conditions:

(1) The fumigants consist of methyl bromide.

(2) To assure safe use of the fumigant, its label and labeling shall conform to the label and labeling registered by the U.S. Environmental Protection Agency.

(3) Residues of inorganic bromides (calculated as Br) in milled fractions derived from cereal grain from all fumigation sources, including fumigation of grain-mill machinery, shall not exceed 125 parts per million.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[40 FR 14156, Mar. 28, 1975. Redesignated at 41 FR 26568, June 28, 1976, as amended at 49 FR 44459, Nov. 7, 1984. Further redesignated at 53 FR 24667, June 29, 1988, as amended at 54 FR 6130, Feb. 8, 1989. Further redesignated and amended at 63 FR 34319, June 24, 1998]

[↑ Back to Top](#)

### **§180.522 Fumigants for processed grains used in production of fermented malt beverage; tolerances for residues.**

(a) *General.* Fumigants for processed grain may be safely used, in accordance with the following conditions.

(1) *Methyl bromide.* Total residues of inorganic bromides (calculated as Br) from the use of this fumigant shall not exceed 125 parts per million.

(2) Methyl bromide is used to fumigate corn grits and cracked rice in the production of fermented malt beverage.

(3) To assure safe use of the fumigant, its label and labeling shall conform to the label and labeling registered by the U.S. Environmental Protection Agency, and the usage employed should conform with such label or labeling.

(4) The total residue of inorganic bromides in fermented malt beverage, resulting from the use of corn grits and cracked rice fumigated with the fumigant described in paragraph (a)(2) of this section plus additional residues of inorganic bromides that may be present from uses in accordance with other regulations in this chapter promulgated under section 408 and/or 409 of the Act, does not exceed 25 parts per million bromide (calculated as Br).

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 74818, Dec. 13, 2006]



[↑ Back to Top](#)**§180.523 Metaldehyde; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the molluscicide metaldehyde, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the specified tolerance levels is to be determined by measuring only metaldehyde, 2,4,6,8-tetramethyl-1,3,5,7-tetroxocane, in or on the commodity.

Commodity	Parts per million
Artichoke, globe	0.07
Berry, low growing, subgroup 13-07G	6.25
Bushberry subgroup 13-07B	0.15
Cactus	0.07
Caneberry subgroup 13-07A	0.15
Corn, field, forage	0.30
Corn, field, grain	0.05
Corn, field, stover	0.10
Corn, sweet, forage	0.30
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	0.10
Fruit, citrus, group 10-10	0.26
Ginseng	0.05
Grass, forage	2.0
Grass, hay	2.0
Leaf petioles subgroup 4B	0.50
Lettuce	1.73
Pea and bean, succulent shelled, subgroup 6B	0.20
Peppermint, oil	12
Peppermint, tops	4.0
Spearmint, oil	12
Spearmint, tops	4.0
Taro, corm	0.15
Taro, leaves	1.0
Tomato subgroup 8-10A	0.24
Vegetable, brassica, leafy, group 5	2.5
Vegetable, foliage of legume, except soybean, subgroup 7A	1.5
Vegetable, legume, edible podded subgroup 6A	0.80
Watercress	3.2

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with a regional registration as defined in §180.1(l) are established for residues of the molluscicide metaldehyde, including its metabolites and degradates, in or on the following commodities. Compliance with the specified tolerance level is to be determined by measuring only metaldehyde, 2,4,6,8-tetramethyl-1,3,5,7-tetroxocane, in or on the commodity.

Commodity	Parts per million
Beet, garden, leaves	0.08
Beet, garden, roots	0.05
Clover, forage	0.60
Clover, hay	0.60
Hop, dried cones	0.10
Rutabaga, roots	0.05
Soybean, seed	0.05
Turnip greens	0.08
Turnip, roots	0.05
Wheat, forage	0.05
Wheat, grain	0.05
Wheat, hay	0.05
Wheat, straw	0.05

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 54963, Sept. 24, 2008, as amended at 78 FR 70869, Nov. 27, 2013; 80 FR 11588, Mar. 4, 2015; 81 FR 71638, Oct. 18, 2016]

[↑ Back to Top](#)**§180.525 Resmethrin; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the insecticide resmethrin [5-(phenylmethyl)-3-furanyl] methyl 2,2-dimethyl-3-(2-methyl-1-propenyl) cyclopropanecarboxylate in or on food commodities at 3.0 ppm resulting from use of the insecticide in food handling and storage areas as a space concentration for spot/or crack and crevice treatment and shall be limited to a maximum of 3.00 percent of the active ingredient by weight, and as a space treatment shall be limited to a maximum of 0.5 fluid ounce of 3.0 percent active ingredient by weight per 1000 cubic feet of space provided that the food is removed or covered prior to such use. To assure safe use of the additive, its label and labeling shall conform to that registered with the U.S. Environmental Protection Agency, and shall be used in accordance with such label and labeling.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 74819, Dec. 13, 2006]

[↑ Back to Top](#)

#### §180.526 Synthetic isoparaffinic petroleum hydrocarbons; tolerances for residues.

(a) *General.* Synthetic isoparaffinic petroleum hydrocarbons complying with 21 CFR 172.882 (a) and (b) may be safely used as a component of insecticide formulations for use on animal feed in an amount no greater than reasonably required to accomplish its intended effect as an adjuvant in the insecticide formulation and shall not be intended to accomplish any effect in animal feed. It is used or intended for use as a component of insecticide formulations used in compliance with regulations issued in 40 CFR part 180 and in this part.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[40 FR 14161, Mar. 28, 1975, as amended at 50 FR 2959, Jan. 23, 1985, and amended at 53 FR 24668, 24669, June 29, 1988. Redesignated and amended at 63 FR 34319, June 24, 1998]

[↑ Back to Top](#)

#### §180.527 Flufenacet, N-(4-fluorophenyl)-N-(1-methylethyl)-2-[[5-(trifluoromethyl)-1, 3, 4-thiadiazol-2-yl] oxy]acetamide and its metabolites containing the 4-fluoro-N-methylethyl benzenamine tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the herbicide flufenacet, N-(4-fluorophenyl)-N-(1-methylethyl)-2-[[5-(trifluoromethyl)-1, 3, 4-thiadiazol-2-yl] oxy]acetamide and its metabolites containing the 4-fluoro-N-methylethyl benzenamine moiety in or on the following commodities.

Commodity	Parts per million
Cattle, kidney	0.05
Corn, field, forage	0.4
Corn, field, grain	0.05
Corn, field, stover	0.4
Corn, sweet, forage	0.45
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	0.30
Goat, kidney	0.05
Hog, kidney	0.05
Horse, kidney	0.05
Sheep, kidney	0.05
Soybean, seed	0.1
Wheat, bran	0.80
Wheat, forage	6.0
Wheat, grain	0.60
Wheat, hay	1.2
Wheat, straw	0.35

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances are established for combined residues of flufenacet, N-(4-fluorophenyl)-N-(1-methylethyl)-2-[[5-(trifluoromethyl)-1, 3, 4-thiadiazol-2-yl] oxy]acetamide, and its metabolites containing the 4-fluoro-N-methylethyl benzenamine moiety, with regional registration.

Commodity	Parts per million
Grass, forage	7.0
Grass, hay	0.4

(d) *Indirect or inadvertent residues.* Tolerances are established for indirect or inadvertent residues of the herbicide flufenacet, *N*-(4-fluorophenyl)-*N*-(1-methylethyl)-2-[[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]oxy]acetamide and its metabolites containing the 4-fluoro-*N*-methylethyl benzenamine moiety in or on the following raw agricultural commodities when present therein as a result of application of flufenacet to the growing crops in paragraph (a) of this section.

Commodity	Parts per million
Alfalfa, forage	0.1
Alfalfa, hay	0.1
Alfalfa, seed	0.1
Clover, forage	0.1
Clover, hay	0.1
Grain, cereal, group 15, except rice	0.1
Grain, cereal, forage, fodder, and straw, group 16, except rice	0.1
Grass, forage, fodder, and hay, group 17	0.1

[63 FR 26473, May 13, 1998, as amended at 63 FR 50791, Sept. 23, 1998; 64 FR 42846, Aug. 6, 1999; 65 FR 64366, Oct. 27, 2000; 68 FR 2247, Jan. 16, 2003; 68 FR 37759, June 25, 2003; 70 FR 37696, June 30, 2005; 71 FR 76200, Dec. 20, 2006; 72 FR 26310, May 9, 2007]

[↑ Back to Top](#)

### §180.532 Cyprodinil; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the fungicide cyprodinil, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only cyprodinil 4-cyclopropyl-6-methyl-*N*-phenyl-2-pyrimidinamine.

Commodity	Parts per million
Acerola	1.5
Almond	0.02
Almond, hulls	8.0
Apple, wet pomace	4.6
Artichoke, globe	4.0
Avocado	1.2
Bean, dry	0.6
Bean, succulent	0.6
Berry, low growing, subgroup 13-07G, except cranberry	5.0
Brassica, head and stem, subgroup 5A	1.0
Brassica, leafy greens, subgroup 5B	10.0
Bushberry subgroup 13-07B	3.0
Caneberry subgroup 13-07A	10
Canistel	1.2
Canola, seed <sup>1</sup>	0.03
Citrus, dried pulp	8.0
Citrus, oil	60
Dragon fruit	2.0
Feijoa	1.5
Fruit, pome, group 11-10	1.7
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	3.0
Fruit, stone, group 12-12	2.0
Grape, raisin	5.0
Guava	1.5
Herb subgroup 19A, dried, except parsley	15.0
Herb subgroup 19A, fresh, except parsley	3.0
Jaboticaba	1.5
Kiwifruit	1.8
Leaf petioles subgroup 4B	30
Leafy greens subgroup 4A	50
Lemon	0.60
Lime	0.60
Longan	2.0
Lychee	2.0
Mango	1.2
Nut, tree, group 14-12; except almond and pistachio	0.04
Onion, bulb, subgroup 3-07A	0.6
Onion, green, subgroup 3-07B	4.0

Papaya	1.2
Parsley, dried leaves	170
Parsley, leaves	35
Passionfruit	1.5
Pistachio	0.10
Pomegranate	10
Potato, wet peel	0.03
Pulasan	2.0
Rambutan	2.0
Sapodilla	1.2
Sapote, black	1.2
Sapote, mamey	1.2
Spanish lime	2.0
Star apple	1.2
Starfruit	1.5
Turnip, greens	10.0
Vegetable, cucurbit, group 9	0.70
Vegetable, fruiting, group 8-10	1.5
Vegetable, leaves of root and tuber, group 2	10
Vegetable, root, except sugarbeet, subgroup 1B	0.75
Vegetable, tuberous and corm, subgroup 1C	0.01
Watercress	20
Wax jambu	1.5

<sup>1</sup>Import only.

(2) Tolerances are established for residues of the fungicide cyprodinil, including its metabolites and degradates, in the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of cyprodinil 4-cyclopropyl-6-methyl-*N*-phenyl-2-pyrimidinamine and free and conjugated CGA-304075 4-(4-cyclopropyl-6-methyl-pyrimidin-2-ylamino)-phenol, calculated as the stoichiometric equivalent of cyprodinil.

Commodity	Parts per million
Cattle, meat byproducts	0.02
Goat, meat byproducts	0.02
Horse, meat byproducts	0.02
Sheep, meat byproducts	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 17706, Apr. 10, 1998]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.532, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.533 Esfenvalerate; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues of the insecticide esfenvalerate, (S)-cyano(3-phenoxyphenyl)methyl-(S)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate, its non-racemic isomer, (R)-cyano(3-phenoxyphenyl)methyl-(R)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate and its diastereomers (S)-cyano(3-phenoxyphenyl)methyl-(R)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate and (R)-cyano(3-phenoxyphenyl)methyl-(S)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate, in or on food commodities as follows:

Commodity	Parts per million
Almond	0.2
Almond, hulls	5.0
Apple	1.0
Artichoke, globe	1.0
Bean, dry, seed	0.25
Bean, snap, succulent	1.0
Beet, sugar, roots	0.05
Beet, sugar, tops	5.0
Blueberry	1.0
Broccoli	1.0
Cabbage, except Chinese cabbage	3.0

Caneberry subgroup 13A	1.0
Cantaloupe	0.5
Carrot, roots	0.5
Cattle, fat	1.5
Cattle, meat	1.5
Cattle, meat byproducts	1.5
Cauliflower	0.5
Collards	3.0
Corn, field, forage	15.0
Corn, field, grain	0.02
Corn, field, stover	15.0
Corn, pop, grain	0.02
Corn, pop, stover	15.0
Corn, sweet, forage	15.0
Corn, sweet, kernel plus cob with husks removed	0.1
Corn, sweet, stover	15.0
Cotton, undelinted seed	0.2
Cucumber	0.5
Egg	0.03
Eggplant	0.5
Elderberry	1.0
Fruit, stone, group 12	3.0
Goat, fat	1.5
Goat, meat	1.5
Goat, meat byproducts	1.5
Gooseberry	1.0
Hazelnut	0.2
Hog, fat	1.5
Hog, meat	1.5
Hog, meat byproducts	1.5
Horse, fat	1.5
Horse, meat	1.5
Horse, meat byproducts	1.5
Kiwifruit	0.5
Lentil, seed	0.25
Melon, honeydew	0.5
Milk	0.3
Milk, fat	7.0
Muskmelon	0.5
Mustard greens	5.0
Okra	0.5
Pea, dry, seed	0.25
Pea, succulent	0.5
Peanut	0.02
Pear	1.0
Pecan	0.2
Pepper	0.5
Potato	0.02
Poultry, fat	0.3
Poultry, liver	0.03
Poultry, meat	0.03
Poultry, meat byproducts, except liver	0.3
Pumpkin	0.5
Radish, roots	0.3
Radish, tops	3.0
Sheep, fat	1.5
Sheep, meat	1.5
Sheep, meat byproducts	1.5
Sorghum, grain, forage	10.0
Sorghum, grain, grain	5.0
Sorghum, grain, stover	10.0
Soybean, hulls	0.5
Soybean, seed	0.05
Squash, summer	0.5
Squash, winter	0.5
Sugarcane, cane	1.0
Sunflower, seed	0.5
Sweet potato, roots	0.05
Tomato	0.5
Turnip, greens	7.0
Turnip, roots	0.5
Walnut	0.2
Watermelon	0.5

(2) A tolerance of 0.05 ppm on raw agricultural food commodities (other than those food commodities already covered by a higher tolerance as a result of use on growing crops) is established for the combined residues of the insecticide esfenvalerate, (S)-cyano(3-phenoxyphenyl)methyl-(S)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate, its non-racemic isomer, (R)-cyano(3-phenoxyphenyl)methyl-(R)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate and its diastereomers (S)-cyano(3-phenoxyphenyl)methyl-(R)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate and (R)-cyano(3-phenoxyphenyl)methyl-(S)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate as a result of the use of esfenvalerate in food-handling establishments.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration are established for the combined residues of the insecticide esfenvalerate, (S)-cyano(3-phenoxyphenyl)methyl-(S)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate, its non-racemic isomer, (R)-cyano(3-phenoxyphenyl)methyl-(R)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate and its diastereomers (S)-cyano(3-phenoxyphenyl)methyl-(R)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate and (R)-cyano(3-phenoxyphenyl)methyl-(S)-4-chloro- $\alpha$ -(1-methylethyl)benzeneacetate, in or on food commodities as follows:

Commodity	Parts per million
Cabbage, chinese, bok choy	1.0
Kohlrabi	2.0
Lettuce, head	5.0

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 23401, Apr. 29, 1998, as amended at 63 FR 48615, Sept. 11, 1998; 74 FR 46699, Sept. 11, 2009]

[↑ Back to Top](#)

### §180.535 Fluroxypyr 1-methylheptyl ester; tolerances for residues.

(a) *General.* Tolerances are established for combined residues of fluroxypyr 1-methylheptyl ester [1-methylheptyl ((4-amino-3,5-dichloro-6-fluoro-2-pyridinyl)oxy)acetate] and its metabolite fluroxypyr [((4-amino-3,5-dichloro-6-fluoro-2-pyridinyl)oxy)acetic acid] in or on the following raw agricultural commodities. Compliance with the established tolerance levels is determined by measuring only the sum of fluroxypyr 1-methylheptyl ester [1-methylheptyl ((4-amino-3,5-dichloro-6-fluoro-2-pyridinyl)oxy)acetate] and its metabolite fluroxypyr [((4-amino-3,5-dichloro-6-fluoro-2-pyridinyl)oxy)acetic acid] calculated as the stoichiometric equivalent of fluroxypyr.

Commodity	Parts per million
Barley, grain	0.5
Barley, hay	12.0
Barley, hay	20.0
Barley, straw	12.0
Cattle, fat	0.1
Cattle, kidney	1.5
Cattle, meat	0.1
Cattle, meat byproducts	0.1
Corn, field, forage	1.0
Corn, field, grain	0.02
Corn, field, stover	0.5
Corn, sweet, forage	1.0
Corn, sweet, kernel plus cob with husks removed	0.02
Corn, sweet, stover	2.0
Fruit, pome, group 11	0.02
Garlic, bulb	0.03
Goat, fat	0.1
Goat, kidney	1.5
Goat, meat	0.1
Goat, meat byproducts	0.1
Grain, aspirated fractions	0.6
Grass, forage	120
Grass, hay	160
Hog, fat	0.1
Hog, kidney	1.5
Hog, meat	0.1
Hog, meat byproducts	0.1
Horse, fat	0.1
Horse, kidney	1.5
Horse, meat	0.1
Horse, meat byproducts	0.1
Milk	0.3
Millet, forage	12.0

Millet, grain	0.5
Millet, hay	20.0
Millet, proso, straw	12.0
Oat, forage	12.0
Oat, grain	0.5
Oat, hay	20.0
Oat, straw	12.0
Onion, bulb	0.03
Rice, bran	3.0
Rice, grain	1.5
Shallot, bulb	0.03
Sheep, fat	0.1
Sheep, kidney	1.5
Sheep, meat	0.1
Sheep, meat byproducts	0.1
Sorghum, grain, forage	2.0
Sorghum, grain, grain	0.02
Sorghum, grain, stover	4.0
Teff, forage	12
Teff, grain	0.50
Teff, hay	20
Teff, straw	12
Wheat, forage	12.0
Wheat, grain	0.5
Wheat, hay	20.0
Wheat, straw	12.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 52169, Sept. 30, 1998, as amended at 64 FR 22799, Apr. 28, 1999; 66 FR 37598, July 19, 2001; 66 FR 47971, Sept. 17, 2001; 67 FR 46884, July 17, 2002; 67 FR 60146, Sept. 25, 2002; 68 FR 75438, Dec. 31, 2003; 69 FR 2074, Jan. 14, 2004; 70 FR 3649, Jan. 26, 2005; 70 FR 7047, Feb. 10, 2005; 71 FR 76204, Dec. 20, 2006; 72 FR 73635, Dec. 28, 2007; 78 FR 3333, Jan. 16, 2013; 83 FR 29706, June 26, 2018]

[↑ Back to Top](#)

#### §180.537 Isoxaflutole; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide, isoxaflutole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of isoxaflutole ((5-cyclopropyl-4-isoxazolyl) [2-(methylsulfonyl)-4-(trifluoromethyl)phenyl] methanone) and its metabolite 1-(2-methylsulfonyl-4-trifluoromethylphenyl)-2-cyano-3-cyclopropyl propan-1,3-dione (RPA 202248), calculated as the stoichiometric equivalent of isoxaflutole, in or on the commodity:

Commodity	Parts per million
Corn, field, forage	0.04
Corn, field, grain	0.02
Corn, field, stover	0.02
Grain, aspirated fractions	0.30
Soybean, seed	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[63 FR 50784, Sept. 23, 1998, as amended at 73 FR 75608, Dec. 12, 2008; 76 FR 76314, Dec. 7, 2011]

[↑ Back to Top](#)

#### §180.539 d-Limonene; tolerances for residues.

(a) *General.* (1) The insecticide d-limonene may be safely used in insect-repellent tablecloths and in insect-repellent strips used in food- or feed-handling establishments.

(2) To assure safe use of the insect repellent, its label and labeling shall conform to that registered by the U.S. Environmental Protection Agency, and it shall be used in accordance with such label and labeling.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 33715, May 24, 2000, as amended at 70 FR 55268, Sept. 21, 2005]

[↑ Back to Top](#)

#### §180.540 Fenitrothion; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide fenitrothion, O,O-dimethyl O-(4-nitro-*m*-tolyl) phosphorothioate, from the postharvest application of the insecticide to stored wheat in Australia, in or on the following food commodity:

Commodity	Parts per million
Wheat, gluten <sup>1</sup>	3.0

<sup>1</sup>There are no U.S. registrations on food commodities since 1987.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 54963, Sept. 24, 2008]

[↑ Back to Top](#)

#### §180.543 Diclosulam; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide diclosulam [*N*-(2,6-dichlorophenyl)-5-ethoxy-7-fluoro[1,2,4] triazolo[1,5-*c*]pyrimidine-2-sulfonamide] in or on the following raw agricultural commodities as follows:

Commodity	Parts per million
Peanut	0.020
Soybean, seed	0.020

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 12134, Mar. 8, 2000]

[↑ Back to Top](#)

#### §180.544 Methoxyfenozide; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide methoxyfenozide, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only methoxyfenozide (3-methoxy-2-methylbenzoic acid 2-(3,5-dimethylbenzoyl)-2-(1,1-dimethylethyl) hydrazide) in or on the commodity.

Commodity	Parts per million
Acerola	0.4
Almond, hulls	25
Animal feed, nongrass, group 18, forage	50.0
Animal feed, nongrass, group 18, hay	150.0
Apple, wet pomace	7.0
Artichoke, globe	3.0
Atemoya	0.60



Avocado	0.6
Beet, sugar, roots	0.50
Berry, low growing, subgroup 13-07G, except cranberry	2.0
Biriba	0.60
Brassica, head and stem, subgroup 5A	7.0
Brassica, leafy greens, subgroup 5B	30
Bushberry subgroup 13-07B	3.0
Caneberry subgroup 13-07A	6.0
Canistel	0.6
Cattle, fat	0.50
Cattle, meat	0.02
Cherimoya	0.60
Chive, fresh leaves	30
Citrus, oil	100
Corn, field, forage	15
Corn, field, grain	0.05
Corn, field, refined oil	0.20
Corn, field, stover	125
Corn, pop, grain	0.05
Corn, pop, stover	125
Corn, sweet, forage	30
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	60
Cotton, gin byproducts	35
Cotton, undelinted seed	2.0
Cranberry	0.5
Custard apple	0.60
Date	8.0
Feijoa	0.4
Fruit, citrus, group 10-10	3.0
Fruit, pome, group 11-10	2.0
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	1.0
Fruit, stone, group 12-12, except plum, prune, fresh	3.0
Goat, fat	0.50
Goat, meat	0.02
Grain, aspirated grain fractions	120
Grape, raisin	1.5
Grass, forage, fodder and hay, group 17, forage	18.0
Grass, forage, fodder and hay, group 17, hay	30.0
Guava	0.4
Herb subgroup 19A, except chive, fresh leaves	400
Hog, fat	0.1
Hog, meat	0.02
Horse, fat	0.50
Horse, meat	0.02
llama	0.60
Jaboticaba	0.4
Leaf petioles subgroup 4B	25
Leafy greens subgroup 4A	30
Longan	2.0
Lychee	2.0
Mango	0.6
Milk	0.10
Nut, tree, group 14-12	0.10
Onion, green, subgroup 3-07B, except chive, fresh leaves	5.0
Papaya	0.6
Passionfruit	0.4
Pea and bean, dried shelled, except soybean, subgroup 6C, except pea, blackeyed, seed and pea, southern, seed	0.50
Pea and bean, succulent shelled, subgroup 6B	0.2
Pea, blackeyed, seed	4.0
Pea, southern, seed	4.0
Peanut	0.02
Peanut, hay	55.0
Peanut, oil	0.04
Peppermint, tops	7.0
Pineapple	0.70
Plum, prune, fresh	0.30
Pomegranate	0.6
Poultry, fat	0.02
Poultry, meat	0.02
Pulasan	2.0
Rambutan	2.0
Sapodilla	0.6

Sapote, black	0.6
Sapote, mamey	0.6
Sheep, fat	0.50
Sheep, meat	0.02
Sorghum, grain, forage	15
Sorghum, grain, grain	6.0
Sorghum, grain, stover	20
Sorghum, sweet, forage	15
Sorghum, sweet, grain	6.0
Sorghum, sweet, stalk	15
Sorghum, sweet, stover	20
Soursop	0.60
Soybean, aspirated grain fractions	160
Soybean, forage	30
Soybean, hay	80
Soybean, hulls	2.0
Soybean, seed	1.0
Spanish lime	2.0
Spearmint, tops	7.0
Star apple	0.6
Starfruit	0.4
Sugar apple	0.60
Tea, dried <sup>1</sup>	20
Tea, instant <sup>1</sup>	20
Turnip, greens	30
Vegetable, cucurbit, group 9	0.3
Vegetable, foliage of legume, except soybean, subgroup 7A	35
Vegetable, fruiting, group 8-10	2.0
Vegetable, leaves of root and tuber, group 2	30
Vegetable, legume, edible podded, subgroup 6A	1.5
Vegetable, root, except sugar beet, Subgroup 1B	0.90
Vegetable, tuberous and corm, except potato, subgroup 1D	0.02
Wax jambu	0.4

<sup>1</sup>There are no U.S. registrations as of March 12, 2019 for use on tea.

(2) Tolerances are established for residues of the insecticide methoxyfenozide, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of methoxyfenozide [3-methoxy-2-methylbenzoic acid 2-(3,5-dimethylbenzoyl)-2-(1,1-dimethylethyl) hydrazide] and its glucuronide metabolite ( $\beta$ -D-Glucopyranuronic acid, 3-[[2-(1,1-dimethylethyl)-2-(3,5-dimethylbenzoyl)-hydrazino]carbonyl]-2-methylphenyl-), calculated as the stoichiometric equivalent of methoxyfenozide.

Commodity	Parts per million
Cattle, liver	0.40
Cattle, meat byproducts, except liver	0.10
Egg	0.02
Goat, liver	0.40
Goat, meat byproducts, except liver	0.10
Hog, liver	0.1
Hog, meat byproducts, except liver	0.02
Horse, liver	0.40
Horse, meat byproducts, except liver	0.10
Poultry, liver	0.10
Poultry, meat byproducts, except liver	0.02
Sheep, liver	0.40
Sheep, meat byproducts, except liver	0.10

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of the insecticide methoxyfenozide, including its metabolites and degradates in or on the commodities listed in the table below, resulting from use of the pesticide under a Section 18 emergency exemption granted by EPA. Compliance with the tolerance levels specified in the following table is to be determined by measuring only methoxyfenozide (3-methoxy-2-methylbenzoic acid 2-(3,5-dimethylbenzoyl)-2-(1,1-dimethylethyl) hydrazide) in or on the commodity.

Commodity	Parts per million	Expiration/revocation date
Rice, bran	4.0	12/31/19
Rice, grain	0.50	12/31/19

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent tolerances.* (1) Tolerances are established for the indirect or inadvertent residues of the insecticide methoxyfenozide, including its metabolites and degradates, in or on the raw agricultural commodities in the following table, when present therein as a result of the application of methoxyfenozide to growing crops as listed in paragraph (a) of this section. Compliance with the tolerance levels specified in the following table is to be determined by measuring only methoxyfenozide [3-methoxy-2-methylbenzoic acid 2-(3,5-dimethylbenzoyl)-2-(1,1-dimethylethyl) hydrazide].

Commodity	Parts per million
Onion, bulb, subgroup 3-07A	0.10
Potato	0.02

(2) Tolerances are established for the indirect or inadvertent residues of the insecticide methoxyfenozide, including its metabolites and degradates, in or on the raw agricultural commodities in the following table, when present therein as a result of the application of methoxyfenozide to growing crops as listed in paragraph (a) of this section. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of methoxyfenozide [3-methoxy-2-methylbenzoic acid, 2-(3,5-dimethylbenzoyl)-2-(1,1-dimethylethyl) hydrazide] and the following metabolites (all calculated as the stoichiometric equivalent of methoxyfenozide): free phenol of methoxyfenozide [3,5-dimethylbenzoic acid N-tert-butyl-N'-(3-hydroxy-2-methylbenzoyl) hydrazide], the glucose conjugate of the phenol [3,5-dimethyl benzoic acid N-tert-butyl-N'-[3 (β-D-glucopyranosyloxy)-2-methylbenzoyl]-hydrazide] and the malonylglycosyl conjugate of the phenol [3,5-dimethyl benzoic acid N-tert-butyl-N'-[3 (β-D-6-malonyl-glucopyranosyl-1-oxy)-2-methylbenzoyl]-hydrazide].

Commodity	Parts per million
Animal feed, nongrass, group 18, straw	8.0
Grain, cereal, forage, fodder and straw group 16, except corn	6.0
Rapeseed subgroup 20A	1.0
Spice subgroup 19B	4.5
Sunflower subgroup 20B	1.0

[67 FR 59203, Sept. 20, 2002]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.544, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

#### §180.545 Prallethrin; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide prallethrin, including its metabolites and degradates, in or on all raw agricultural commodities and processed food from use of prallethrin in food handling establishments where food and food products are held, processed, prepared and/or served, or as a wide-area mosquito adulticide at 1.0 part per million (ppm). Compliance with the tolerance level specified is to be determined by measuring only prallethrin, 2-methyl-4-oxo-3-(2-propyn-1-yl)-2-cyclopenten-1-yl-2,2-dimethyl-3-(2-methyl-1-propen-1-yl)cyclopropanecarboxylate.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[79 FR 64330, Oct. 29, 2014]

[↑ Back to Top](#)

#### §180.546 Mefenoxam; tolerances for residues.

(a) *General.* Tolerances are established for residues of mefenoxam, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only metalaxyl (methyl N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-DL-alaninate).

Commodity	Parts per million
Artichoke, globe	0.05
Atemoya	0.20
Bean, snap, succulent	0.20
Bushberry subgroup 13-07B	2.0
Cacao, dried bean	0.20
Caneberry subgroup 13-07A	0.70
Canistel	0.40
Custard apple	0.20

Fruit, small, vine climbing, except grape, subgroup 13-07E	0.10
Herbs, dried	55
Herbs, fresh	8.0
Mango	0.40
Onion, bulb, subgroup 3-07A	3.0
Onion, green, subgroup 3-07B	10
Papaya	0.40
Rapeseed subgroup 20A	0.05
Sapodilla	0.40
Sapote, black	0.40
Sapote, mamey	0.40
Spinach	10
Star apple	0.40
Starfruit	0.20
Sugar apple	0.20
Wasabi, stem	3.0
Wasabi, tops	6.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 57556, Sept. 25, 2000, as amended at 66 FR 48003, Sept. 17, 2001; 67 FR 35050, May 17, 2002; 76 FR 4548, Jan. 26, 2011; 81 FR 26727, May 4, 2016; 83 FR 65546, Dec. 21, 2018]

[↑ Back to Top](#)

#### §180.547 Prohexadione calcium; tolerances for residues.

(a) *General.* Tolerances are established for residues of the growth regulator, prohexadione calcium, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only prohexadione calcium (calcium 3-oxido-5-oxo-4-propionylcyclohex-3-enecarboxylate)<sup>1</sup> in or on the following commodities.

Commodity	Parts per million
Cattle, kidney	0.10
Cattle, meat byproducts, except kidney	0.05
Cherry, sweet	0.40
Fruit, pome, group 11	3.0
Goat, kidney	0.10
Goat, meat byproducts, except kidney	0.05
Grass, forage <sup>1</sup>	0.10
Grass, hay <sup>1</sup>	0.10
Grass, seed screenings <sup>1</sup>	3.5
Grass, straw <sup>1</sup>	1.2
Hog, kidney	0.10
Hog, meat byproducts, except kidney	0.05
Horse, kidney	0.10
Horse, meat byproducts, except kidney	0.05
Peanut	1.0
Peanut, hay	0.60
Sheep, kidney	0.10
Sheep, meat byproducts, except kidney	0.05
Strawberry	0.30
Watercress	4.0

<sup>1</sup>Registration is limited to grass grown for seed.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 25660, May 3, 2000, as amended at 66 FR 29712, June 1, 2001; 76 FR 71464, Nov. 18, 2011; 80 FR 38980, July 8, 2015]

[↑ Back to Top](#)

**§180.549 Diflufenzopyr; tolerances for residues.**

(a) *General.* Tolerances are established for combined residues of diflufenzopyr, 2-(1-[[[3,5-difluorophenylamino]carbonyl]hydrazono]ethyl)-3- pyridinecarboxylic acid, and its metabolites convertible to 8- methylpyrido[2,3-d]pyridazin-5(6H)-one, expressed as diflufenzopyr, in or on the following raw agricultural commodities:

Commodity	Parts per million
Corn, field, forage	0.05
Corn, field, grain	0.05
Corn, field, stover	0.05
Corn, pop, grain	0.05
Corn, pop, stover	0.05
Corn, sweet, forage	0.05
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	0.05
Grass, forage	22.0
Grass, hay	7.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 4308, Jan. 28, 1999, as amended at 67 FR 55338, Aug. 29, 2002; 76 FR 34886, June 15, 2011]

[↑ Back to Top](#)

**§180.551 Fluthiacet-methyl; tolerances for residues.**

(a) *General.* (1) A tolerance is established for residues of the herbicide, fluthiacet-methyl, acetic acid [[2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1*H*,3*H*-[1,3,4]thiadiazolo[3,4- $\alpha$ ]pyridazin-1-ylidene)amino]phenyl]thio]-methyl ester, in or on the food commodity:

Commodity	Parts per million
Corn, field, forage	0.050
Corn, field, grain	0.010
Corn, field, stover	0.050
Corn, pop, grain	0.010
Corn, pop, stover	0.050
Corn, sweet, forage	0.050
Corn, sweet, kernel plus cob with husks removed	0.010
Corn, sweet, stover	0.050
Soybean, seed	0.01

(2) A tolerance is established for the combined residues of the herbicide fluthiacet-methyl and its acid metabolite: acetic acid, [[2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1*H*,3*H*-[1,3,4]thiadiazolo[3,4- $\alpha$ ]pyridazin-1-ylidene)amino]phenyl]thio]-methyl ester, and its acid metabolite, acetic acid, [[2-chloro-4-fluoro-5-[(tetrahydro-3-oxo-1*H*,3*H*-[1,3,4]thiadiazolo[3,4- $\alpha$ ]pyridazin-1-ylidene)amino]phenyl]thio]-, in or on the following food commodities:

Commodity	Parts per million
Cotton, gin byproducts	0.20
Cotton, undelinted seed	0.020

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 18357, Apr. 14, 1999, as amended at 66 FR 65850, Dec. 21, 2001; 71 FR 77625, Dec. 27, 2006]

[↑ Back to Top](#)

**§180.552 Sulfosulfuron; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the herbicide sulfosulfuron, 1-(4,6-dimethoxypyrimidin-2-yl)-3-[(2-ethanesulfonyl-imidazo[1,2-*a*]pyridine-3-yl) sulfonyl]urea and its metabolites converted to 2-(ethylsulfonyl)-imidazo[1,2-*a*]pyridine and calculated as sulfosulfuron in or on the raw agricultural commodities.

Commodity	Parts per million
Cattle, fat	0.02
Cattle, meat	0.01
Cattle, meat byproducts	0.3
Goat, fat	0.02
Goat, meat	0.01
Goat, meat byproducts	0.3
Grass, forage, fodder and hay, group 17, forage	14
Grass, forage, fodder and hay, group 17, hay	25
Hog, fat	0.005
Hog, meat	0.005
Hog, meat byproducts	0.05
Horse, fat	0.02
Horse, meat	0.01
Horse, meat byproducts	0.3
Milk	0.02
Sheep, fat	0.02
Sheep, meat	0.01
Sheep, meat byproducts	0.3
Wheat, forage	4.0
Wheat, grain	0.02
Wheat, hay	0.3
Wheat, straw	0.1

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 27192, May 19, 1999, as amended at 70 FR 69464, Nov. 16, 2005; 72 FR 54574, Sept. 26, 2007]

[↑ Back to Top](#)

#### §180.553 Fenhexamid; tolerances for residues.

(a) *General.* Tolerances are established for the residues of the fungicide fenhexamid (N-2,3-dichloro-4-hydroxyphenyl)-1-methyl cyclohexanecarboxamide) in or on the following commodities:

Commodity	Parts per million
Almond, hulls	2.0
Almond	0.02
Asparagus	0.02
Bushberry subgroup 13B	5.0
Caneberry subgroup 13A	20.0
Cilantro, leaves	30.0
Cucumber	2.0
Fruit, stone, group 12, except plum, prune, fresh, postharvest	10.0
Ginseng	0.3
Grape	4.0
Grape, raisin	6.0
Juneberry	5.0
Kiwifruit, postharvest	15.0
Leafy greens subgroup 4A, except spinach	30.0
Lingonberry	5.0
Pear	10
Pepper, nonbell	0.02
Pistachio	0.02
Plum, prune, dried	2.5
Plum, prune, fresh	1.5
Pomegranate	2.0
Salal	5.0
Strawberry	3.0
Vegetable, fruiting, group 8, except nonbell pepper	2.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 28924, May 28, 1999, as amended at 65 FR 19849, Apr. 13, 2000; 65 FR 69883, Nov. 21, 2000; 67 FR 19120, Apr. 18, 2002; 68 FR 2247, Jan. 16, 2003; 68 FR 55519, Sept. 26, 2003; 71 FR 15617, Mar. 29, 2006; 71 FR 43664, Aug. 2, 2006; 73 FR 19154, Apr. 9, 2008]

[↑ Back to Top](#)

#### §180.554 Kresoxim-methyl; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues of the fungicide kresoxim-methyl (methyl (*E*)-2-[2-(2-methylphenoxy)-methyl]phenyl-2-(methoxyimido)acetate) and its metabolites as follows: (*E*)-2-[2-(2-methylphenoxy)methyl]-phenyl-2-(methoxyimido)acetic acid; (*E*)-2-[2-(2-hydroxymethylphenoxy)methyl]-phenyl-2-(methoxyimido)acetic acid (free and glucose conjugated); and (*E*)-2-[2-(4-hydroxy-2-methylphenoxy)-methyl]phenyl-2-(methoxyimido)acetic acid (free and glucose conjugated) in or on the following commodities:

Commodity	Parts per million
Apple, dry pomace	1.0
Apple, wet pomace	1.0
Fruit, pome	0.5
Grape	1.0
Grape, raisin	1.5
Pecan	0.15
Vegetable, cucurbit, group 9	0.40

(2) Tolerances are established in or on the following commodities for the residues of the metabolite (*E*)-2-[2-(2-methylphenoxy)methyl]-phenyl-2-(methoxyimido)acetic acid resulting from the use of the fungicide kresoxim-methyl:

Commodity	Parts per million
Cattle, meat byproducts	0.01
Goat, meat byproducts	0.01
Sheep, meat byproducts	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 31136, June 10, 1999, as amended at 71 FR 50359, Aug. 25, 2006; 74 FR 46377, Sept. 9, 2009]

[↑ Back to Top](#)

#### §180.555 Trifloxystrobin; tolerances for residues.

(a) *General.* Tolerances are established for residues of trifloxystrobin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of trifloxystrobin, benzeneacetic acid, (*E,E*)- $\alpha$ -(methoxyimino)-2-[[[1-[3-(trifluoromethyl) phenyl]ethylidene] amino]oxy]methyl]-, methyl ester, and the free form of its acid metabolite CGA-321113, (*E,E*)-methoxyimino-[2-[1-(3-trifluoromethyl-phenyl)-ethylideneamino]oxy]methyl]-phenyl]acetic acid, calculated as the stoichiometric equivalent of trifloxystrobin, in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	0.01
Alfalfa, hay	0.01
Almond, hulls	9.0
Apple, wet pomace	5.0
Artichoke, globe	1.0
Asparagus	0.07
Banana <sup>1</sup>	0.10
Barley, grain	0.05
Barley, hay	0.3
Barley, straw	5.0
Beet, sugar, dried pulp	0.4
Beet, sugar, molasses	0.2
Beet, sugar, roots	0.1
Beet, sugar, tops	4.0
Berry, low growing subgroup 13-07G	1.5
Brassica, head and stem, subgroup 5A	2.0
Brassica, leafy greens, subgroup 5B	30
Canistel	0.7

Cattle, fat	0.1
Cattle, meat	0.1
Cattle, meat byproducts	0.1
Citrus, dried pulp	1.0
Citrus, oil	38
Coffee, green bean <sup>2</sup>	0.02
Corn, field, forage	8.0
Corn, field, grain	0.05
Corn, field, stover	7
Corn, field, refined oil	0.1
Corn, pop, grain	0.05
Corn, pop, stover	7
Corn, sweet, cannery waste	0.6
Corn, sweet, forage	7.0
Corn, sweet, kernel plus cob with husks removed	0.04
Corn, sweet, stover	4.0
Cotton, gin byproducts	3.0
Cottonseed subgroup 20C	0.50
Dill, seed	30
Egg	0.04
Flax, seed	0.40
Fruit, citrus, group 10	0.6
Fruit, pome	0.5
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2.0
Fruit, stone, group 12	2
Goat, fat	0.1
Goat, meat	0.1
Goat, meat byproducts	0.1
Grain, aspirated fractions	10
Grape, raisin	5.0
Grass, forage	12
Grass, hay	17
Herbs, subgroup 19A	200
Hog, fat	0.05
Hog, meat	0.05
Hog, meat byproducts	0.05
Hop, dried cones	11.0
Horse, fat	0.1
Horse, meat	0.1
Horse, meat byproducts	0.1
Leaf petioles subgroup 4B	9.0
Leafy greens, subgroup 4A	30
Mango	0.7
Milk	0.02
Nut, tree, group 14	0.04
Oat, forage	0.3
Oat, grain	0.05
Oat, hay	0.3
Oat, straw	5.0
Papaya	0.7
Pea, dry, seed	0.06
Pea, field, hay	15
Pea, field, vines	4
Peanut, hay	4.0
Peanut	0.05
Pistachio	0.04
Poultry, fat	0.04
Poultry, meat	0.04
Poultry, meat byproducts	0.04
Radish, tops	10
Rice, grain	3.5
Rice, hulls	8
Sapodilla	0.7
Sapote, black	0.7
Sapote, mamey	0.7
Sheep, fat	0.1
Sheep, meat	0.1
Sheep, meat byproducts	0.1
Soybean, forage	10.0
Soybean, hay	25.0
Soybean, seed	0.08
Star apple	0.7
	5



Tea, dried <sup>3</sup>	
Tea, instant <sup>3</sup>	5
Vegetable, cucurbit, group 9	0.50
Vegetable, fruiting	0.5
Vegetable, root, except sugar beet, subgroup 1B	0.1
Vegetable, tuberous and corm, subgroup 1C	0.04
Wheat, bran	0.15
Wheat, forage	0.3
Wheat, grain	0.05
Wheat, hay	0.2
Wheat, straw	5.0

<sup>1</sup> There are no U.S. registrations as of September 27, 1999 for use on banana.

<sup>2</sup> There are no U.S. registrations as of January 18, 2012 for use on coffee, green bean.

<sup>3</sup> There are no U.S. registrations as of June 24, 2019, for use on tea.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[64 FR 51907, Sept. 27, 1999]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.555, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

#### §180.556 Pymetrozine; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide pymetrozine 1,2,4-triazin-3(2H)-one,4,5-dihydro-6-methyl-4-[(3-pyridinylmethylene) amino] in or on the following raw agricultural commodities. The tolerance level for each commodity is expressed in terms of the parent insecticide only, which serves as an indicator of the use of pymetrozine on these raw agricultural commodities.

Commodity	Parts per million
Asparagus	0.04
Brassica, head and stem, subgroup 5A	0.5
Brassica, leafy greens, subgroup 5B	0.25
Cotton, gin byproducts	2.0
Cotton, undelinted seed	0.3
Hop, dried cones	6.0
Pecan	0.02
Turnip, greens	0.25
Vegetable, fruiting, group 8	0.2
Vegetable, cucurbit, group 9	0.1
Vegetable, leafy, except brassica, group 4	0.6
Vegetable, tuberous and corm, subgroup 1C	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 48634, Aug. 9, 2000, as amended at 66 FR 14846, Mar. 14, 2001; 66 FR 66794, Dec. 27, 2001; 70 FR 7047, Feb. 10, 2005; 70 FR 43298, July 27, 2005]

[↑ Back to Top](#)

#### §180.557 Tetraconazole; tolerances for residues.

(a) *General.* Tolerances are established for residues of tetraconazole, including its metabolites and degradates, in or on the commodities listed below. Compliance with the following tolerance levels is to be determined by measuring only tetraconazole (1-[2-(2,4-dichlorophenyl)-3-(1,1,2,2-tetrafluoroethoxy)propyl]-1H-1,2,4-triazole), in or on the following commodities.

Commodity	Parts per million
-----------	-------------------

Barley, bran	1.0
Barley, flour	0.50
Barley, grain	0.30
Beet sugar, dried pulp	0.20
Beet sugar, molasses	0.25
Beet sugar, root	0.15
Cattle, fat	0.15
Cattle, liver	1.50
Cattle, meat	0.02
Cattle, meat byproducts (except liver)	0.15
Corn, field, grain	0.01
Corn, pop, grain	0.01
Eggs	0.02
Goat, fat	0.15
Goat, liver	1.50
Goat, meat	0.02
Goat, meat byproducts (except liver)	0.15
Grain, aspirated fractions	4.0
Grain, cereal, forage, fodder, and straw, group 16	7.0
Hog, fat	0.01
Hog, liver	0.05
Hog, meat	0.01
Hog, meat byproducts (except liver)	0.01
Horse, fat	0.15
Horse, liver	1.50
Horse, meat	0.02
Horse, meat byproducts (except liver)	0.15
Low growing berry subgroup 13-07G, except cranberry	0.25
Milk	0.06
Milk, fat	0.75
Pea and bean, dried shelled (except soybean) subgroup 6C	0.09
Peanut	0.03
Peanut, oil	0.10
Pecan	0.04
Poultry, fat	0.05
Poultry, meat	0.01
Poultry meat byproducts	0.05
Rapeseed subgroup 20A	0.90
Sheep, fat	0.15
Sheep, liver	1.50
Sheep, meat	0.02
Sheep, meat byproducts (except liver)	0.15
Small fruit vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.20
Soybean, refined oil	0.80
Soybean, seed	0.15
Vegetable, cucurbit, group 9	0.15
Vegetable, foliage of legume (except soybeans) subgroup 7A	8.0
Vegetable, fruiting, group 8-10	0.30
Wheat, bran	0.15
Wheat, flour	0.08
Wheat, germ	0.50
Wheat, grain	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[70 FR 20830, Apr. 22, 2005, as amended at 70 FR 31359, June 1, 2005; 72 FR 18134, Apr. 11, 2007; 73 FR 67406, Nov. 14, 2008; 76 FR 53648, Aug. 29, 2011; 82 FR 2905, Jan. 10, 2017; 83 FR 16206, Apr. 16, 2018]

[↑ Back to Top](#)

#### §180.559 Clodinafop-propargyl; tolerances for residues.

(a) *General.* Tolerances are established for clodinafop-propargyl, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only clodinafop-propargyl [(2R)-2-[4-[(5-chloro-3-fluoro-2-pyridinyl)oxy]phenoxy]propanoic acid, 2-propynyl ester] and its metabolite clodinafop [(2R)-2-[4-[(5-chloro-3-fluoro-2-pyridinyl)oxy]phenoxy]propanoic acid].

Commodity	Parts per million
Wheat, forage	0.1
Wheat, grain	0.02
Wheat, hay	0.1
Wheat, straw	0.5

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 38774, June 22, 2000, as amended at 77 FR 72226, Dec. 5, 2012]

[↑ Back to Top](#)

#### §180.560 Cloquintocet-mexyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the inert ingredient cloquintocet-mexyl, including its metabolites and degradates, in or on the commodities in the following table when used as a safener in pesticide formulations containing the active ingredients clodinafop-propargyl (wheat only), dicamba (wheat only), flucarbazone-sodium (wheat only), halauxifen-methyl (wheat or barley), pinoxaden (wheat or barley), pyroxsulam (wheat or teff), florasulam (teff), or fluroxypyr 1-methylheptyl ester (teff). Compliance with the tolerance levels specified is to be determined by measuring the combined residues of cloquintocet-mexyl, (acetic acid [(5-chloro-8-quinolinyl)oxy]-, 1-methylhexyl ester; CAS Reg. No. 99607-70-2) and its acid metabolite (5-chloro-8-quinolinoxyacetic acid), expressed as cloquintocet-mexyl, in or on the following commodities:

Commodity	Parts per million
Barley, grain	0.1
Barley, hay	0.1
Barley, straw	0.1
Teff, forage <sup>1</sup>	0.2
Teff, grain <sup>1</sup>	0.1
Teff, hay <sup>1</sup>	0.5
Teff, straw <sup>1</sup>	0.1
Wheat, forage	0.2
Wheat, grain	0.1
Wheat, hay	0.5
Wheat, straw	0.1

<sup>1</sup>There are no U.S. registrations for use on this commodity as of March 22, 2017.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 38764, June 22, 2000, as amended at 70 FR 74688, Dec. 16, 2005; 73 FR 11820, Mar. 5, 2008; 75 FR 16020, Mar. 31, 2010; 76 FR 38035, June 29, 2011; 81 FR 50634, Aug. 2, 2016; 82 FR 14623, Mar. 22, 2017; 83 FR 45843, Sept. 11, 2018]

[↑ Back to Top](#)

#### §180.561 Acibenzolar-S-methyl; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of acibenzolar-S-methyl, benzo(1,2,3)thiadiazole-7-carbothioic acid-S-methyl ester, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only those acibenzolar-S-methyl residues convertible to benzo(1,2,3)thiadiazole-7-carboxylic acid (CGA-210007), expressed as the stoichiometric equivalent of acibenzolar-S-methyl, in or on the following raw agricultural commodities.

Commodity	Parts per million
Banana <sup>1</sup>	0.1
Berry, low growing, subgroup 13-07G	0.15
Fruit, citrus, group 10-10	0.02
Fruit, pome, group 11-10	0.03
Onion, bulb, subgroup 3-07A	0.1
Spinach	1.0
Tomato, paste	3.0

Vegetable, brassica, leafy, group 5	1.0
Vegetable, cucurbit, group 9	2.0
Vegetable, fruiting, group 8	1.0
Vegetable, leafy, group 4	0.25

<sup>1</sup>There are no United States registrations for banana.

(2) Tolerances are established for residues of acibenzolar- S -methyl, benzo(1,2,3)thiadiazole-7-carbothioic acid- S -methyl ester, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only those acibenzolar- S -methyl residues convertible to benzo(1,2,3)thiadiazole-7-carboxylic acid (CGA-210007), expressed as the Stoichiometric equivalent of acibenzolar- S -methyl, in or on the following raw agricultural commodities.

Commodity	Parts per million	Expiration/revocation date
Apple	0.05	12/31/15
Grapefruit	0.05	12/31/15
Pear	0.05	12/31/15

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 50446, Aug. 18, 2000, as amended at 70 FR 7861, Feb. 16, 2005; 71 FR 76200, Dec. 20, 2006; 74 FR 24710, May 26, 2009; 76 FR 34886, June 15, 2011; 77 FR 21676, Apr. 11, 2012; 77 FR 30406, May 23, 2012; 80 FR 58620, Sept. 30, 2015]

[↑ Back to Top](#)

#### §180.562 Flucarbazone-sodium; tolerances for residues.

(a) *General.* Tolerances are established for combined residues of the herbicide flucarbazone-sodium, 4,5-dihydro-3-methoxy-4-methyl-5-oxo-N-[[2(trifluoromethoxy)phenyl] sulfonyl]-1H-1,2,4-triazole 1-carboxamide, sodium salt) and its N-desmethyl metabolite; and its metabolites converted to 2-(trifluoromethoxy)benzene sulfonamide and calculated as flucarbazone-sodium in or on the following food commodities:

Commodity	Parts per million
Cattle, liver	1.50
Cattle, meat	0.01
Cattle, meat byproducts, except liver	0.01
Goat, liver	1.50
Goat, meat	0.01
Goat, meat byproducts, except liver	0.01
Hog, liver	1.50
Hog, meat	0.01
Hog, meat byproducts, except liver	0.01
Horse, liver	1.50
Horse, meat	0.01
Horse, meat byproducts, except liver	0.01
Milk	0.005
Sheep, liver	1.50
Sheep, meat	0.01
Sheep, meat byproducts, except liver	0.01
Wheat, forage	0.30
Wheat, grain	0.01
Wheat, hay	0.10
Wheat, straw	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[70 FR 67915, Nov. 9, 2005, as amended at 71 FR 76931, Dec. 22, 2006]

[↑ Back to Top](#)

#### §180.563 Ethametsulfuron-methyl; tolerances for residues.

(a) *General.* A tolerance is established for residues of ethametsulfuron methyl (methyl 2-(((4-ethoxy-6-(methylamino)-1,3,5-triazin-2-yl) amino) carbonyl) amino) sulfonyl) benzoate) in or on the following raw agricultural commodities.

Commodity	Parts per million
Canola, seed	0.02
Crambe, seed	0.02
Rapeseed, seed	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect of inadvertent residues.* [Reserved]

[65 FR 57972, Sept. 27, 2000, as amended at 66 FR 18207, Apr. 6, 2001; 67 FR 35050, May 17, 2002]

[↑ Back to Top](#)

#### §180.564 Indoxacarb; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of indoxacarb, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only indoxacarb, (S)-methyl 7-chloro-2,5-dihydro-2-[[[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]carbonyl]indeno[1,2-e][1,3,4][oxadiazine-4a(3H)-carboxylate, and its R-enantiomer, (R)-methyl 7-chloro-2,5-dihydro-2-[[[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]carbonyl]indeno[1,2-e][1,3,4][oxadiazine-4a(3H)-carboxylate.

Commodity	Parts per million
Apple, wet pomace	3.0
Alfalfa, forage	10
Alfalfa, hay	50
Bean, dry, seed	0.2
Bean, succulent	0.9
Beet, garden, roots	0.30
Beet, garden, tops	6.0
Berry, low growing, except strawberry, subgroup 13-07H	1
Bushberry subgroup 13-07B	1.5
Cattle, fat	1.5
Cattle, meat	0.05
Cattle, meat byproducts	0.03
Corn, field, forage	6.0
Corn, field, grain	0.02
Corn, field, stover	15
Corn, sweet, forage	10
Corn, sweet, kernel plus cob with husk removed	0.02
Corn, sweet, stover	15
Cotton, gin byproducts	15
Cotton, undelinted seed	2.0
Cowpea, forage	50
Cowpea, hay	100
Fruit, pome, except pear, group 11	1.0
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2
Fruit, stone, group 12	0.90
Goat, fat	1.5
Goat, meat	0.05
Goat, meat byproducts	0.03
Grain, aspirated fractions	45
Grape, raisin	5.0
Hog, fat	1.5
Hog, meat	0.05
Hog, meat byproducts	0.03
Horse, fat	1.5
Horse, meat	0.05
Horse, meat byproducts	0.03
Milk	0.15
Milk, fat	4.0
Okra	0.50
Pea, southern, seed	0.10
Peanut	0.01
Peanut, hay	40
Pear	0.20

Pear, oriental	0.20
Peppermint, tops	11
Sheep, fat	1.5
Sheep, meat	0.05
Sheep, meat byproducts	0.03
Soybean, hulls	4.0
Soybean, seed	0.80
Spearmint, tops	11
Turnip, greens	12
Vegetable, <i>Brassica</i> , leafy, group 5	12
Vegetable, cucurbit, group 9	0.60
Vegetable, fruiting, group 8	0.50
Vegetable, leafy, except <i>Brassica</i> , group 4	14
Vegetable, tuberous and corm, subgroup 1-C	0.01

(2) Tolerances are established for residues of indoxacarb, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of indoxacarb, (S)-methyl-7-chloro-2,5-dihydro-2-[[[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]carbonyl]indeno[1,2e] [1,3,4]oxadiazine-4a(3H)-carboxylate, its R-enantiomer, (R)-methyl 7-chloro-2,5-dihydro-2-[[[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]carbonyl]indeno[1,2-e] [1,3,4] oxadiazine-4a(3H)-carboxylate, and the metabolites: IN-JT333, methyl 7-chloro-2,5-dihydro-2-[[[4-(trifluoromethoxy)phenyl]-amino]carbonyl]indeno[1,2-e] [1,3,4]oxadiazine-4a(3H)-carboxylate; IN-KT319, (E)-methyl 5-chloro-2,3,-dihydro-2-hydroxy-1-[[[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]-carbonyl]hydrazono]-1H-indene-2-carboxylate; IN-JU873, methyl 5-chloro-2,3-dihydro-2-hydroxy-1-[[[4-(trifluoromethoxy)-phenyl]amino]carbonyl]hydrazono]-1H-indene-2-carboxylate; IN-KG433, methyl 5-chloro-2,3,-dihydro-2-hydroxy-1-[[[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]carbonyl]-hydrazono]-1H-indene-2-carboxylate; and IN-KB687, methyl [4-(trifluoromethoxy)phenyl]carbamate, calculated as the stoichiometric equivalent of indoxacarb in the commodity.

Commodity	Parts per million
Egg	0.20
Poultry, fat	0.20
Poultry, meat	0.06
Poultry, meat byproducts	0.06

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for residues of the indoxacarb, including its metabolites and degradates, in or on the specified agricultural commodities in the table below, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. Compliance with the tolerance levels specified in the table below is to be determined by measuring only indoxacarb, (S)-methyl 7-chloro-2,5-dihydro-2-[[[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]carbonyl]indeno[1,2-e][1,3,4]oxadiazine-4a(3H)-carboxylate, and its R-enantiomer, (R)-methyl 7-chloro-2,5-dihydro-2-[[[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]carbonyl]indeno[1,2-e] [1,3,4]oxadiazine-4a(3H)-carboxylate.

The tolerances expire on the dates specified in the table.

Commodity	Parts per million	Expiration date
Grass, forage	10	12/31/2022
Grass, hay	50	12/31/2022

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 58424, Sept. 29, 2000, as amended at 67 FR 41807, June 19, 2002; 67 FR 47309, July 18, 2002; 67 FR 58730, Sept. 18, 2002; 68 FR 25830, May 14, 2003; 68 FR 27746, May 21, 2003; 69 FR 28842, May 19, 2004; 69 FR 29459, May 24, 2004; 69 FR 32282, June 9, 2004; 72 FR 37641, July 11, 2007; 74 FR 33165, July 10, 2009; 77 FR 8749, Feb. 15, 2012; 78 FR 78738, Dec. 27, 2013; 82 FR 57866, Dec. 8, 2017; 84 FR 32094, July 5, 2019]

[↑ Back to Top](#)

### §180.565 Thiamethoxam; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide thiamethoxam, including its metabolites and degradates, in or on the following commodities. Compliance with the tolerance levels specified below is to be determined by measuring only thiamethoxam 3-[(2-chloro-5-thiazolyl)methyl]tetrahydro-5-methyl-N-nitro-4H-1,3,5-oxadiazin-4-imine and its

metabolite CGA-322704 N-[(2-chloro-thiazol-5-yl)methyl]-N'-methyl-N"-nitro-guanidine, calculated as the stoichiometric equivalent of thiamethoxam, in or on the following commodities:

Commodity	Parts per million
Alfalfa, forage	0.05
Alfalfa, hay	0.12
Almond, hulls	1.2
Artichoke, globe	0.45
Avocado	0.40
Banana <sup>1</sup>	0.03
Barley, grain	0.4
Barley, hay	0.40
Barley, straw	0.40
Bean, succulent	0.02
Berry, low growing, subgroup 13-07G, except cranberry	0.30
Borage, seed	0.02
Brassica, head and stem, subgroup 5-A	4.5
Brassica, leafy greens, subgroup 5-B	3.0
Buckwheat, forage	0.50
Buckwheat, hay	0.02
Buckwheat, straw	0.02
Bushberry subgroup 13-07B, except lingonberry and blueberry, lowbush	0.20
Caneberry subgroup 13-07A	0.35
Canistel	0.40
Canola, seed	0.02
Cattle, meat	0.02
Cattle, meat byproducts	0.04
Citrus, dried pulp	0.60
Coffee, green, bean <sup>1</sup>	0.20
Corn, field, forage	0.10
Corn, field, stover	0.05
Corn, pop, forage	0.10
Corn, pop, stover	0.05
Corn, sweet, forage	0.10
Corn, sweet, kernel plus cob with husks removed	0.02
Corn, sweet, stover	0.05
Cotton, gin byproducts	1.5
Cotton, undelinted seed	0.10
Crambe, seed	0.02
Cranberry	0.02
Flax, seed	0.02
Food commodities and feed commodities (other than those covered by a higher tolerance as a result of use on growing crops) in food/feed handling establishments	0.02
Fruit, citrus, group 10	0.40
Fruit, pome, group 11	0.2
Fruit, small, vine climbing, subgroup 13-07F, except fuzzy kiwifruit	0.20
Fruit, stone, group 12	0.5
Goat, meat	0.02
Goat, meat byproducts	0.04
Grain, aspirated fractions	2.0
Grain, cereal, group 15, except barley	0.02
Grape, raisin	0.30
Hog, meat	0.02
Hog, meat byproducts	0.02
Hop, dried cones	0.10
Horse, meat	0.02
Horse, meat byproducts	0.04
Mango	0.40
Milk	0.02
Millet, pearl, forage	0.02
Millet, pearl, stover	0.02
Millet, proso, forage	0.02
Millet, proso, stover	0.02
Millet, proso, straw	0.02
Mustard, seed	0.02
Nut, tree, group 14	0.02
Oat, forage	0.50
Oat, hay	0.02
Oat, straw	0.02
Onion, dry bulb	0.03

Papaya	0.40
Peanut	0.05
Peanut, hay	0.25
Peanut, meal	0.15
Peppermint, tops	1.5
Pistachio	0.02
Potato	0.25
Radish, tops	0.80
Rapeseed, seed	0.02
Rye, forage	0.50
Rye, straw	0.02
Safflower, seed	0.02
Sapodilla	0.40
Sapote, black	0.40
Sapote, mamey	0.40
Sheep, meat	0.02
Sheep, meat byproducts	0.04
Sorghum, forage	0.02
Sorghum, grain, stover	0.02
Soybean, hulls	0.08
Spearmint, tops	1.5
Star apple	0.40
Sunflower	0.02
Tea, dried <sup>1</sup>	20
Tomato, paste	0.80
Vegetable, cucurbit, group 9	0.2
Vegetable, fruiting, group 8	0.25
Vegetable, leafy, except brassica, group 4	4.0
Vegetable, legume, group 6	0.02
Vegetable, root, subgroup 1A	0.05
Vegetable, tuberous and corm, except potato, subgroup 1D	0.02
Wheat, forage	0.50
Wheat, hay	0.02
Wheat, straw	0.02

<sup>1</sup>There are no U.S. registrations for these commodities as of February 15, 2017.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[65 FR 79762, Dec. 20, 2000]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.565, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.566 Fenpyroximate; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide fenpyroximate, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified in the table is to be determined by measuring only the sum of fenpyroximate, (*E*)-1,1-dimethylethyl 4-[[[(1,3-dimethyl-5-phenoxy-1*H*-pyrazol-4-yl)methylene]amino]oxy]methyl]benzoate and its *Z*-isomer, (*Z*)-1,1-dimethylethyl 4-[[[(1,3-dimethyl-5-phenoxy-1*H*-pyrazol-4-yl)methylene]amino]oxy]methyl]benzoate, calculated as the stoichiometric equivalent of fenpyroximate.

Commodity	Parts per million
Almond, hulls	3.0
Avocado	0.15
Bean, snap, succulent	0.40
Berry, low growing, subgroup 13-07G	1.0
Canistel	0.15
Citrus, dried pulp	4.0
Citrus, oil	15
Corn, field, forage	2.0
Corn, field, grain	0.02
Corn, field, refined oil	0.05
Corn, field, stover	7.0
Corn, pop, forage	2.0



Corn, pop, grain	0.02
Corn, pop, stover	7.0
Cotton, gin byproducts	10
Cotton, undelinted seed	0.10
Cucumber	0.40
Fruit, citrus, group 10-10	1.0
Fruit, pome, group 11-10	0.30
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	1.0
Fruit, stone, group 12-12	2.0
Grain, aspirated fractions	0.40
Hop, dried cones	10
Mango	0.15
Melon subgroup 9A	0.10
Nut, tree, group 14	0.10
Papaya	0.15
Peppermint, tops	7.0
Pistachio	0.10
Sapodilla	0.15
Sapote, black	0.15
Sapote, mamey	0.15
Spearmint, tops	7.0
Star, apple	0.15
Tea, dried <sup>1</sup>	20
Vegetable, fruiting, group 8-10	0.20
Vegetable, tuberous and corm, subgroup 1C	0.10

<sup>1</sup>There are no U.S. Registrations.

(2) Tolerances are established for residues of the insecticide fenpyroximate, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified in the table is to be determined by measuring only the sum of fenpyroximate, (*E*)-1,1-dimethylethyl 4-[[[(1,3-dimethyl-5-phenoxy-1*H*-pyrazol-4-yl)methylene]amino]oxy]methyl]benzoate and its metabolites (*E*)-4-[(1,3-dimethyl-5-phenoxy-1*H*-pyrazol-4-yl)methyleneamino]oxy]methyl]benzoic acid and (*E*)-1,1-dimethylethyl-2-hydroxyethyl 4-[[[(1,3-dimethyl-5-phenoxy-1*H*-pyrazol-4-yl)methylene]amino]oxy]methyl]benzoate, calculated as the stoichiometric equivalent of fenpyroximate.

Commodity	Parts per million
Cattle, fat	0.03
Cattle, meat	0.03
Cattle, meat byproducts, except kidney and liver	0.03
Goat, fat	0.03
Goat, meat	0.03
Goat, meat byproducts, except kidney and liver	0.03
Horse, fat	0.03
Horse, meat	0.03
Horse, meat byproducts, except kidney and liver	0.03
Milk	0.015
Sheep, fat	0.03
Sheep, meat	0.03
Sheep, meat byproducts, except kidney and liver	0.03

(3) Tolerances are established for residues of the insecticide fenpyroximate, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified in the table is to be determined by measuring only the sum of fenpyroximate, (*E*)-1,1-dimethylethyl 4-[[[(1,3-dimethyl-5-phenoxy-1*H*-pyrazol-4-yl)methylene]amino]oxy]methyl]benzoate and its metabolite (*E*)-4-[(1,3-dimethyl-5-phenoxy-1*H*-pyrazol-4-yl)methyleneamino]oxy]methyl]benzoic acid, calculated as the stoichiometric equivalent of fenpyroximate.

Commodity	Parts per million
Cattle, kidney	0.25
Cattle, liver	0.25
Goat, kidney	0.25
Goat, liver	0.25
Horse, kidney	0.25
Horse, liver	0.25
Sheep, kidney	0.25
Sheep, liver	0.25

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of the insecticide fenpyroximate, including its metabolites and degradates in or on the commodities in the table below. Compliance with the tolerance levels specified in the table is to be determined by measuring only the sum of fenpyroximate, (*E*)-1,1-dimethylethyl 4-[[[(1,3-dimethyl-5-phenoxy-1*H*-pyrazol-4-yl)methylene]amino]oxy]methyl]benzoate and its *Z*-isomer, (*Z*)-1,1-dimethylethyl 4-

[[[(1,3-dimethyl-5-phenoxy-1*H*-pyrazol-4-yl)methylene]amino]oxy]methyl]benzoate, calculated as the stoichiometric equivalent of fenpyroximate.

Commodity	Parts per million	Expiration/revocation date
Honey	0.10	12/31/13

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[66 FR 18568, Apr. 10, 2001, as amended at 69 FR 32464, June 10, 2004; 71 FR 49368, Aug. 23, 2006; 72 FR 26321, May 9, 2007; 74 FR 37617, July 29, 2009; 74 FR 63079, Dec. 2, 2009; 75 FR 80346, Dec. 22, 2010; 77 FR 73951, Dec. 12, 2012; 78 FR 36097, June 17, 2013; 82 FR 34875, July 27, 2017]

[↑ Back to Top](#)

#### §180.567 Zoxamide; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of zoxamide including metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only zoxamide (3,5-dichloro-*N*-(3-chloro-1-ethyl-1-methyl-2-oxopropyl)-4-methylbenzamide).

Commodity	Parts per million
Banana <sup>1</sup>	0.20
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	5.0
Grape, raisin	15.0
Pepper/Eggplant Subgroup 8-10B	1.0
Tomato subgroup 8-10A	2.0
Vegetable, cucurbit, group 9	1.0

<sup>1</sup>There are no U.S. registrations allowing use of zoxamide on banana as of February 9, 2018.

(2) Tolerances are established for residues of zoxamide including metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of zoxamide (3,5-dichloro-*N*-(3-chloro-1-ethyl-1-methyl-2-oxopropyl)-4-methylbenzamide) and its metabolites 3,5-dichloro-1,4-benzenedicarboxylic acid (RH-1455 and RH-141455) and 3,5-dichloro-4-hydroxymethylbenzoic acid (RH-1452 and RH-141452) calculated as the stoichiometric equivalent of zoxamide.

Commodity	Parts per million
Ginseng	0.30
Onion, bulb, subgroup 3-07A	0.7
Potato, granules/flakes	0.30
Potato, wet peel	0.10
Vegetable, tuberous and corm, subgroup 1C	0.06

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[66 FR 18733, Apr. 11, 2001, as amended at 66 FR 49118, Sept. 26, 2001; 69 FR 16805, Mar. 31, 2004; 71 FR 31104, June 1, 2006; 71 FR 76200, Dec. 20, 2006; 75 FR 770, Jan. 6, 2010; 79 FR 41915, July 18, 2014; 81 FR 12015, Mar. 8, 2016; 83 FR 5719, Feb. 9, 2018; 84 FR 12524, Apr. 2, 2019]

[↑ Back to Top](#)

#### §180.568 Flumioxazin; tolerances for residues.

(a) *General.* Tolerances are established for residues of flumioxazin, 2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2*H*-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1*H*-isoindole-1,3(2*H*)-dione, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only flumioxazin.

Commodity	Parts per million
Alfalfa, forage	3.0
Alfalfa, hay	8.0
Almond, hulls	0.70

Artichoke, globe	0.02
Asparagus	0.02
Berry, low growing, subgroup 13-07G	0.07
Bushberry subgroup 13-07B	0.02
Caneberry, subgroup 13-07A	0.50
Citrus, group 10-10	0.02
Citrus, oil	0.1
Corn, field, forage	0.02
Corn, field, grain	0.02
Corn, field, stover	0.02
Cotton, gin byproducts	0.60
Cotton, undelinted seed	0.02
Fish, freshwater	1.5
Fruit, pome, group 11-10	0.02
Fruit, small vine climbing, except for fuzzy kiwifruit, subgroup 13-07F	0.02
Fruit, stone, group 12-12	0.02
Grain, aspirated fractions	100
Hop, dried cones	0.05
Leaf petioles subgroup 4B	0.02
Nut, tree, group 14-12	0.02
Olive	0.02
Onion, bulb subgroup 3-07A	0.02
Pea and bean, dried shelled, except soybean, subgroup 6C	0.07
Peanut	0.02
Peppermint, tops	0.04
Pomegranate	0.02
Prickly pear, fruit	0.07
Prickly pear, pads	0.06
Rapeseed subgroup 20A	0.40
Soybean forage	0.03
Soybean hay	0.02
Soybean, seed	0.02
Spearmint, tops	0.04
Sugarcane, cane	0.20
Sunflower subgroup 20B	0.50
Vegetable, brassica, head and stem, group 5-16	0.02
Vegetable, cucurbit, group 9	0.03
Vegetable, fruiting, group 8-10	0.02
Vegetable, tuberous and corm, subgroup 1C	0.02
Wheat, forage	0.02
Wheat, grain	0.40
Wheat, hay	0.02
Wheat, straw	6.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances are established for residues of flumioxazin, 2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only flumioxazin.

Commodity	Parts per million
Clover, forage	0.02
Clover, hay	0.15
Grass, forage	0.40
Grass, hay	0.05

(d) *Indirect or inadvertent residues.* [Reserved]

[81 FR 91851, Dec. 19, 2016, as amended at 83 FR 50288, Oct. 5, 2018]

[↑ Back to Top](#)

### §180.569 Forchlorfenuron; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of forchlorfenuron, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only forchlorfenuron (*N*-(2-chloro-4-pyridinyl)-*N*-phenylurea).

Commodity	Parts per
-----------	-----------

	million
Almond	0.01
Almond, hulls	0.15
Bushberry subgroup 13-07B	0.01
Cherry, sweet	0.01
Fig	0.01
Grape	0.03
Grape, raisin	0.06
Kiwifruit	0.04
Pear	0.01
Pistachio	0.01
Plum, prune, fresh	0.01

(2) Temporary tolerances are established for residues of forchlorfenuron, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring on forchlorfenuron (*N*-(2-chloro-4-pyridinyl)-*N'*-phenylurea).

Commodity	Parts per million	Expiration/revocation date
Almond	0.01	12/31/15
Almond, hulls	0.15	12/31/15
Cherry, sweet	0.01	12/31/15
Fig	0.01	12/31/15
Pear	0.01	12/31/15
Pistachio	0.01	12/31/15
Plum, prune, fresh	0.01	12/31/15

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional restrictions.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[66 FR 22936, May 7, 2001, as amended at 69 FR 48805, Aug. 11, 2004; 69 FR 58322, Sept. 30, 2004; 73 FR 47846, Aug. 15, 2008; 78 FR 46283, July 31, 2013; 79 FR 18471, Apr. 2, 2014]

[↑ Back to Top](#)

#### §180.570 Isoxadifen-ethyl; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of isoxadifen-ethyl (ethyl 5,5-diphenyl-2-isoxazoline-3-carboxylate, (CAS No. 163520-33-0), and its metabolite: 4,5-dihydro-5,5-diphenyl-3-isoxazolecarboxylic acid, when used as an inert ingredient (safener) in or on the following raw agricultural commodities:

Commodity	Parts per million
Corn, field, forage	0.20
Corn, field, grain	0.08
Corn, field, stover	0.40
Corn, oil	0.50
Corn, pop, grain	0.04
Corn, pop, stover	0.25
Corn, sweet, forage	0.30
Corn, sweet, kernel plus cob with husk removed	0.04
Corn, sweet, stover	0.45

(2) Tolerances are established for the residues of isoxadifen-ethyl (3-isoxazolecarboxylic acid, 4,5-dihydro-5,5-diphenyl-, ethyl ester (CAS No. 164520-33-0)), and its metabolites 4,5-dihydro-5,5-diphenyl-3-isoxazolecarboxylic acid and  $\beta$ -hydroxy- $\beta$ -benzenepropanenitrile when used as an inert ingredient (safener) in or on the following raw agricultural commodities:

Commodity	Parts per million
Rice, grain	0.10
Rice, hulls	0.50

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[66 FR 33187, June 21, 2001, as amended at 66 FR 40141, Aug. 2, 2001; 67 FR 12878, Mar. 20, 2002; 69 FR 29890, May 26, 2004; 72 FR 63997, Nov. 14, 2007; 80 FR 72599, Nov. 20, 2016]

[↑ Back to Top](#)

### §180.571 Mesotrione; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide mesotrione, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only mesotrione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione, in or on the following raw agricultural commodities:

Commodity	Parts per million
Almond, hulls	0.02
Asparagus	0.01
Berry, group 13	0.01
Corn, field, forage	0.01
Corn, field, grain	0.01
Corn, field, stover	0.01
Corn, pop, grain	0.01
Corn, pop, stover	0.01
Corn, sweet, forage	0.5
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	1.5
Cranberry	0.02
Flax, seed	0.01
Fruit, citrus, group 10-10	0.01
Fruit, pome, group 11-10	0.01
Fruit, stone, group 12-12	0.01
Grass, forage	0.01
Grass, hay	0.01
Grass, seed screenings	0.10
Grass, straw	0.10
Lingonberry	0.01
Millet, forage	0.01
Millet, grain	0.01
Millet, hay	0.02
Millet, straw	0.02
Nut, tree, group 14-12	0.01
Oat, forage	0.01
Oat, grain	0.01
Oat, hay	0.01
Oat, straw	0.01
Okra	0.01
Rhubarb	0.01
Sorghum, grain, forage	0.01
Sorghum, grain, grain	0.01
Sorghum, grain, stover	0.01
Sorghum, sweet	0.01
Soybean, seed	0.01
Sugarcane, cane	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[66 FR 33195, June 21, 2001, as amended at 67 FR 45656, July 10, 2002; 68 FR 273, Jan. 3, 2003; 69 FR 58310, Sept. 30, 2004; 70 FR 14551, Mar. 23, 2005; 72 FR 71802, Dec. 19, 2007; 73 FR 1512, Jan. 9, 2008; 73 FR 9226, Feb. 20, 2008; 74 FR 67123, Dec. 18, 2009; 76 FR 34886, June 15, 2011; 80 FR 30630, May 29, 2015]

[↑ Back to Top](#)

### §180.572 Bifenazate; tolerance for residues.

(a) *General.* (1) Tolerances are established for residues of bifenazate (1-methylethyl 2-(4-methoxy[1,1'-biphenyl]-3-yl)hydrazinecarboxylate) including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified are to be determined by measuring only the sum of bifenazate and its

metabolite, diazinecarboxylic acid, 2-(4-methoxy-[1,1'-biphenyl]-3-yl), 1-methylethyl ester, (calculated as the stoichiometric equivalent of bifentazate) in or on the following food commodities:

Commodity	Parts per million
Acerola	0.90
Almond, hulls	15
Apple, wet pomace	1.2
Atemoya	1.6
Avocado	7.0
Bean, dry seed	0.60
Berry, low-growing subgroup 13-07G	1.5
Biriba	1.6
Black sapote	7.0
Caneberry subgroup 13-07A	5.0
Canistel	7.0
Cattle, fat	0.10
Cherimoya	1.6
Cotton, gin byproducts	35
Cotton, undelinted seed	0.75
Custard apple	1.6
Feijoa	0.90
Fruit, pome, group 11-10	0.7
Fruit, small, vine climbing subgroup 13-07F, except fuzzy kiwifruit	1.0
Fruit, stone, group 12, except plum	2.5
Goat, fat	0.10
Grape	0.75
Grape, raisin	1.2
Guava	0.9
Herb, subgroup 19A, except chervil and chive	300
Hog, fat	0.10
Hop, dried cones	15
Horse, fat	0.10
Jaboticaba	0.90
llama	1.6
Longan	5.0
Lychee	5.0
Mango	7.0
Nut, tree, group 14	0.20
Okra	2.0
Papaya	7.0
Passionfruit	0.90
Pea and bean, succulent shelled, subgroup 6B	0.70
Peppermint, tops	25
Pistachio	0.20
Plum	0.20
Pulasan	5.0
Rambutan	5.0
Sapodilla	7.0
Sapote, mamey	7.0
Sheep, fat	0.10
Soursop	1.6
Soybean, succulent shelled	0.70
Spanish lime	5.0
Spearmint, tops	25
Star apple	7.0
Starfruit	0.90
Strawberry	1.5
Sugar apple	1.6
Vegetable, cucurbit, group 9	0.75
Vegetable, fruiting, group 8-10	4.0
Vegetable, legume, edible-podded, subgroup 6A	6.0
Vegetable, tuberous and corm, subgroup 1C	0.10
Wax jambu	0.90

(2) Tolerances are established for residues of bifentazate (1-methylethyl 2-(4-methoxy[1,1'-biphenyl]-3-yl)hydrazinecarboxylate) including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified are to be determined by measuring only the sum of bifentazate and its metabolites diazinecarboxylic acid, 2-(4-methoxy-[1,1'-biphenyl]-3-yl), 1-methylethyl ester; 1,1'-biphenyl, 4-ol; and 1,1'-biphenyl, 4-oxysulfonic acid (calculated as the stoichiometric equivalent of bifentazate) in or on the following food commodities:

Commodity	Parts per million
-----------	-------------------

Cattle, meat	0.02
Cattle, meat byproducts	0.02
Goat, meat	0.02
Goat, meat byproducts	0.02
Hog, meat	0.02
Hog, meat byproducts	0.02
Horse, meat	0.02
Horse, meat byproducts	0.02
Milk	0.02
Sheep, meat	0.02
Sheep, meat byproducts	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of bifentazate (1-methylethyl 2-(4-methoxy[1,1'-biphenyl]-3-yl)hydrazinecarboxylate) including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified are to be determined by measuring only the sum of bifentazate and its metabolite, diazinecarboxylic acid, 2-(4-methoxy-[1,1'-biphenyl]-3-yl), 1-methylethyl ester, (calculated as the stoichiometric equivalent of bifentazate) in or on the following food commodities:

Commodity	Parts per million
Timothy, forage	200
Timothy, hay	150

(d) *Indirect or inadvertent residues.* [Reserved]

[66 FR 34569, June 29, 2001]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.572, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.573 Tepraloxym; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of tepraloxym, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the combined residues of tepraloxym, (2-[1-[[[(2E)-3-chloro-2-propen-1-yl]oxy]imino]propyl]-3-hydroxy-5-(tetrahydro-2H-pyran-4-yl)-2-cyclohexen-1-one) and its metabolites convertible to GP (3-(tetrahydropyran-4-yl)pentane-1,5-dioic acid) and OH-GP (3-hydroxy-3-(tetrahydropyran-4-yl)pentane-1,5-dioic acid), calculated as tepraloxym, in or on the commodities.

Commodity	Parts per million	Expiration/revocation date
Cotton, undelinted seed	0.2	12/31/18
Cotton, gin byproducts	3.0	12/31/18
Flax, seed	0.10	12/31/18
Grain, aspirated fraction	1200.0	12/31/18
Pea and bean, dried shelled, except soybean, subgroup 6C <sup>1</sup>	0.10	12/31/18
Soybean, seed	6.0	12/31/18
Soybean, hulls	8.0	12/31/18
Sunflower subgroup 20B <sup>1</sup>	0.20	12/31/18

<sup>1</sup>There are no U.S. registrations for commodities in this subgroup.

(2) Tolerances are established for residues of tepraloxym, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the combined residues of tepraloxym (2-[1-[[[(2E)-3-chloro-2-propen-1-yl]oxy]imino]propyl]-3-hydroxy-5-(tetrahydro-2H-pyran-4-yl)-2-cyclohexen-1-one) and its metabolites convertible to GP (3-(tetrahydropyran-4-yl)pentane-1,5-dioic acid), OH-GP (3-hydroxy-3-(tetrahydropyran-4-yl)pentane-1,5-dioic acid), and GL (3-(2-oxotetrahydropyran-4-yl)-1,5-dioic acid), calculated as tepraloxym, in or on the commodities.

Commodity	Parts per million	Expiration/revocation date
Cattle, fat	0.15	12/31/18
Cattle, kidney	0.50	12/31/18
Cattle, meat	0.20	12/31/18
Cattle, meat byproducts, except kidney	0.20	12/31/18

Egg	0.20	12/31/18
Goat, fat	0.15	12/31/18
Goat, kidney	0.50	12/31/18
Goat, meat	0.20	12/31/18
Goat, meat byproducts, except kidney	0.20	12/31/18
Hog, fat	0.15	12/31/18
Hog, kidney	0.50	12/31/18
Hog, meat	0.20	12/31/18
Hog, meat byproducts, except kidney	0.20	12/31/18
Horse, fat	0.15	12/31/18
Horse, kidney	0.50	12/31/18
Horse, meat	0.20	12/31/18
Horse, meat byproducts, except kidney	0.20	12/31/18
Milk	0.10	12/31/18
Poultry, fat	0.30	12/31/18
Poultry, liver	1.00	12/31/18
Poultry, meat	0.20	12/31/18
Poultry, meat byproducts, except liver	0.20	12/31/18
Sheep, fat	0.15	12/31/18
Sheep, kidney	0.50	12/31/18
Sheep, meat	0.20	12/31/18
Sheep, meat byproducts, except kidney	0.20	12/31/18

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* A tolerance with regional registration, as defined in §180.1(l), is established for residues of tepraloxymid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the combined residues of tepraloxymid (2-[1-[[[(2E)-3-chloro-2-propen-1-yl]oxy]imino]propyl]-3-hydroxy-5-(tetrahydro-2H-pyran-4-yl)-2-cyclohexen-1-one) and its metabolites convertible to GP (3-(tetrahydropyran-4-yl)pentane-1,5-dioic acid) and OH-GP (3-hydroxy-3-(tetrahydropyran-4-yl)pentane-1,5-dioic acid), calculated as tepraloxymid, in or on the commodities.

Commodity	Parts per million	Expiration/revocation date
Canola, seed	0.50	12/31/18

(d) *Indirect or inadvertent residues.* [Reserved]

[66 FR 40150, Aug. 2, 2001, as amended at 72 FR 54588, Sept. 26, 2007; 76 FR 34885, June 15, 2011; 76 FR 82152, Dec. 30, 2011; 81 FR 34906, June 1, 2016]

[↑ Back to Top](#)

#### §180.574 Fluazinam; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of fluazinam (3-chloro-N-[3-chloro-2,6-dinitro-4-(trifluoromethyl)phenyl]-5-(trifluoromethyl)-2-pyridinamine), including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only fluazinam.

Commodity	Parts per million
Apple	2.0
Apple, wet pomace	5.0
Bushberry subgroup 13-07B	7.0
Cabbage	3.0
Carrot, roots	0.70
Ginseng	4.5
Lettuce, head	0.02
Lettuce, leaf	2.0
Mayhaw	2.0
Onion, bulb, subgroup 3-07A	0.20
Pea and bean, dried shelled, except soybean, subgroup 6C, except pea	0.02
Pea and bean, succulent shelled, subgroup 6B, except pea	0.04
Peanut	0.02
Pepper/eggplant subgroup 8-10B	0.09
Soybean, seed	0.01
Soybean, hulls	0.05
Tea, dried <sup>1</sup>	6.0
Turnip, greens	0.01
Vegetable, <i>Brassica</i> leafy, group 5, except cabbage	0.01
Vegetable, cucurbit, group 9	0.07



Vegetable, legume, edible-podded, subgroup 6A, except pea	0.10
Vegetable, tuberous and corm, subgroup 1C	0.02

<sup>1</sup>There is no U.S. registration as of January 19, 2017.

(2) Tolerances are established for residues of fluazinam, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only fluazinam and its metabolite AMGT (3-[[4-amino-3-[[3-chloro-5-(trifluoromethyl)-2-pyridinyl]amino]-2-nitro-6-(trifluoromethyl) phenyl]thio]-2-(beta-D-glucopyranosyloxy) propionic acid).

Commodity	Parts per million
Grape, wine <sup>1</sup>	3.0

<sup>1</sup> No US registration as of March 15, 2002.

(3) Tolerances are established for residues of fluazinam (3-chloro-N-[3-chloro-2,6-dinitro-4-(trifluoromethyl)phenyl]-5-(trifluoromethyl)-2-pyridinamine), including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only fluazinam, AMPA (2-(6-amino-3-chloro- $\alpha,\alpha,\alpha$ -trifluoro-2-nitro-p-toluidino)-3-chloro-5-(trifluoromethyl) pyridine), DAPA (3-chloro-2-(2,6-diamino-3-chloro- $\alpha,\alpha,\alpha$ -trifluoro-p-toluidino)-5-(trifluoromethyl)pyridine), and their sulfamate conjugates.

Commodity	Parts per million
Cattle, fat	0.05
Cattle, meat byproducts	0.05
Goat, fat	0.05
Goat, meat byproducts	0.05
Horse, fat	0.05
Horse, meat byproducts	0.05
Sheep, fat	0.05
Sheep, meat byproducts	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[66 FR 46738, Sept. 7, 2001, as amended at 67 FR 19130, Apr. 18, 2002; 72 FR 60260, Oct. 24, 2007; 75 FR 26667, May 12, 2010; 76 FR 3029, Jan. 19, 2011; 77 FR 66729, Nov. 7, 2012; 81 FR 20550, Apr. 8, 2016; 81 FR 34283, May 31, 2016; 82 FR 21948, May 11, 2017]

[↑ Back to Top](#)

### §180.575 Sulfuryl fluoride; tolerances for residues.

(a)(1) *General.* Tolerances are established for residues of sulfuryl fluoride in or on the following commodities from the postharvest fumigation with sulfuryl fluoride for the control of insects:

Commodity	Parts per million
All processed food commodities not otherwise listed	2.0
Barley, bran, postharvest	0.05
Barley, flour, postharvest	0.05
Barley, grain, postharvest	0.1
Barley, pearled barley, postharvest	0.05
Cacao bean, roasted bean, postharvest	0.2
Cattle, meat, dried	0.01
Cheese	2.0
Coconut, postharvest	1.0
Coffee, bean, roasted bean, postharvest	1.0
Corn, field, flour, postharvest	0.01
Corn, field, grain, postharvest	0.05
Corn, field, grits, postharvest	15.0
Corn, field, meal, postharvest	0.01
Corn, pop, grain, postharvest	0.05
Cotton, undelinted seed, postharvest	0.5
Egg, dried	1.0
Fruit, dried, postharvest	0.05
Ginger, postharvest	0.5
Grain, aspirated fractions, postharvest	0.05

Herbs and spices group 19, postharvest	0.5
Hog, meat	0.02
Milk, powdered	2.0
Millet, grain, postharvest	0.1
Nut, pine, postharvest	0.2
Nut, tree, Group 14, postharvest	3.0
Oat, flour, postharvest	0.05
Oat, grain, postharvest	0.1
Oat, groats/rolled oats, postharvest	0.1
Peanut, postharvest	0.5
Pistachio, postharvest	3.0
Rice, bran, postharvest	0.01
Rice, flour, postharvest	0.05
Rice, grain, postharvest	0.04
Rice, hulls, postharvest	0.1
Rice, polished rice, postharvest	0.01
Rice, wild, grain, postharvest	0.05
Sorghum, grain, grain, postharvest	0.1
Triticale, grain, postharvest	0.1
Vegetable, legume, group 6, postharvest	0.5
Wheat, bran, postharvest	0.05
Wheat, flour, postharvest	0.05
Wheat, germ, postharvest	0.02
Wheat, grain, postharvest	0.1
Wheat, milled byproducts, postharvest	0.05
Wheat, shorts, postharvest	0.05

(2) To assure safe use of this pesticide commodities treated with sulfuryl fluoride must be aerated for at least 24 hours prior to entering commerce.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registration.* [Reserved]

(d) *Indirect or inadvertant residues.* [Reserved]

[67 FR 5740, Feb. 7, 2002, as amended at 69 FR 3257, Jan. 23, 2004; 70 FR 40908, July 15, 2005]

[↑ Back to Top](#)

#### §180.576 Cyhalofop-butyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of cyhalofop-butyl, including its metabolites and degradates, in or on the commodities listed in the table below. Compliance with the tolerance levels specified below is to be determined by measuring cyhalofop butyl [R-( + )-n-butyl-2-(4(4-cyano-2-fluorophenoxy)-phenoxy)propionate], cyhalofop acid [R-( + )-2-(4(4-cyano-2-fluorophenoxy)-phenoxy)propionic acid], and the di-acid metabolite [(2R)-4-(4-(1-carboxyethoxy)phenoxy)-3-fluorobenzoic acid].

Commodity	Parts per million
Rice, grain	0.40
Wild rice, grain	0.40

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[67 FR 43256, June 27, 2002, as amended at 74 FR 15880, Apr. 8, 2009; 76 FR 82157, Dec. 30, 2011]

[↑ Back to Top](#)

#### §180.577 Bispyribac-sodium; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide bispyribac-sodium, including its metabolites and degradates, in or on the commodity listed below. Compliance with the tolerance level specified below is to be determined by measuring only bispyribac-sodium, (2,6-bis[(4,6-dimethoxy-2-pyrimidinyl)oxy]benzoic acid, sodium salt), in or on the following raw agricultural commodities:

Commodity	Parts per million
-----------	-------------------

Fish, freshwater	0.01
Rice, grain	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[66 FR 48097, Sept. 18, 2001, as amended at 76 FR 5716, Feb. 2, 2011; 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.578 Acetamiprid; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide acetamiprid (1*E*)-*N*-[(6-chloro-3-pyridinyl)methyl]-*N'*-cyano-*N*-methylethanimidamide, including its metabolites and degradates, in or on the commodities in the table below as a result of the application of acetamiprid. Compliance with the tolerance levels specified below is to be determined by measuring only acetamiprid in or on the following commodities.

Commodity	Parts per million
Almond, hulls	5.0
Asparagus	0.80
Berry, low growing subgroups 13-07G	0.60
Brassica, head and stem, subgroup 5A	1.20
Brassica, leafy greens, subgroup 5B	15
Bushberry subgroup 13-07B	1.6
Caneberry subgroup 13-07A	1.6
Canola, seed	0.010
Citrus, dried pulp	1.20
Corn, sweet, forage	15
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	30
Cotton, gin byproducts	20.0
Cotton, undelinted seed	0.60
Fruit, citrus, group 10-10	1.0
Fruit, pome, group 11-10	1.0
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.35
Fruit, stone, group 12, except plum, prune	1.20
Grain, aspirated fractions	5.0
Mustard, seed	0.010
Nut, tree, group 14	0.10
Onion, bulb, subgroup 3-07A	0.02
Onion, green, subgroup 3-07B	4.5
Pea and bean, succulent shelled, subgroup 6B	0.40
Pistachio	0.10
Plum, prune, dried	0.40
Plum, prune, fresh	0.20
Soybean, hulls	0.04
Soybean, seed	0.03
Tea, dried <sup>1</sup>	50.0
Tomato, paste	0.40
Turnip greens	15
Vegetable, cucurbit, group 9	0.50
Vegetable, fruiting, group 8-10	0.20
Vegetable, leafy, except brassica, group 4	3.00
Vegetable, legume, edible podded, subgroup 6A	0.60
Vegetable, tuberous and corm, group 1	0.01

<sup>1</sup>There are no U.S. registrations as of February 10, 2010, for the use of acetamiprid on dried tea.

(2) Tolerances are established for residues of the insecticide acetamiprid (1*E*)-*N*-[(6-chloro-3-pyridinyl)methyl]-*N'*-cyano-*N*-methylethanimidamide, including its metabolites and degradates, in or on the commodities in the table below as a result of the application of acetamiprid. Compliance with the tolerance levels specified below is to be determined by measuring acetamiprid and (1*E*)-*N*-[(6-chloro-3-pyridinyl)methyl]-*N'*-cyano-*N*-ethanimidamide in or on the following commodities.

Commodity	Parts per million
Cattle, fat	0.20
Cattle, meat	0.30
Cattle, meat byproducts	0.70

Egg	0.010
Goat, fat	0.20
Goat, meat	0.30
Goat, meat byproducts	0.70
Hog, fat	0.10
Hog, meat	0.10
Hog, meat byproducts	0.20
Horse, fat	0.20
Horse, meat	0.30
Horse, meat byproducts	0.70
Milk	0.30
Poultry, fat	0.010
Poultry, liver	0.050
Poultry, meat	0.010
Sheep, fat	0.20
Sheep, meat	0.30
Sheep, meat byproducts	0.70

(3) A tolerance of 0.01 ppm is established for residues of the insecticide acetamiprid, including its metabolites and degradates, in or on all food/feed items (other than those covered by a higher tolerance in paragraph (a)(1) or (a)(2) of this section as a result of the use on growing crops) as a result of the application of acetamiprid in food/feed handling establishments. Compliance with the 0.01 ppm tolerance level is to be determined by measuring only acetamiprid (1*E*)-*N*-[(6-chloro-3-pyridinyl)methyl]-*N'*-cyano-*N*-methylethanimidamide in or on the commodities.

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for residues of the acetamiprid, (1*E*)-*N*-[(6-chloro-3-pyridinyl)methyl]-*N'*-cyano-*N*-methylethanimidamide, in or on the specified agricultural commodities, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. Compliance with the tolerance levels specified below is to be determined by measuring only acetamiprid. The tolerances expire on the date specified in the table.

Commodity	Parts per million	Expiration date
Sugarcane, cane	45	12/31/19
Sugarcane, molasses	600	12/31/19

(c) *Tolerances with regional registrations.* Tolerances with regional registrations are established for residues of the insecticide acetamiprid (1*E*)-*N*-[(6-chloro-3-pyridinyl)methyl]-*N'*-cyano-*N*-methylethanimidamide, including its metabolites and degradates, in or on the commodities in the table below as a result of the application of acetamiprid. Compliance with the tolerance levels specified below is to be determined by measuring only acetamiprid in or on the following commodities.

Commodity	Parts per million
Clover, forage	0.30
Clover, hay	2.0

(d) *Indirect or inadvertent residues.* [Reserved]

[67 FR 14659, Mar. 27, 2002, as amended at 68 FR 52352, Sept. 3, 2003; 70 FR 19293, Apr. 13, 2005; 72 FR 67262, Nov. 28, 2007; 73 FR 2811, Jan. 16, 2008; 75 FR 6582, Feb. 10, 2010; 77 FR 18716, Mar. 28, 2012; 77 FR 43529, July 25, 2012; 78 FR 36676, June 19, 2013; 80 FR 68778, Nov. 6, 2015; 82 FR 17151, Apr. 10, 2017]

[↑ Back to Top](#)

### §180.579 Fenamidone; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the fungicide, fenamidone, including its metabolites and degradates, in or on the following commodities. Compliance with the tolerance levels is to be determined by measuring only fenamidone (4*H*-imidazol-4-one, 3,5-dihydro-5-methyl-2-(methylthio)-5-phenyl-3 (phenylamino)-, (S)-), in or on the commodities:

Commodity	Parts per million
Basil, dried leaves	200
Basil, fresh leaves	30
Bean, succulent, except cowpea	0.80
Celtuce	60
Cilantro, fresh leaves	60
Cotton, gin byproducts	0.02
Cottonseed subgroup 20C	0.02
Fennel, Florence, fresh leaves and stalk	60
Ginseng	0.80
Kohlrabi	5.0
Leaf petiole vegetable subgroup 22B	60

Leafy vegetable group 4-16	60
Okra	3.5
Onion, bulb, subgroup 3-07A	0.20
Onion, green, subgroup 3-07B	1.5
Pepper, nonbell	3.5
Sunflower	0.02
Tomato, paste	2.2
Tomato, puree	2.0
Turnip, greens	55
Vegetable, <i>Brassica</i> , head and stem, group 5-16	5.0
Vegetable, cucurbit, group 9	0.15
Vegetable, fruiting, group 8, except nonbell pepper	1.0
Vegetable, root, except sugar beet, subgroup 1B, except radish	0.15
Vegetable, tuberous and corm, subgroup 1C	0.02

(2) Tolerances are established for residues of the fungicide fenamidone, including its metabolites and degradates, in or on the following commodities. Compliance with the tolerance levels is to be determined by measuring fenamidone (4H-Imidazol-4-one, 3,5-dihydro-5-methyl-2-(methylthio)-5-phenyl-3 (phenylamino)-,(S)-), and its metabolite RPA 717879 (2,4-imidazolidinedione, 5-methyl-5-phenyl), in or on the commodities:

Commodity	Parts per million
Cattle, fat	0.10
Cattle, meat	0.10
Cattle, meat byproducts	0.10
Goat, fat	0.10
Goat, meat	0.10
Goat, meat byproducts	0.10
Milk	0.02
Sheep, fat	0.10
Sheep, meat	0.10
Sheep, meat byproducts	0.10

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* A tolerance with regional registration as defined in §180.1(l) is established for residues of the fungicide fenamidone, including its metabolites and degradates, in or on the following commodities. Compliance with the tolerance levels is to be determined by measuring only fenamidone (4H-Imidazol-4-one, 3,5-dihydro-5-methyl-2-(methylthio)-5-phenyl-3 (phenylamino)-,(S)-), in or on the commodity:

Commodity	Parts per million
Grape <sup>1</sup>	1.0

<sup>1</sup>Applicable to grapes grown East of the Rocky Mountains.

(d) *Indirect or inadvertent residues.* Tolerances are established for residues of the fungicide fenamidone, including its metabolites and degradates, in or on the following commodities. Compliance with the tolerance levels is to be determined by measuring fenamidone (4H-Imidazol-4-one, 3,5-dihydro-5-methyl-2-(methylthio)-5-phenyl-3 (phenylamino)-,(S)-), and its metabolite RPA 717879 (2,4-imidazolidinedione, 5-methyl-5-phenyl), in or on the following commodities when present therein as a result of application of fenamidone to the crops in paragraph (a)(1).

Commodity	Parts per million
Grain, cereal, group 15, except rice	0.1
Grain, cereal, forage, fodder and straw, group 16, except rice	0.5
Soybean, forage	0.15
Soybean, hay	0.25
Soybean, seed	0.02
Strawberry	0.02

[67 FR 60976, Sept. 27, 2002, as amended at 69 FR 58066, Sept. 29, 2004; 71 FR 55293, Sept. 22, 2006; 72 FR 60272, Oct. 24, 2007; 74 FR 34257, July 15, 2009; 76 FR 34885, June 15, 2011; 76 FR 70895, Nov. 16, 2011; 77 FR 32401, June 1, 2012; 79 FR 13882, Mar. 12, 2014; 82 FR 35114, July 28, 2017]

[↑ Back to Top](#)

### §180.580 Iodosulfuron-Methyl-Sodium; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide *Iodosulfuron-Methyl-Sodium (methyl 4-iodo-2-[3-(4-methoxy-6-methyl-1,3,5 triazin-2-yl)ureidosulfonyl]benzoate, sodium salt)* in or on the following commodities:

Commodity	Parts per million
Corn, field, forage	0.05
Corn, field, grain	0.03
Corn, field, stover	0.05
Wheat, forage	0.10
Wheat, grain	0.02
Wheat, hay	0.05
Wheat, straw	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[67 FR 57532, Sept. 11, 2002, as amended at 74 FR 23644, May 20, 2009]

[↑ Back to Top](#)

#### §180.581 Iprovalicarb; tolerances for residues.

(a) *General.* Tolerances are established for residues of iprovalicarb, [2-methyl-1[[[(1S)-(4-methylphenyl) ethyl] amino]carbonyl] propyl]carbamic acid methylethylester, in or on the following commodities.

Commodity	Parts per million
Grape <sup>1</sup>	2.0
Tomato <sup>1</sup>	1.0

<sup>1</sup>There is no U.S. registration as of September 1, 2005.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[67 FR 54359, Aug. 22, 2002, as amended at 70 FR 55281, Sept. 21, 2005]

[↑ Back to Top](#)

#### §180.582 Pyraclostrobin; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the fungicide pyraclostrobin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of pyraclostrobin (carbamic acid, [2-[[[ 1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy] methyl]phenyl]methoxy-, methyl ester) and its desmethoxy metabolite (methyl-N-[[[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy]methyl] phenylcarbamate), calculated as the stoichiometric equivalent of pyraclostrobin, in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	10
Alfalfa, hay	30
Almond, hulls	7.0
Apple, wet pomace	8.0
Artichoke, globe	3.0
Avocado	0.6
Banana	0.04
Barley, grain	1.4
Barley, hay	25
Barley, straw	6.0
Bean, succulent shelled	0.5
Beet, sugar, dried pulp	1.0
Beet, sugar, roots	0.2
Beet, sugar, tops	8.0
Berry, low growing, subgroup 13-07G, except cranberry	1.2
Brassica, leafy greens, subgroup 4-16B, except watercress	16
Bushberry subgroup 13-07B	4.0
Caneberry subgroup 13-07A	4.0
Canistel	0.6
Celtuce	29
Citrus, dried pulp	12.5

Citrus, oil	9.0
Coffee, green bean	10.3
Corn, field, forage	5.0
Corn, field, grain	0.1
Corn, field, refined oil	0.2
Corn, field, stover	17.0
Corn, pop, grain	0.1
Corn, pop, stover	17.0
Corn, sweet, forage	5.0
Corn, sweet, kernel plus cob with husks removed	0.04
Corn, sweet, stover	23.0
Cotton, gin byproducts	30
Dill, seed	40
Endive, belgium	4.0
Fennel, Florence	29
Fruit, citrus, group 10-10	2.0
Fruit, pome, group 11-10	1.5
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2.0
Fruit, stone, group 12-12	2.5
Grain, aspirated fractions	2.5
Grape, raisin	7.0
Grass, forage	10
Grass, hay	4.5
Grass, seed screenings	27
Grass, straw	14
Herb subgroup 19A	40
Hop, dried cones	23.0
Kohlrabi	5.0
Leaf petiole vegetable, subgroup 22B	29
Leafy greens, subgroup 4-16A	40
Mango	0.6
Nut, tree, group 14-12, except pistachio	0.04
Oat, grain	1.2
Oat, hay	18
Oat, straw	15
Oilseed group 20	0.45
Papaya	0.6
Pea, succulent	0.2
Pea and bean, dried shelled, except soybean, subgroup 6C	0.5
Peanut	0.05
Peanut, refined oil	0.1
Peppermint, tops	8.0
Persimmon	3.0
Pistachio	0.7
Radish, tops	16
Rye, grain	0.04
Rye, straw	0.5
Sapodilla	0.6
Sapote, black	0.6
Sapote, mamey	0.6
Sorghum, grain, forage	5.0
Sorghum, grain, grain	0.60
Sorghum, grain, stover	0.80
Soybean, forage	11
Soybean, hay	14
Soybean, hulls	0.06
Soybean, seed	0.04
Spearmint, tops	8.0
Star apple	0.6
Sugarcane, cane	0.20
Vegetable, <i>Brassica</i> , head and stem, group 5-16	5.0
Vegetable, bulb, group 3-07	0.9
Vegetable, cucurbit, group 9	0.5
Vegetable, foliage of legume, except soybean, subgroup 7A	25.0
Vegetable, fruiting, group 8-10	1.4
Vegetable, leaves of root and tuber, group 2, except sugar beet	16.0
Vegetable, legume, edible podded, subgroup 6A	0.5
Vegetable, root, except sugar beet, subgroup 1B	0.4
Vegetable, tuberous and corm, subgroup 1C	0.04
Vegetables, foliage of legume, group 7	25
Wheat, grain	0.02
Wheat, hay	6.0
Wheat, straw	8.5

(2) Tolerances are established for combined residues of the fungicide pyraclostrobin carbamic acid, [2-[[[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy]methyl]phenyl]methoxy-, methyl ester and its metabolites convertible to 1-(4-chlorophenyl)-1H-pyrazol-3-ol and 1-(4-chloro-2-hydroxyphenyl)-1H-pyrazol-3-ol, expressed as parent compound, in or on the following raw agricultural commodities.

Commodity	Parts per million
Cattle, fat	0.1
Cattle, liver	1.5
Cattle, meat	0.1
Cattle, meat byproducts, except liver	0.2
Goat, fat	0.1
Goat, liver	1.5
Goat, meat	0.1
Goat, meat byproducts, except liver	0.2
Hog, fat	0.1
Hog, liver	1.5
Hog, meat	0.1
Hog, meat byproducts, except liver	0.2
Horse, fat	0.1
Horse, liver	0.1
Horse, meat	0.1
Horse, meat byproducts, except liver	0.2
Milk	0.1
Poultry, eggs	0.10
Poultry, fat	0.10
Poultry, meat	0.10
Poultry, meat byproducts	0.10
Sheep, fat	0.1
Sheep, liver	1.5
Sheep, meat	0.1
Sheep, meat byproducts, except liver	0.2

(b) *Section 18 emergency exemptions.* A time-limited tolerance is established for combined residues of the fungicide pyraclostrobin, (carbamic acid, [2-[[[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy]methyl] phenyl]methoxy-, methyl ester) and its desmethoxy metabolite (methyl-N-[[[1-(4-chlorophenyl) pyrazol-3-yl]oxy]o-tolyl]carbamate) in connection with use of the pesticide under section 18 emergency exemptions granted by EPA. The time-limited tolerance will expire and is revoked on the date specified in the following table.

Commodity	Parts per million	Expiration/revocation date
Endive, belgium	11.0	12/31/13

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[67 FR 60901, Sept. 27, 2002, as amended at 69 FR 63100, Oct. 29, 2004; 71 FR 17021, Apr. 5, 2006; 72 FR 54569, Sept. 26, 2007; 73 FR 15431, Mar. 24, 2008; 73 FR 21842, Apr. 23, 2008; 73 FR 44167, July 30, 2008; 74 FR 11499, Mar. 18, 2009; 74 FR 51496, Oct. 7, 2009; 75 FR 770, Jan. 6, 2010; 75 FR 42329, July 21, 2010; 75 FR 80346, Dec. 22, 2010; 76 FR 81396, Dec. 28, 2011; 78 FR 53046, Aug. 28, 2013; 80 FR 19238, Apr. 10, 2015; 83 FR 51862, Oct. 15, 2018]

[↑ Back to Top](#)

### §180.583 Triticonazole; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide triticonazole, (1RS)-(E)-5-[(4-chlorophenyl)methylene]-2,2-dimethyl-1-(1H-1,2,4-triazol-1-ylmethyl)cyclopentanol, from the treatment of seed prior to planting in or on raw agricultural commodities as follows:

Commodity	Parts per million
Grain, cereal, fodder and straw, group 16, except rice	0.10
Grain, cereal, group 15, except rice	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]



[67 FR 60959, Sept. 27, 2002, as amended at 75 FR 4288, Jan. 27, 2010]

[↑ Back to Top](#)

#### §180.584 Tolyfluanid; tolerances for residues.

(a) *General.* Tolerances are established for residues of tolyfluanid, 1,1-dichloro-N-[(dimethylamino)-sulfonyl]-1-fluoro-N-(4-methylphenyl)methanesulfenamide in or on the following commodities.

Commodity	Parts per million
Apple <sup>1</sup>	5.0
Grape <sup>1</sup>	11
Hop, dried cones <sup>1</sup>	30
Tomato <sup>1</sup>	2.0

<sup>1</sup> No U.S. registration as of August 31, 2002.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[67 FR 60141, Sept. 25, 2002]

[↑ Back to Top](#)

#### §180.585 Pyraflufen-ethyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide, pyraflufen-ethyl, including its metabolites and degradates, in the commodities in the table below. Compliance with the plant commodity tolerance levels specified in the table is to be determined by measuring only the sum of the parent pyraflufen-ethyl, ethyl 2-[2-chloro-5-(4-chloro-5-difluoromethoxy)-1-methyl-1H-pyrazol-3-yl]-4-fluorophenoxy] acetate, and its acid metabolite, E-1, 2-chloro-5-(4-chloro-5-difluoromethoxy)-1-methyl-1H-pyrazol-3-yl)-4-fluorophenoxyacetic acid, calculated as the stoichiometric equivalent of pyraflufen-ethyl in or on the commodity. Compliance with the livestock commodity tolerance levels specified in the table is to be determined by measuring only the sum of the parent pyraflufen-ethyl, ethyl 2-[2-chloro-5-(4-chloro-5-difluoromethoxy)-1-methyl-1H-pyrazol-3-yl]-4-fluorophenoxy] acetate and its acid metabolites: E-1, 2-chloro-5-(4-chloro-5-difluoromethoxy-1-methyl-1H-pyrazol-3-yl)-4-fluorophenoxyacetic acid, and E-9, 2-chloro-5-(4-chloro-5-difluoromethoxy-1H-pyrazol-3-yl)-4-fluorophenoxyacetic acid, both calculated as the stoichiometric equivalent of pyraflufen-ethyl in or on the commodity.

Commodity	Parts per million
Almond, hulls	0.02
Cattle, fat	0.03
Cattle, meat	0.03
Cattle, meat byproducts	0.03
Corn, field, forage	0.01
Corn, field, grain	0.01
Corn, field, stover	0.01
Cotton, gin byproducts	1.5
Cottonseed subgroup 20C	0.04
Fruit, pome, group 11-10	0.01
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup	
Fruit, stone, group 12-12	0.01
Goat, fat	0.03
Goat, meat	0.03
Goat, meat byproducts	0.03
Grass, forage, group 17	1.0
Grass, hay, group 17	1.4
Hop, dried cones	0.02
Horse, fat	0.03
Horse, meat	0.03
Horse, meat byproducts	0.03
Milk	0.03
Nut, tree, group 14-12	0.01
Peanut	0.01
Peanut, hay	0.07
Pomegranate	0.01
Sheep, fat	0.03
Sheep, meat	0.03

Sheep, meat byproducts	0.03
Soybean, forage	0.05
Soybean, hay	0.10
Soybean, seed	0.01
Tropical and subtropical, small fruit, edible peel, subgroup 23A	0.01
Vegetable, tuberous and corm, subgroup 1C	0.02
Wheat, forage	0.02
Wheat, grain	0.01
Wheat, hay	0.01
Wheat, straw	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 23055, Apr. 30, 2003, as amended at 68 FR 27739, May 21, 2003; 69 FR 26312, May 12, 2004; 73 FR 51743, Sept. 5, 2008; 76 FR 31484, June 11, 2011; 77 FR 75861, Dec. 26, 2012; 78 FR 13263, Feb. 27, 2013; 84 FR 48076, Sept. 12, 2019]

[↑ Back to Top](#)

### §180.586 Clothianidin; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide clothianidin, including its metabolites and degradates. Compliance with the tolerance levels specified below is to be determined by measuring only clothianidin, (E)-N-[(2-Chloro-5-thiazolyl)methyl]-N'-methyl-N''-nitroguanidine, in or on the following raw agricultural commodities:

Commodity	Parts per million
Almond, hulls	1.5
Beet, sugar, dried pulp	0.03
Beet, sugar, molasses	0.05
Beet, sugar, roots	0.02
Berry, low-growing, subgroup 13-07H, except strawberry	0.01
Canola, seed	0.01
Cotton, gin byproducts	4.5
Cotton, undelinted seed	0.20
Fig	0.05
Fruit, pome	1.0
Grain, cereal, forage, fodder and straw, group 16, except rice, forage	0.35
Grain, cereal, forage, fodder and straw, group 16, except rice, hay	0.07
Grain, cereal, forage, fodder and straw, group 16, except rice, stover	0.1
Grain, cereal, forage, fodder and straw, group 16, except rice, straw	0.05
Grain, cereal, group 15, except rice	0.01
Grape	0.60
Milk	0.01
Mustard, seed	0.01
Nut, tree, group 14	0.01
Peach	0.80
Pepper	0.80
Pomegranate	0.20
Potato, chips	0.6
Potato, granules/flakes	1.5
Rice, grain	0.01
Soybean, seed	0.02
Tea, dried <sup>1</sup>	70
Vegetable, brassica, leafy, group 5	1.9
Vegetable, bulb, group 3-07	0.45
Vegetable, cucurbit, group 9	0.06
Vegetable, fruiting, group 8, except pepper	0.20
Vegetable, leafy, except brassica, group 4	3.0
Vegetable, root, except sugar beet, subgroup 1B	0.8
Vegetable, tuberous and corm, subgroup 1C	0.3

<sup>1</sup>No U.S. registrations.

(2) Time-limited tolerances are established for residues of the insecticide clothianidin, including its metabolites and degradates. Compliance with the tolerance levels specified below is to be determined by measuring only clothianidin, (E)-1-(2-chloro-1,3-thiazol-5-ylmethyl)-3-methyl-2-nitroguanidine, in or on the following raw agricultural commodity:

Commodity	Parts per million	Expiration/revocation date
-----------	-------------------	----------------------------

Rice, seed	0.01	6/23/12
------------	------	---------

(b) *Section 18 emergency exemptions.* A time-limited tolerance specified in the following table is established for residues of clothianidin, (E)-N-[(2-chloro-5-thiazolyl)methyl]-N'-methyl-N''-nitroguanidine, in or on the specified agricultural commodity, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. This tolerance expires on the date specified in the table.

Commodity	Parts per million	Expiration/revocation date
Fruit, citrus, group 10-10	0.07	12/31/20

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect and inadvertent residues.* Tolerances are established for the indirect or inadvertent residues of the insecticide clothianidin, including its metabolites and degradates. Compliance with the tolerance levels specified below is to be determined by measuring only clothianidin, (E)-1-(2-chloro-1,3-thiazol-5-ylmethyl)-3-methyl-2-nitroguanidine, in or on the following raw agricultural commodities when present therein as a result of the application of clothianidin to crops listed in paragraph (a) of this section:

Commodity	Parts per million
Animal feed, nongrass, group 18	0.02
Grass, forage, fodder and hay, group 17	0.02
Soybean, forage	0.02
Soybean, hay	0.02

[74 FR 65028, Dec. 9, 2009, as amended at 76 FR 7718, Feb. 11, 2011; 76 FR 25246, May 4, 2011; 76 FR 34886, June 15, 2011; 77 FR 52252, Aug. 29, 2012; 78 FR 19136, Mar. 29, 2013; 80 FR 10007, Feb. 25, 2015; 82 FR 57151, Dec. 4, 2017]

[↑ Back to Top](#)

#### §180.587 Famoxadone; tolerance for residues.

(a) *General.* Tolerances are established for residues of the fungicide famoxadone (3-anilino-5-methyl-5-(4-phenoxyphenyl)-1,3-oxazolidine-2,4-dione) in or on the following commodities:

Commodity	Parts per million
Caneberry subgroup 13-07A	10
Cattle, fat	0.02
Cattle, liver	0.05
Cilantro, leaves	25
Goat, fat	0.02
Goat, liver	0.05
Grape, raisin <sup>1</sup>	4.0
Hop, dried cone	80
Horse, fat	0.02
Horse, liver	0.05
Milk, fat (reflecting negligible residues in whole milk)	0.06
Onion, bulb, subgroup 3-07A	0.45
Onion, green, subgroup 3-07B	40
Potato	0.02
Sheep, fat	0.02
Sheep, liver	0.05
Spinach	50
Tomato	1.0
Vegetable, cucurbit, group 9	0.30
Vegetable, fruiting, group 8, except tomato	4.0
Vegetable, leafy, except Brassica, group 4, except spinach	25

<sup>1</sup>There are no U.S. registrations as of May 15, 2003.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with a regional registrations.* Tolerances with a regional registration as defined in §180.1(l) are established for the residues of the fungicide famoxadone, 3-anilino-5-methyl-5-(4-phenoxyphenyl)-1,3-oxazolidine-2,4-dione) in or on the raw agricultural commodities:

Commodity	Parts per million
Grape	2.5

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 39471, July 2, 2003, as amended at 72 FR 28881, May 23, 2007; 74 FR 9364, Mar. 4, 2009; 76 FR 34885, June 15, 2011]

[↑ Back to Top](#)

### §180.588 Quinoxifen; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide quinoxifen, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only quinoxifen (5,7-dichloro-4-(4-fluorophenoxy)quinoline).

Commodity	Parts per million
Artichoke, globe	1.4
Berry, low growing, subgroup 13-07G	1.0
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2.0
Fruit, stone, group 12	0.70
Hop, dried cones	3.0
Gourd, edible	0.20
Lettuce, head	7.0
Lettuce, leaf	19
Melon, subgroup 9A	0.08
Pumpkin	0.20
Squash, winter	0.20
Vegetable, fruiting, group 8-10	1.7

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 55858, Sept. 29, 2003, as amended at 70 FR 4032, Jan. 28, 2005; 71 FR 50354, Aug. 25, 2006; 74 FR 14743, Apr. 1, 2009; 78 FR 57280, Sept. 18, 2013]

[↑ Back to Top](#)

### §180.589 Boscalid; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the fungicide boscalid, including its metabolites and degradates, in or on the commodities listed below. Compliance with the tolerance levels specified below is to be determined by measuring only boscalid, 3-pyridinecarboxamide, 2-chloro-*N*-(4'-chloro[1,1'-biphenyl]-2-yl), in or on the following raw agricultural commodities:

Commodity	Parts per million
Alfalfa, forage	30.0
Alfalfa, hay	65.0
Almond, hulls	17
Apple, wet pomace	10
Artichoke, globe	6.0
Avocado	1.5
Banana, import <sup>1</sup>	0.40
Berry, low growing, subgroup 13-07G, except cranberry	4.5
Brassica, leafy greens, subgroup 4-16B, except watercress	60
Bushberry subgroup 13-07B	13.0
Caneberry subgroup 13-07A	10.0
Canistel	1.5
Canola, refined oil	5.0
Celtuce	45
Citrus, dried pulp	4.5
Citrus, oil	85.0
Coffee, green bean, import <sup>1</sup>	0.05
Cotton, gin byproducts	55.0
Dill, seed	100
Endive, Belgium	6.0
Fennel, Florence	45
Fruit, citrus, group 10-10	2.0
Fruit, pome, group 11-10	3.0
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	5.0
Fruit, stone, group 12-12	3.5
Grain, aspirated fractions	3.0
Grape, raisin	8.5

Herb subgroup 19A	150
Hop, dried cones	35
Kohlrabi	6.0
Leaf petiole vegetable subgroup 22B	45
Leafy greens subgroup 4-16A	70
Mango	1.5
Nut, tree, group 14-12	0.70
Oilseed group 20	3.5
Papaya	1.5
Pea and bean, dried shelled, except soybean, subgroup 6C	2.5
Pea and bean, succulent shelled, subgroup 6B	0.60
Peanut	0.05
Peanut, meal	0.15
Peanut, refined oil	0.15
Peppermint, tops	30.0
Persimmon	8.0
Sapodilla	1.5
Sapote, black	1.5
Sapote, mamey	1.5
Soybean, hulls	0.2
Soybean, seed	0.1
Soybean, vegetable	2.0
Spearmint, tops	30.0
Star apple	1.5
Vegetable, <i>Brassica</i> , head and stem, group 5-16	6.0
Vegetable, bulb, group 3-07	5.0
Vegetable, cucurbit, group 9	3.0
Vegetable, fruiting, group 8-10	3.0
Vegetable, legume, edible podded subgroup 6A	5.0
Vegetable, root, except sugar beet, subgroup 1B	2.0
Vegetable, tuberous and corm, subgroup 1C	0.05

<sup>1</sup>No US registrations as of September 16, 2009.

(2) Tolerances are established for residues of the fungicide boscalid, including its metabolites and degradates, in or on the commodities listed below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of boscalid, 3-pyridinecarboxamide, 2-chloro-*N*-(4'-chloro[1,1'-biphenyl]-2-yl), and metabolites 2-chloro-*N*-(4'-chloro-5-hydroxy-biphenyl-2-yl) nicotinamide and glucuronic acid conjugate of 2-chloro-*N*-(4'-chloro-5-hydroxy-biphenyl-2-yl) nicotinamide, calculated as the stoichiometric equivalent of boscalid in or on the following food commodities:

Commodity	Parts per million
Cattle, fat	0.30
Cattle, meat	0.10
Cattle, meat byproducts	0.35
Egg	0.02
Goat, fat	0.30
Goat, meat	0.10
Goat, meat byproducts	0.35
Hog, fat	0.20
Hog, meat	0.05
Hog, meat byproducts	0.10
Horse, fat	0.30
Horse, meat	0.10
Horse, meat byproducts	0.35
Milk	0.10
Poultry, fat	0.20
Poultry, meat	0.05
Poultry, meat byproducts	0.20
Sheep, fat	0.30
Sheep, meat	0.10
Sheep, meat byproducts	0.35

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of the fungicide boscalid, including its metabolites and degradates, in connection with use of the pesticide under section 18 emergency exemptions granted by EPA. Compliance with the tolerance level specified below is to be determined by measuring only boscalid, 3-pyridinecarboxamide, 2-chloro-*N*-(4'-chloro[1,1'-biphenyl]-2-yl). This tolerance will expire and is revoked on the date specified in the following table:

Commodity	Parts per million	Expiration/revocation date
Endive, Belgian	16	12/31/13

(c) *Tolerances with regional registration.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for the indirect or inadvertent residues of the fungicide boscalid, including its metabolites and degradates, in or on the commodities listed below. Compliance with the tolerance levels specified below is to be determined by measuring only boscalid, 3-pyridinecarboxamide, 2-chloro-*N*-(4'-chloro[1,1'-biphenyl]-2-yl), in or on the following commodities:

Commodity	Parts per million
Animal feed, nongrass, group 18, forage, except alfalfa	1.0
Animal feed, nongrass, group 18, hay, except alfalfa	2.0
Animal feed, nongrass, group 18, seed	0.05
Beet, sugar, roots	0.1
Grain, cereal, forage, fodder and straw, group 16, forage	2.0
Grain, cereal, forage, fodder and straw, group 16, stover	1.5
Grain, cereal, forage, fodder and straw, group 16, straw	3.0
Grain, cereal, group 15	0.20
Grass, forage, fodder, and hay, group 17, forage	2.0
Grass, forage, fodder, and hay, group 17, hay	8.0
Grass, forage, fodder, and hay, group 17, seed screenings	0.20
Grass, forage, fodder, and hay, group 17, straw	0.30
Rice, hulls	0.50
Vegetable, foliage of legume, group 7, forage	1.5
Vegetable, foliage of legume, group 7, hay	2.0
Vegetable, foliage of legume, group 7, vines	0.05
Vegetable, leafy, except brassica, group 4, except celery, lettuce and spinach	1.0
Vegetable, leaves of root and tuber, group 2	0.1

[68 FR 44651, July 30, 2003, as amended at 69 FR 19774, Apr. 14, 2004; 70 FR 55293, Sept. 21, 2005; 71 FR 6364, Feb. 8, 2006; 71 FR 25961, May 3, 2006; 71 FR 76190, Dec. 20, 2006; 73 FR 16558, Mar. 28, 2008; 74 FR 47445, Sept. 16, 2009; 75 FR 770, Jan. 6, 2010; 75 FR 29907, May 28, 2010; 75 FR 80346, Dec. 22, 2010; 78 FR 67048, Nov. 8, 2013; 80 FR 14014, Mar. 18, 2015; 82 FR 56739, Nov. 30, 2017; 83 FR 52996, Oct. 19, 2018]

[↑ Back to Top](#)

### §180.590 2, 6-Diisopropylnaphthalene (2, 6-DIPN); tolerances for residues.

(a) *General.* Tolerances are established for residues of the growth inhibitor 2,6-DIPN, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only 2,6-Diisopropylnaphthalene.

Commodity	Parts per million
Cattle, fat	0.2
Cattle, meat	0.02
Cattle, meat byproducts, except fat	0.02
Goat, fat	0.2
Goat, meat	0.02
Goat, meat byproducts, except fat	0.02
Horse, fat	0.2
Horse, meat	0.02
Horse, meat byproducts, except fat	0.02
Milk, fat	0.02
Potato, granules/flakes	5.5
Potato, wet peel	6.0
Potato, whole	2.0
Sheep, fat	0.2
Sheep, meat	0.02
Sheep, meat byproducts, except fat	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 52011, Sept. 1, 2006, as amended at 74 FR 66579, Dec. 16, 2009; 77 FR 32406, June 1, 2012]

[↑ Back to Top](#)

### §180.591 Trifloxysulfuron; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide trifloxysulfuron, *N*-[[[4,6-dimethoxy-2-pyrimidinyl]amino]carbonyl]-3-(2,2,2-trifluoroethoxy)-2-pyridinesulfonamide in or on the following raw agricultural commodities.

Commodity	Parts per million
Almond	0.02
Almond, hulls	0.01
Fruit, citrus, Group 10	0.03
Cotton, undelinted seed	0.05
Cotton, gin byproducts	1.0
Sugarcane	0.01
Tomato	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 54386, Sept. 17, 2003]

[↑ Back to Top](#)

### §180.592 Butafenacil; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide butafenacil, (1,1-dimethyl-2-oxo-2-(2-propenyloxy)ethyl 2-chloro-5-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2*H*)-pyrimidinyl] benzoate) in or on the following raw agricultural commodities:

Commodity	Parts per million
Cotton, gin byproducts	10
Cotton, undelinted seed	0.50

(2) Tolerances are established for residues of the herbicide butafenacil, (1,1-dimethyl-2-oxo-2-(2-propenyloxy)ethyl 2-chloro-5-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2*H*)-pyrimidinyl] benzoate) and its metabolite CGA-293731 (1-carboxy-1-methylethyl 2-chloro-5-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2*H*)-pyrimidinyl] benzoate), in or on the following livestock commodities:

Commodity	Parts per million
Cattle, kidney	0.05
Cattle, liver	0.50
Goat, kidney	0.05
Goat, liver	0.50
Hog, kidney	0.05
Hog, liver	0.50
Horse, kidney	0.05
Horse, liver	0.50
Sheep, kidney	0.05
Sheep, liver	0.50

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect and inadvertant residues.* [Reserved]

[68 FR 54827, Sept. 19, 2003]

[↑ Back to Top](#)

### §180.593 Etoxazole; tolerances for residues.

(a) *General.* Tolerances are established for residues of etoxazole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only etoxazole (2-(2,6-difluorophenyl)-4-[4-(1,1-dimethylethyl)-2-ethoxyphenyl]-4,5-dihydrooxazole) in or on the commodity.

Commodity	Parts per million
Almond, hulls	2.0
Apple, wet pomace	0.50
Avocado	0.20

Berry, low growing, subgroup 13-07G	0.50
Caneberry subgroup 13-07A	1.5
Canistel	0.20
Cattle, fat	0.02
Cattle, liver	0.01
Cherry subgroup 12-12A	1.0
Corn, field, forage	0.80
Corn, field, grain	0.01
Corn, field, refined oil	0.03
Corn, field, stover	4.0
Corn, pop, grain	0.01
Corn, pop, stover	4.0
Corn, sweet, forage	1.5
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	5.0
Cotton, gin byproducts	1.0
Cottonseed subgroup 20C	0.05
Fruit, pome, group 11-10	0.20
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.50
Goat, fat	0.02
Goat, liver	0.01
Grape, raisin	1.5
Hop, dried cones	7.0
Horse, fat	0.02
Horse, liver	0.01
Mango	0.20
Melon subgroup 9A	0.20
Milk, fat	0.01
Nut, tree group 14-12	0.01
Orange <sup>2</sup>	0.10
Orange, oil <sup>2</sup>	1.0
Papaya	0.20
Peach subgroup 12-12B	1.0
Pepper/eggplant subgroup 8-10B	0.20
Peppermint, oil	20
Peppermint, tops	10
Plum, prune, dried	0.30
Plum subgroup 12-12C	0.15
Sapodilla	0.20
Sapote, black	0.20
Sapote, mamey	0.20
Sheep, fat	0.02
Sheep, liver	0.01
Soybean, seed	0.02
Spearmint, oil	20
Spearmint, tops	10
Squash/cucumber subgroup 9B	0.02
Star apple	0.20
Tangerine <sup>1</sup>	0.10
Tea, dried*	15
Tomato	0.20

<sup>1</sup>There are no U.S. registrations for use of etoxazole on tangerines as of September 26, 2003.

\*There are currently no U.S. registrations for tea as of April 13, 2011.

<sup>2</sup>There are no U.S. registrations for orange and orange, oil as of December 2, 2015.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect and inadvertant residues.* [Reserved]

[68 FR 55493, Sept. 26, 2003, as amended at 70 FR 41625, July 20, 2005; 72 FR 72963, Dec. 26, 2007; 74 FR 25160, May 27, 2009; 76 FR 20542, Apr. 13, 2011; 77 FR 3621, Jan. 25, 2012; 80 FR 75430, Dec. 2, 2015; 81 FR 49169, July 27, 2016; 83 FR 51867, Oct. 15, 2018]

[↑ Back to Top](#)

#### §180.594 Thiacloprid; tolerances for residues.



(a) *General.* Tolerances are established for residues of the insecticide thiacloprid, including its metabolites and degradates in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only thiacloprid ([3-[(6-chloro-3-pyridinyl)methyl]-2-thiazolidinylidene] cyanamide) in or on the commodity.

Commodity	Parts per million
Apple, wet pomace <sup>1</sup>	0.60
Cattle, fat <sup>1</sup>	0.020
Cattle, kidney <sup>1</sup>	0.050
Cattle, liver <sup>1</sup>	0.15
Cattle, meat <sup>1</sup>	0.030
Cattle, meat byproducts <sup>1</sup>	0.050
Cherry subgroup 12-12A <sup>1</sup>	0.5
Cotton, gin byproducts <sup>1</sup>	11.0
Cotton, undelinted seed <sup>1</sup>	0.020
Fruit, pome, group 11 <sup>1</sup>	0.30
Goat, fat <sup>1</sup>	0.020
Goat, kidney <sup>1</sup>	0.050
Goat, liver <sup>1</sup>	0.15
Goat, meat <sup>1</sup>	0.030
Goat, meat byproducts <sup>1</sup>	0.050
Horse, fat <sup>1</sup>	0.020
Horse, kidney <sup>1</sup>	0.050
Horse, liver <sup>1</sup>	0.15
Horse, meat <sup>1</sup>	0.030
Horse, meat byproducts <sup>1</sup>	0.050
Milk <sup>1</sup>	0.030
Peach subgroup 12-12B <sup>1</sup>	0.5
Peach subgroup 12-12C <sup>1</sup>	0.05
Pepper <sup>1</sup>	1.0
Sheep, fat <sup>1</sup>	0.020
Sheep, kidney <sup>1</sup>	0.050
Sheep, liver <sup>1</sup>	0.15
Sheep, meat <sup>1</sup>	0.030
Sheep, meat byproducts <sup>1</sup>	0.050

<sup>1</sup>There are no U.S. registrations for the commodity since August 6, 2014.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 55512, Sept. 26, 2003, as amended at 78 FR 8416, Feb. 6, 2013; 81 FR 34907, June 1, 2016]

[↑ Back to Top](#)

### §180.595 Flufenpyr-ethyl; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide, flufenpyr-ethyl; acetic acid, [2-chloro-4-fluoro-5-[5-methyl-6-oxo-4-(trifluoromethyl)-1-(6H)-pyridazinyl]-phenoxy]-ethyl ester], in or on the following commodities:

Commodity	Parts per million
Corn, field, grain	0.01
Soybean, seed	0.01
Sugarcane, cane	0.01

(2) Tolerances are established for residues of the herbicide flufenpyr-ethyl; acetic acid, [2-chloro-4-fluoro-5-[5-methyl-6-oxo-4-(trifluoromethyl)-1-(6H)-pyridazinyl]-phenoxy]-ethyl ester], and its metabolite, S-3153 acid-4-OH; [2-chloro-4-hydroxy-5-[5-methyl-6-oxo-4-(trifluoromethyl)-1-(6H)-pyridazinyl]-phenoxy]-acetic acid, free and conjugated, in or on the following commodities:

Commodity	Parts per million
Corn, field, forage	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[68 FR 54842, Sept. 19, 2003]

[↑ Back to Top](#)

#### §180.596 Fosthiazate; tolerances for residues.

(a) *General.* A tolerance is established for residues of the insecticide fosthiazate, including its metabolites and degradates, in or on the commodity in the table in this paragraph. Compliance with the tolerance level specified in this paragraph is to be determined by measuring only the sum of fosthiazate, O-ethyl S-(1-methylpropyl)(2-oxo-3-thiazolidinyl)phosphonothioate, and its metabolite, O-ethyl S-(1-methylpropyl)(2-(methylsulfonyl)ethyl)phosphoramidothioate, calculated as the stoichiometric equivalent of fosthiazate, in or on the commodity.

Commodity	Parts per million
Tomato	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[69 FR 18275, Apr. 7, 2004, as amended at 76 FR 23498, Apr. 27, 2011]

[↑ Back to Top](#)

#### §180.597 Mesosulfuron-methyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide mesosulfuron-methyl, (methyl 2-[[[(4,6-dimethoxy-2-pyrimidinyl) amino]carbonyl]amino]sulfonyl] -4-[[[(methylsulfonyl)amino] methyl]benzoate]) in or on the following raw agricultural commodities:

Commodity	Parts per million
Cattle, meat byproducts	0.01
Goat, meat byproducts	0.01
Grain, aspirated fractions	0.60
Horse, meat byproducts	0.01
Sheep, meat byproducts	0.01
Wheat, forage	0.60
Wheat, germ	0.10
Wheat, grain	0.03
Wheat, hay	0.06
Wheat, straw	0.30

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[69 FR 18263, Apr. 7, 2004]

[↑ Back to Top](#)

#### §180.598 Novaluron; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide novaluron, including its metabolites and degradates, in or on the following commodities. Compliance with the tolerance levels specified in the following table is to be determined by measuring only novaluron, (N-[[[3-chloro-4-[1,1,2-trifluoro-2-(trifluoromethoxy)ethoxy]phenyl]amino]carbonyl]-2,6-difluorobenzamide), in or on the following raw agricultural commodities:

Commodity	Parts per
-----------	-----------

	million
Apple, wet pomace	8.0
Avocado	0.60
Bean, dry, seed	0.30
Bean, succulent	0.70
Berry, low growing, subgroup 13-07G, except lowbush blueberry	0.45
Brassica, head and stem, subgroup 5A	0.50
Brassica, leafy greens, subgroup 5B	25
Bushberry subgroup 13-07B	7.0
Carrot	0.05
Cattle, fat	11
Cattle, kidney	1.0
Cattle, liver	1.0
Cattle, meat	0.60
Cattle, meat byproducts, except kidney and liver	11
Cherry subgroup 12-12A	8.0
Corn, sweet, forage	16
Corn, sweet, kernel plus cob with husks removed	0.05
Corn, sweet, stover	50
Cotton, gin byproducts	30
Cotton, undelinted seed	0.60
Egg	1.5
Food commodities and feed commodities (other than those covered by a higher tolerance as a result of use on growing crops) in food and feed handling establishments	0.01
Fruit, pome, group 11-10	3.0
Goat, fat	11
Goat, kidney	1.0
Goat, liver	1.0
Goat, meat	0.60
Goat, meat byproducts, except kidney and liver	11
Grain, aspirated fractions	25
Hog, fat	1.5
Hog, kidney	0.10
Hog, liver	0.10
Hog, meat	0.07
Hog, meat byproducts, except kidney and liver	1.5
Horse, fat	11
Horse, kidney	1.0
Horse, liver	1.0
Horse, meat	0.60
Horse, meat byproducts, except kidney and liver	11
Milk	1.0
Milk, fat	20
Peach subgroup 12-12B	1.9
Peanut	0.01
Plum, prune, dried	3.0
Plum subgroup 12-12C	1.9
Poultry, fat	7.0
Poultry, kidney	0.80
Poultry, liver	0.80
Poultry, meat	0.40
Poultry, meat byproducts, except kidney and liver	7.0
Sheep, fat	11
Sheep, kidney	1.0
Sheep, liver	1.0
Sheep, meat	0.60
Sheep, meat byproducts, except kidney and liver	11
Sorghum, grain, forage	6.0
Sorghum, grain, grain	3.0
Sorghum, grain, stover	40
Soybean, seed	0.07
Sugarcane, cane	0.50
Swiss chard	12
Turnip, greens	25
Vegetable, cucurbit, group 9	0.20
Vegetable, fruiting, group 8-10	1.0
Vegetable, tuberous and corm, subgroup 1C	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[69 FR 31021, June 2, 2004, as amended at 71 FR 17014, Apr. 5, 2006; 71 FR 61911, Oct. 20, 2006; 73 FR 74982, Dec. 10, 2008; 74 FR 637, Jan. 7, 2009; 74 FR 20891, May 6, 2009; 74 FR 65033, Dec. 9, 2009; 75 FR 4278, Jan. 27, 2010; 75 FR 29447, May 26, 2010; 76 FR 55814, Sept. 9, 2011; 78 FR 40033, July 3, 2013; 80 FR 43335, July 22, 2015]

[↑ Back to Top](#)

**§180.599 Acequinocyl; tolerances for residues.**

(a) *General.* Tolerances are established for residues of acequinocyl, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of acequinocyl [2-(acetyloxy)-3-dodecyl-1,4-naphthalenedione] and its metabolite, 2-dodecyl-3-hydroxy-1,4-naphthoquinone, calculated as the stoichiometric equivalent of acequinocyl, in or on the commodity.

Commodity	Parts per million
Almond, hulls	2.0
Apple, wet pomace	1.0
Avocado	0.50
Bean, dry, seed	0.15
Bean, edible podded	0.25
Bean, succulent shelled	0.30
Berry, low growing, subgroup 13-07G	0.50
Caneberry subgroup 13-07A	4.0
Cattle, fat	0.02
Cattle, meat byproducts	0.02
Cherry, subgroup 12-12A	1.0
Citrus, oil	30
Cowpea, forage	6.0
Cowpea, hay	18
Fruit, citrus, group 10-10	0.35
Fruit, pome, group 11-10	0.40
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	1.6
Goat, fat	0.02
Goat, meat byproducts	0.02
Guava	0.90
Hop, dried cones	15
Horse, fat	0.02
Horse, meat byproducts	0.02
Nut, tree, group 14-12	0.02
Sheep, fat	0.02
Sheep, meat byproducts	0.02
Soybean, vegetable, succulent	0.25
Tea, plucked leaves <sup>1</sup>	40
Tropical and subtropical, small fruit, inedible peel, subgroup 24A	2.0
Vegetable, cucurbit, group 9	0.30
Vegetable, fruiting, group 8-10	0.70

<sup>1</sup>There are no U.S. registrations as of January 18, 2017 for use on tea.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[69 FR 43533, July 21, 2004, as amended at 73 FR 17910, Apr. 2, 2008; 75 FR 70148, Nov. 17, 2010; 77 FR 25909, May 2, 2012; 81 FR 21756, Apr. 13, 2016; 82 FR 5414, Jan. 18, 2017; 83 FR 26373, June 7, 2018]

[↑ Back to Top](#)

**§180.600 Propoxycarbazone; tolerances for residues.**

(a) *General.* (1) Tolerances are established for combined residues of the herbicide propoxycarbazone methyl 2-[[[(4,5-dihydro-4-methyl-5-oxo-3-propoxy-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]benzoate and its metabolite methyl 2-[[[(4,5-dihydro-3-(2-hydroxypropoxy)-4-methyl-5-oxo-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]benzoate in/on the following raw agricultural commodities:

Commodity	Parts per million
Grass, forage	20

Grass, hay	25
Wheat, forage	17
Wheat, grain	0.02
Wheat, hay	0.15
Wheat, straw	0.05

(2) Tolerances are established for residues of the herbicide propoxycarbazone methyl 2-[[[(4,5-dihydro-4-methyl-5-oxo-3-propoxy-1H-1,2,4-triazol-1-yl)carbonyl]amino]sulfonyl]benzoate in/on the following raw agricultural commodities:

Commodity	Parts per million
Cattle, meat	0.05
Cattle, meat byproducts	0.3
Goat, meat	0.05
Goat, meat byproducts	0.3
Horse, meat	0.05
Horse, meat byproducts	0.3
Milk	0.03
Sheep, meat	0.05
Sheep, meat byproducts	0.3

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[69 FR 40781, July 7, 2004, as amended at 71 FR 52487, Sept. 6, 2006; 74 FR 9377, Mar. 4, 2009]

[↑ Back to Top](#)

#### §180.601 Cyazofamid; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide cyazofamid, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of 4-chloro-2-cyano-*N,N*-dimethyl-5-(4-methylphenyl)-1*H*-imidazole-1-sulfonamide and its metabolite, 4-chloro-5-(4-methylphenyl)-1*H*-imidazole-2-carbonitrile, calculated as the stoichiometric equivalent of cyazofamid, in or on the following commodities:

Commodity	Parts per million
Bean, succulent	0.5
Bean, succulent shelled	0.08
Brassica, head and stem, subgroup 5A	1.2
Brassica, leafy greens, subgroup 5B	12.0
Bulb vegetables, group3-07	2.0
Carrot, roots	0.09
Herb subgroup 19A	90
Hop dried cones	10.0
Leafy greens subgroup 4A	10
Turnip, greens	12.0
Vegetable, cucurbit, group 9	0.10
Vegetable, fruiting, group 8-10	0.9
Vegetable, tuberous and corm, subgroup 1C	0.02

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of the fungicide cyazofamid, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of cyazofamid, 4-chloro-2-cyano-*N,N*-dimethyl-5-(4-methylphenyl)-1*H*-imidazole-1-sulfonamide and its metabolite CCIM, 4-chloro-5-(4-methylphenyl)-1*H*-imidazole-2-carbonitrile, calculated as the stoichiometric equivalent of cyazofamid, resulting from use of the pesticide under FIFRA section 18 emergency exemptions. The tolerances expire and are revoked on the date specified in the table.

Commodity	Parts per million	Expiration/revocation date
Basil, dried	144	12/31/14

(c) *Tolerances with regional registrations.* Tolerances with regional registrations are established for residues of the fungicide cyazofamid, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of 4-chloro-2-cyano-*N,N*-dimethyl-5-(4-methylphenyl)-1*H*-imidazole-1-sulfonamide and its metabolite, 4-chloro-5-(4-methylphenyl)-1*H*-imidazole-2-carbonitrile, calculated as the stoichiometric equivalent of cyazofamid, in or on the following commodities:

Commodity	Parts per million
Grape	1.5

(d) *Indirect or inadvertent residues.* [Reserved]

[69 FR 58299, Sept. 30, 2004, as amended at 73 FR 21839, Apr. 23, 2008; 74 FR 32453, July 8, 2009; 75 FR 40751, July 14, 2010; 77 FR 4252, Jan. 27, 2012; 77 FR 59119, Sept. 26, 2012; 81 FR 5605, Feb. 3, 2016]

[↑ Back to Top](#)

### §180.602 Spiroxamine; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide spiroxamine, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified in the following table is to be determined by measuring only spiroxamine, [(8-(1,1-dimethylethyl)-N-ethyl-N-propyl-1,4-dioxaspiro[4,5]decane-2-methanamine) in or on the commodities.

Commodity	Parts per million
Artichoke, globe, import <sup>1</sup>	0.7
Asparagus <sup>1</sup>	0.05
Banana (import)	3.0
Grape (import)	1.0
Vegetable, fruiting, crop group 8 <sup>1</sup>	1.2

<sup>1</sup>No U.S. registration as of December 1, 2010.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[69 FR 42570, July 16, 2004, as amended at 75 FR 74640, Dec. 1, 2010; 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

### §180.603 Dinotefuran; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of dinotefuran, (RS)-1-methyl-2-nitro-3-((tetrahydro-3-furanyl)methyl)guanidine, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of dinotefuran and its metabolites DN, 1-methyl-3-(tetrahydro-3-furylmethyl)guanidine, and UF, 1-methyl-3-(tetrahydro-3-furylmethyl)urea, calculated as the stoichiometric equivalent of dinotefuran, in or on the commodities listed in the table below:

Commodity	Parts per million
Berry, low growing, except strawberry, subgroup 13-07H	0.2
Brassica, head and stem, subgroup 5A	1.4
Brassica, leafy greens, subgroup 5B	15.0
Cotton, undelinted seed	0.4
Cotton, gin byproducts	8.0
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.9
Grape, raisin	2.5
Onion, bulb, subgroup 3-07A	0.15
Onion, green, subgroup 3-07B	5.0
Peach	1.0
Persimmon <sup>1</sup>	2
Potato, chips	0.1
Potato, granules/flakes	0.15
Rice, grain	9.0
Tea, dried <sup>2</sup>	50
Tomato, paste	1.0
Turnip, greens	15.0
Vegetable, fruiting, group 8	0.7
Vegetable, cucurbit, group 9	0.5
Vegetable, leafy, except Brassica, group 4	5.0
Vegetable, tuberous and corm, subgroup 1C	0.05
Watercress	8.0

<sup>1</sup>There are no U.S. registrations for use of dinotefuran on this commodity

<sup>2</sup>There are no U.S. registrations for tea.

(2) Tolerances are established for residues of dinotefuran, (*RS*)-1-methyl-2-nitro-3-((tetrahydro-3-furanyl)methyl)guanidine, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of dinotefuran, (*RS*)-1-methyl-2-nitro-3-((tetrahydro-3-furanyl)methyl)guanidine in or on the commodities listed in the table below:

Commodity	Parts per million
Cattle, fat	0.05
Cattle, meat	0.05
Cattle, meat byproducts	0.05
Egg	0.01
Goat, fat	0.05
Goat, meat	0.05
Goat, meat byproducts	0.05
Hog, fat	0.05
Hog, meat	0.05
Hog, meat byproducts	0.05
Horse, fat	0.05
Horse, meat	0.05
Horse, meat byproducts	0.05
Milk	0.05
Poultry, meat byproducts	0.01
Sheep, fat	0.05
Sheep, meat	0.05
Sheep, meat byproducts	0.05

(3) A tolerance of 0.01 parts per million is established for residues of the insecticide dinotefuran, (*RS*)-1-methyl-2-nitro-3-((tetrahydro-3-furanyl)methyl)guanidine, including its metabolites and degradates, in or on all food and/or feed commodities (other than those covered by a higher tolerance as a result of use on growing crops or inadvertent residues) when residues result from application of dinotefuran in food and/or feed handling establishments where food and/or feed products are held, stored, processed, prepared, or served. Compliance with the tolerance level is to be determined by measuring only dinotefuran.

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of dinotefuran, (*RS*)-1-methyl-2-nitro-3-((tetrahydro-3-furanyl)methyl)guanidine, including its metabolites and degradates, in or on the commodities in the table below resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of dinotefuran and its metabolites DN, 1-methyl-3-(tetrahydro-3-furylmethyl)guanidine, and UF, 1-methyl-3-(tetrahydro-3-furylmethyl)urea, calculated as the stoichiometric equivalent of dinotefuran, in or on the commodities listed in the table below. The tolerances expire and are revoked on the dates specified in the table.

Commodity	Parts per million	Expiration/revocation date
Fruit, pome, Group 11	2.0	12/31/21
Fruit, stone, Group 12	2.0	12/31/21

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[70 FR 14546, Mar. 23, 2005, as amended at 74 FR 12601, Mar. 25, 2009; 74 FR 67104, Dec. 18, 2009; 75 FR 770, Jan. 6, 2010; 77 FR 56138, Sept. 12, 2012; 77 FR 67285, Nov. 9, 2012; 77 FR 70913, Nov. 28, 2012; 78 FR 21272, Apr. 10, 2013; 78 FR 24683, Apr. 26, 2013; 79 FR 3512, Jan. 22, 2014; 80 FR 78145, Dec. 16, 2015; 83 FR 62732, Dec. 6, 2018; 84 FR 49479, Sept. 20, 2019]

[↑ Back to Top](#)

#### §180.604 Mepanipyrim; tolerances for residues.

(a) *General.* [Reserved]

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect of inadvertent residues.* [Reserved]

(e) *Revoked tolerances subject to the channel of trade provisions.* [Reserved]

(f) *Import tolerances.* Tolerances are established for the combined residues of mepanipyrim, 4-methyl-N-phenyl-6-(1-propynyl)-2-pyrimidinamine, and its metabolite, 4-methyl-N-phenyl-6-(2-hydroxypropyl)-2-pyrimidinamine, both free and conjugated in or on the following commodities:

Commodity	Parts per million
Grape	1.5
Grape, raisin	3.0
Strawberry	1.5
Tomato	0.5

[68 FR 60827, Oct. 13, 2004]

[↑ Back to Top](#)

#### §180.605 Penoxsulam; tolerances for residues.

(a) *General.* Tolerances are established for residues of penoxsulam, including its metabolites and degradates, in or on the commodities listed in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only penoxsulam 2-(2,2-difluoroethoxy)-N-(5,8-dimethoxy[1,2,4]triazolo[1,5-c] pyrimidin-2-yl)-6-(trifluoromethyl) benzenesulfonamide, in or on the commodity.

Commodity	Parts per million
Almond, hulls	0.01
Fish	0.01
Fish, shellfish, crustacean	0.01
Fish, shellfish, mollusc	0.02
Fruit, pome, group 11-10	0.01
Fruit, small, vine climbing, subgroup 13-07F, except fuzzy kiwifruit	0.01
Fruit, stone, group 12-12	0.01
Nut, tree, group 14-12	0.01
Olive	0.01
Pomegranate	0.01
Rice, grain	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[69 FR 57197, Sept. 24, 2004, as amended at 72 FR 40763, July 25, 2007; 74 FR 18648, Apr. 24, 2009; 80 FR 72599, Nov. 20, 2015; 81 FR 10776, Mar. 2, 2016]

[↑ Back to Top](#)

#### §180.607 Spiromesifen; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide/miticide spiromesifen, including its metabolites and degradates, in or on the commodities listed below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of spiromesifen [2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl 3,3-dimethylbutanoate] and 4-hydroxy-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-2-one, calculated as the stoichiometric equivalent of spiromesifen, in or on the following primary crop commodities:

Commodity	Parts per million
Bean, dry	0.02
Bean, edible podded	0.80
Bean, succulent	0.10
Berry and small fruit, low growing berry, subgroup 13-07G	2.0
Brassica, head and stem, subgroup 5A	2.0
Brassica, leafy greens, subgroup 5B	12
Coffee, green bean <sup>1</sup>	0.20
Corn, field, forage	5.0
Corn, field, grain	0.02
Corn, field, stover	8.0
Corn, pop, grain	0.02
Corn, pop, stover	4.0
Corn, sweet, forage	17
Corn, sweet, kernel plus cob with husks removed	0.02
Corn, sweet, stover	12



Cotton, gin byproducts	15
Cotton, undelinted seed	0.50
Cowpea, forage	30
Cowpea, hay	86
Leaf petiole subgroup 4B	6.0
Leafy greens subgroup 4A	12
Pea, dry, seed	0.20
Peppermint, tops	45
Spearmint, tops	45
Tea, dry	40
Tomato, paste	0.80
Vegetable, cucurbit, group 9	0.10
Vegetable, fruiting, group 8	0.45
Vegetable, tuberous and corm, subgroup 1C	0.02

<sup>1</sup>This use has not been registered in the United States as of August 28, 2018.

(2) Tolerances are established for residues of the insecticide/miticide spiromesifen, including its metabolites and degradates, in or on the commodities listed below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of spiromesifen [2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl 3,3-dimethylbutanoate] and its metabolites containing the 4-hydroxy-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-2-one and 4-hydroxy-3-[4-(hydroxymethyl)-2,6-dimethylphenyl]-1-oxaspiro[4.4]non-3-en-2-one moieties, calculated as the stoichiometric equivalent of spiromesifen, in the following livestock commodities:

Commodity	Parts per million
Cattle, fat	0.10
Cattle, meat	0.02
Cattle, meat byproducts	0.20
Goat, fat	0.10
Goat, meat	0.02
Goat, meat byproducts	0.20
Horse, fat	0.10
Horse, meat	0.02
Horse, meat byproducts	0.20
Milk	0.01
Milk, fat	0.25
Sheep, fat	0.10
Sheep, meat	0.02
Sheep, meat byproducts	0.20

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for residues of the insecticide/miticide spiromesifen, including its metabolites and degradates, in or on the commodities listed below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of spiromesifen [2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl 3,3-dimethylbutanoate] and 4-hydroxy-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-2-one, calculated as the stoichiometric equivalent of spiromesifen, in or on the specified agricultural commodities, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. The tolerances expire and are revoked on the date specified in the table.

Commodity	Parts per million	Expiration/revocation date
Soybean, forage	30	12/31/14
Soybean, hay	86	12/31/14
Soybean, seed	0.02	12/31/14

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for the inadvertent or indirect residues of the insecticide/miticide spiromesifen, including its metabolites and degradates, in or on the commodities listed below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of spiromesifen [2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-4-yl 3,3-dimethylbutanoate], 4-hydroxy-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.4]non-3-en-2-one, and its metabolites containing the 4-hydroxy-3-[4-(hydroxymethyl)-2,6-dimethylphenyl]-1-oxaspiro[4.4]non-3-en-2-one moiety, calculated as the stoichiometric equivalent of spiromesifen, in the following rotational crop commodities:

Commodity	Parts per million
Alfalfa, forage	1.5
Alfalfa, hay	3.0
Barley, grain	0.03
Barley, hay	0.25
Barley, straw	0.15
Beet, sugar, roots	0.03

Beet, sugar, tops	0.20
Oat, forage	0.20
Oat, grain	0.03
Oat, hay	0.25
Oat, straw	0.25
Vegetable, bulb, group 3-07	0.09
Wheat, forage	0.20
Wheat, grain	0.03
Wheat, hay	0.15
Wheat, straw	0.25

[70 FR 43283, July 27, 2005, as amended at 72 FR 3079, Jan. 24, 2007; 73 FR 13140, Mar. 12, 2008; 73 FR 52606, Sept. 10, 2008; 74 FR 8492, Feb. 25, 2009; 74 FR 15886, Apr. 8, 2009; 75 FR 5526, Feb. 3, 2010; 75 FR 53586, Sept. 1, 2010; 76 FR 81396, Dec. 28, 2011; 78 FR 3337, Jan. 16, 2013; 83 FR 45849, Sept. 11, 2018]

[↑ Back to Top](#)

### §180.608 Spirodiclofen; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of spirodiclofen, including its metabolites and degradates, in or on the commodities listed below. Compliance with the following tolerance levels is to be determined by measuring only spirodiclofen (3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2,2-dimethylbutanoate).

Commodity	Parts per million
Almond, hulls	20.0
Apple, wet pomace	2.4
Avocado	1.0
Black sapote	1.0
Canistel	1.0
Citrus, juice	0.60
Citrus, oil	35
Fruit, citrus, group 10	0.50
Fruit, pome, group 11	0.80
Fruit, stone, group 12	1.0
Grape	2.0
Grape, raisin	6.0
Hop, dried cones	30
Mamey sapote	1.0
Mango	1.0
Nut, tree, group 14	0.10
Papaya	1.0
Pistachio	0.10
Sapodilla	1.0
Star apple	1.0

(2) Tolerances are established for residues of spirodiclofen, including its metabolites and degradates, in or on the commodities listed below. Compliance with the following tolerance levels is to be determined by measuring only spirodiclofen (3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2,2-dimethylbutanoate) and its metabolite 3-(2,4-dichlorophenyl)-4-hydroxy-1-oxaspiro[4,5] dec-3-en-2-one, calculated as the stoichiometric equivalent of spirodiclofen.

Commodity	Parts per million
Cattle, fat	0.02
Cattle, meat byproducts	0.10
Cattle, meat	0.02
Goat, fat	0.02
Goat, meat byproducts	0.1
Goat, meat	0.02
Horse, fat	0.02
Horse, meat byproducts	0.1
Horse, meat	0.02
Milk	0.01
Milk, fat	0.03
Sheep, fat	0.02
Sheep, meat byproducts	0.1
Sheep, meat	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[70 FR 40211, July 13, 2005, as amended at 73 FR 25539, May 7, 2008; 75 FR 24434, May 5, 2010; 77 FR 73939, Dec. 12, 2012; 79 FR 33464, June 11, 2014]

[↑ Back to Top](#)

### §180.609 Fluoxastrobin; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of fluoxastrobin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only fluoxastrobin, (1E)-[2-[[6-(2-chlorophenoxy)-5-fluoro-4-pyrimidinyl]oxy]phenyl](5,6-dihydro-1,4,2-dioxazin-3-yl)methanone O-methyloxime and its Z isomer, (1Z)-[2-[[6-(2-chlorophenoxy)-5-fluoro-4-pyrimidinyl]oxy]phenyl](5,6-dihydro-1,4,2-dioxazin-3-yl)methanone O-methyloxime, calculated as the stoichiometric equivalent of fluoxastrobin.

Commodity	Parts per million
Avocado	1.0
Barley, grain	0.40
Barley, hay	15
Barley, straw	15
Berry, low growing, subgroup 13-07G	1.9
Corn, field, forage	3.0
Corn, field, grain	0.02
Corn, field, stover	4.5
Corn, sweet, forage	13
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	10
Cotton, gin byproducts	0.01
Cotton, undelinted seed	0.01
Grain, aspirated grain fractions	60
Leaf petioles subgroup 4B	4.0
Melon subgroup 9A	1.5
Pea and bean, dried shelled, except soybean, subgroup 6C	0.20
Peanut	0.02
Peanut, hay	20.0
Peanut, refined oil	0.06
Rapeseed, subgroup 20A	0.70
Rice, grain	4.0
Sorghum, grain, forage	5.0
Sorghum, grain, grain	1.5
Sorghum, grain, stover	5.0
Soybean, forage	9.0
Soybean, hay	1.2
Soybean, hulls	0.20
Soybean, seed	0.05
Squash/cucumber subgroup 9B	0.50
Tomato, paste	1.5
Vegetable, fruiting, group 8	1.0
Vegetable, tuberous and corm, subgroup 1C	0.010
Wheat, forage	7.0
Wheat, grain	0.15
Wheat, hay	17
Wheat, straw	11

(2) Tolerances are established for residues of fluoxastrobin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only fluoxastrobin, (1E)-[2-[[6-(2-chlorophenoxy)-5-fluoro-4-pyrimidinyl]oxy]phenyl](5,6-dihydro-1,4,2-dioxazin-3-yl)methanone O-methyloxime, its Z isomer, (1Z)-[2-[[6-(2-chlorophenoxy)-5-fluoro-4-pyrimidinyl]oxy]phenyl](5,6-dihydro-1,4,2-dioxazin-3-yl)methanone O-methyloxime, and its phenoxy-hydroxypyrimidine, 6-(2-chlorophenoxy)-5-fluoro-4-pyrimidinol, calculated as the stoichiometric equivalent of fluoxastrobin.

Commodity	Parts per million
Cattle, fat	0.10
Cattle, meat	0.05
Cattle, meat byproducts	0.20
Goat, fat	0.10
Goat, meat	0.05
Goat, meat byproducts	0.20
Hog, fat	0.03
Hog, meat byproducts	0.06
Horse, fat	0.10
Horse, meat	0.05
Horse, meat byproducts	0.20

Milk	0.03
Milk, fat	0.75
Poultry, liver	0.06
Sheep, fat	0.10
Sheep, meat	0.05
Sheep, meat byproducts	0.20

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for the indirect or inadvertent residues of fluoxastrobin, including its metabolites and degradates, in or on the commodities in the table below, when present therein as a result of the application of fluoxastrobin to the growing crops listed in paragraph (a)(1) of this section. Compliance with the tolerance levels specified below is to be determined by measuring only fluoxastrobin, (1E)-[2-[[6-(2-chlorophenoxy)-5-fluoro-4-pyrimidinyl]oxy]phenyl](5,6-dihydro-1,4,2-dioxazin-3-yl)methanone O-methyloxime and its Z isomer, (1Z)-[2-[[6-(2-chlorophenoxy)-5-fluoro-4-pyrimidinyl]oxy]phenyl](5,6-dihydro-1,4,2-dioxazin-3-yl)methanone O-methyloxime, calculated as the stoichiometric equivalent of fluoxastrobin.

Commodity	Parts per million
Alfalfa, forage	0.050
Alfalfa, hay	0.10
Cotton, gin byproducts	0.020
Grain, cereal, forage, fodder, and straw, group 16, except corn	0.10
Grass, forage	0.10
Grass, hay	0.50
Vegetable, foliage of legume, group 7	0.050

[74 FR 67113, Dec. 18, 2009, as amended at 75 FR 60333, Sept. 30, 2010; 76 FR 50898, Aug. 17, 2011; 77 FR 26471, May 4, 2012; 77 FR 64915, Oct. 24, 2012; 79 FR 20105, Apr. 11, 2014; 79 FR 59119, Oct. 1, 2014; 82 FR 45735, Oct. 2, 2017; 84 FR 38143, Aug. 6, 2019]

[↑ Back to Top](#)

### §180.610 Aminopyralid; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide aminopyralid, 4-amino-3,6-dichloro-2-pyridinecarboxylic acid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only free and conjugated aminopyralid.

Commodity	Parts per million
Corn, field, forage	0.30
Corn, field, grain	0.20
Corn, field, stover	0.20
Grain, aspirated fractions	0.2
Grass, forage	25
Grass, hay	50
Wheat, bran	0.1
Wheat, forage	2.0
Wheat, grain	0.04
Wheat, hay	4.0
Wheat, straw	0.25

(2) Tolerances are established for residues of the herbicide aminopyralid, 4-amino-3,6-dichloro-2-pyridinecarboxylic acid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only aminopyralid.

Commodity	Parts per million
Cattle, fat	0.02
Cattle, kidney	0.3
Cattle, meat	0.02
Cattle, meat byproducts, except kidney	0.02
Goat, fat	0.02
Goat, kidney	0.3
Goat, meat	0.02
Goat, meat byproducts, except kidney	0.02
Horse, fat	0.02
Horse, kidney	0.3
Horse, meat	0.02
Horse, meat byproducts, except kidney	0.02

Milk	0.03
Sheep, fat	0.02
Sheep, kidney	0.3
Sheep, meat	0.02
Sheep, meat byproducts, except kidney	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[70 FR 46428, Aug. 10, 2005, as amended at 75 FR 17584, Apr. 7, 2010]

[↑ Back to Top](#)

### §180.611 Pinoxaden; tolerances for residues.

(a) *General.* (1) Tolerances are established for the combined residues of pinoxaden (8-(2,6-diethyl-4-methylphenyl)-1,2,4,5-tetrahydro-7-oxo-7H-pyrazolo[1,2-d][1,4,5] oxadiazepin-9-yl 2,2-dimethylpropanoate), and its metabolites 8-(2,6-diethyl-4-methyl-phenyl)-tetrahydro-pyrazolo[1,2-d][1,4,5]oxadiazepine-7,9-dione (M2), and free and conjugated forms of 8-(2,6-diethyl-4-hydroxymethyl-phenyl)-tetrahydro-pyrazolo[1,2-d][1,4,5] oxadiazepine-7,9-dione (M4), and 4-(7,9-dioxo-hexahydro-pyrazolo[1,2-d][1,4,5]oxadiazepin-8-yl)-3,5-diethyl-benzoic acid (M6), calculated as pinoxaden, in/on the following commodities:

Commodity	Parts per million
Barley, bran	1.6
Barley, grain	0.9
Barley, hay	1.5
Barley, straw	1.0
Egg	0.06
Poultry, fat	0.06
Poultry, meat	0.06
Poultry, meat byproducts	0.06
Wheat, bran	3.0
Wheat, forage	3.5
Wheat, grain	1.3
Wheat, hay	2.0
Wheat, straw	1.5

(2) For the combined residues of pinoxaden, 8-(2,6-diethyl-4-methylphenyl)-1,2,4,5-tetrahydro-7-oxo-7H-pyrazolo[1,2-d][1,4,5] oxadiazepin-9-yl 2,2-dimethylpropanoate), and its metabolites M2, 8-(2,6-diethyl-4-methyl-phenyl)-tetrahydro-pyrazolo[1,2-d][1,4,5]oxadiazepine-7,9-dione, and free and conjugated forms of M4, 8-(2,6-diethyl-4-hydroxymethyl-phenyl)-tetrahydro-pyrazolo[1,2-d][1,4,5] oxadiazepine-7,9-dione, calculated as pinoxaden, in/on the following commodities:

Commodity	Parts per million
Cattle, fat	0.04
Cattle, meat	0.04
Cattle, meat byproducts	0.04
Milk	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[70 FR 43322, July 27, 2005]

[↑ Back to Top](#)

### §180.612 Topramezone; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide topramezone, including its metabolites and degradates, in or on the following commodities. Compliance with the following tolerance levels is to be determined by measuring only topramezone ([3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)methanone) in or on the following commodities:

Commodity	Parts per
-----------	-----------

	million
Cattle, meat byproducts	0.80
Corn, field, forage	0.05
Corn, field, grain	0.01
Corn, field, stover	0.05
Corn, pop, grain	0.01
Corn, pop, stover	0.05
Corn, sweet, forage	0.05
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	0.05
Fish-freshwater finfish	0.05
Fish-saltwater finfish	0.05
Fish-shellfish, crustacean	0.05
Fish-shellfish, mollusk	0.05
Goat, meat byproducts	0.80
Hog, meat byproducts	0.40
Horse, meat byproducts	0.80
Poultry, meat byproducts	0.02
Sheep, meat byproducts	0.80
Sugarcane, cane	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[78 FR 48074, Aug. 7, 2013, as amended at 82 FR 35120, July 28, 2017]

[↑ Back to Top](#)

### §180.613 Fonicamid; tolerances for residues.

(a) *General.* (1) Tolerances are established for the residues of the insecticide fonicamid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of fonicamid, *N*-(cyanomethyl)-4-(trifluoromethyl)-3-pyridinecarboxamide, and its metabolites, TFNA (4-trifluoromethylnicotinic acid), TFNA-AM (4-trifluoromethylnicotinamide), and TFNG, *N*-(4-trifluoromethylnicotinoyl)glycine, calculated as the stoichiometric equivalent of fonicamid, in or on the following commodities.

Commodity	Parts per million
Alfalfa, forage	10.0
Alfalfa, hay	1.0
Alfalfa, seed	1.5
Almond, hulls	9.0
Berry, low growing, subgroup 13-07G	1.5
Brassica, leafy greens, subgroup 4-16B, except radish, tops	16
Celtuce	4.0
Cotton, gin byproducts	6.0
Cotton, hulls	2.0
Cotton, meal	1.0
Cottonseed subgroup 20C	0.60
Florence fennel	4.0
Fruit, citrus, group 10-10	1.5
Fruit, pome, group 11-10	0.20
Fruit, stone, group 12-12	0.60
Hop, dried cones	20.0
Kohlrabi	1.5
Leaf petiole vegetable subgroup 22B	4.0
Leafy greens subgroup 4-16A, except spinach	4.0
Nut, tree, group 14-12 except pistachio	0.15
Pea and bean, dried shelled, except soybean, subgroup 6C	3.0
Pea and bean, succulent shelled, subgroup 6B	7.0
Pepper/Eggplant, subgroup 8-10B	3.0
Peppermint, tops	7.0
Pistachio	0.60
Potato, granules/flakes	0.40
Radish, tops	20
Rapeseed subgroup 20A	1.5
Spearmint, tops	7.0
Spinach	9.0
Sunflower subgroup 20B	0.70

Tea <sup>1</sup>	40
Tomato, paste	2.0
Tomato, puree	0.50
Tomato subgroup 8-10A	0.4
Vegetable, <i>brassica</i> , head and stem, group 5-16	1.5
Vegetable, cucurbit, group 9	1.5
Vegetable, legume, edible podded, subgroup 6A	4.0
Vegetable, root, except sugar beet, subgroup 1B	0.60
Vegetable, tuberous and corm, subgroup 1C	0.20

<sup>1</sup>There are no U.S. registrations for tea as of May 11, 2017.

(2) Tolerances are established for the residues of the insecticide flonicamid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of flonicamid, *N*-(cyanomethyl)-4-(trifluoromethyl)-3-pyridinecarboxamide, and its metabolites, TFNA (4-trifluoromethylnicotinic acid), and TFNA-AM (4-trifluoromethylnicotinamide), calculated as the Stoichiometric equivalent of flonicamid, in or on the following commodities.

Commodity	Parts per million
Cattle, fat	0.03
Cattle, meat	0.08
Cattle, meat byproducts	0.08
Egg	0.04
Goat, fat	0.03
Goat, meat	0.08
Goat, meat byproducts	0.08
Hog, fat	0.03
Hog, meat	0.03
Hog, meat byproducts	0.03
Horse, fat	0.03
Horse, meat	0.08
Horse, meat byproducts	0.08
Milk	0.05
Poultry, fat	0.03
Poultry, meat	0.03
Poultry, meat byproducts	0.03
Sheep, fat	0.03
Sheep, meat	0.08
Sheep, meat byproducts	0.08

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for residues of the flonicamid, *N*-(cyanomethyl)-4-(trifluoromethyl)-3-pyridinecarboxamide) and its metabolites, TFNA (4-trifluoromethylnicotinic acid), TFNA-AM (4-trifluoromethylnicotinamide), and TFNG (*N*-(4-trifluoromethylnicotinoyl)glycine), calculated as the stoichiometric equivalent of flonicamid, in or on the specified agricultural commodities, resulting from use of the pesticide pursuant to FFIFRA section 18 emergency exemptions. The tolerances expire on the date specified in the table.

Commodity	Parts per million	Expiration date
Prickly pear, fruit	1.5	12/31/20
Prickly pear, pads	1.5	12/31/20

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined by §180.1(1), are established for the residues of the insecticide flonicamid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of flonicamid, *N*-(cyanomethyl)-4-(trifluoromethyl)-3-pyridinecarboxamide, and its metabolites, TFNA (4-trifluoromethylnicotinic acid), TFNA-AM (4-trifluoromethylnicotinamide), and TFNG (*N*-(4-trifluoromethylnicotinoyl)glycine), calculated as the stoichiometric equivalent of flonicamid, in or on the following commodities:

Commodity	Parts per million
Clover, forage	0.90
Clover, hay	5.0

(d) *Indirect or inadvertent residues.* [Reserved]

[70 FR 51614, Aug. 31, 2005, as amended at 71 FR 15608, Mar. 29, 2006; 73 FR 17923, Apr. 2, 2008; 77 FR 67776, Nov. 14, 2012; 78 FR 75266, Dec. 11, 2013; 81 FR 52352, Aug. 8, 2016; 82 FR 21945, May 11, 2017; 82 FR 31471, July 7, 2017; 83 FR 3615, Jan. 26, 2018; 83 FR 34780, July 23, 2018; 84 FR 13808, Apr. 8, 2019]

[↑ Back to Top](#)**§180.614 Kasugamycin; tolerances for residues.**

(a) *General.* Tolerances are established for residues of kasugamycin, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified is to be determined by measuring only kasugamycin (3-O-[2-amino-4-[(carboxyimino-methyl)amino]-2,3,4,6-tetraoxy- $\alpha$ -D-arabino-hexopyranosyl]-D-chiro-inositol) in or on the commodity.

Commodity	Parts per million
Cherry subgroup 12-12A	0.60
Fruit, pome, group 11-10	0.20
Vegetable, fruiting, group 8 <sup>1</sup>	0.04
Walnut	0.04

<sup>1</sup>There is no U.S. registration as of September 1, 2005.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[79 FR 51497, Aug. 29, 2014, as amended at 83 FR 9446, Mar. 6, 2018]

[↑ Back to Top](#)**§180.615 Amicarbazone; tolerances for residues.**

(a) *General.* Tolerances are established for combined residues of the herbicide, amicarbazone [4-amino-4, 5-dihydro- N-(1,1-dimethylethyl)-3-(1-methylethyl)-5-oxo-1H-1,2,4-triazole-1-carboxamide] and its metabolites DA amicarbazone [N-(1,1-dimethylethyl)-4,5-dihydro-3-(1-methylethyl)-5-oxo-1H-1,2,4-triazole-1-carboxamide] and iPr-2-OH DA amicarbazone [N-(1,1-dimethylethyl)-4,5-dihydro-3-(1-hydroxy-1-methylethyl)-5-oxo-1H-1,2,4-triazole-1-carboxamide], calculated as parent equivalents, in or on the following commodities:

Commodity	Parts per million
Cattle, fat	0.01
Cattle, liver	1.0
Cattle, meat	0.01
Cattle, meat byproducts, except liver	0.10
Corn, field, forage	0.80
Corn, field, grain	0.05
Corn, field, stover	1.0
Goat, fat	0.01
Goat, liver	1.0
Goat, meat	0.01
Goat, meat byproducts, except liver	0.10
Hog, fat	0.01
Hog, liver	0.10
Hog, meat	0.01
Hog, meat byproducts, except liver	0.01
Horse, fat	0.01
Horse, liver	1.0
Horse, meat	0.01
Horse, meat byproducts, except liver	0.10
Milk	0.01
Sheep, fat	0.01
Sheep, liver	1.0
Sheep, meat	0.01
Sheep, meat byproducts, except liver	0.10
Poultry, liver	0.10

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for the indirect or inadvertent residues of amicarbazone [4-amino-4, 5-dihydro-N-(1,1-dimethylethyl)-3-(1-methylethyl)-5-oxo-1H-1,2,4-triazole-1-carboxamide] and its metabolites DA



amicarbazone [N-(1,1-dimethylethyl)-4,5-dihydro-3-(1-methylethyl)-5-oxo-1H-1,2,4-triazole-1-carboxamide] and iPr-2-OH DA amicarbazone [N-(1,1-dimethylethyl)-4,5-dihydro-3-(1-hydroxy-1-methylethyl)-5-oxo-1H-1,2,4-triazole-1-carboxamide], calculated as parent equivalents, in or on the following commodities when present therein as a result of application of amicarbazone to the growing crops in paragraph (a) of this section:

Commodity	Parts per million
Alfalfa, forage	0.05
Alfalfa, hay	0.10
Cotton, gin byproducts	0.30
Cotton, undelinted seed	0.07
Soybean, forage	1.50
Soybean, hay	5.0
Soybean, seed	0.80
Wheat, bran	0.15
Wheat, flour	0.15
Wheat, forage	0.50
Wheat, germ	0.15
Wheat, grain	0.10
Wheat, hay	1.0
Wheat, middlings,	0.15
Wheat, shorts	0.15
Wheat, straw	0.50

[70 FR 55760, Sept. 23, 2005, as amended at 74 FR 46377, Sept. 9, 2009]

[↑ Back to Top](#)

#### §180.616 Fenpropimorph; tolerances for residues.

Tolerances are established for the residues of the fungicide fenpropimorph (rel-(2R,6S)-4-[3-[4-(1,1-dimethylethyl)phenyl]-2-methylpropyl]-2,6-dimethylmorpholine) in or on the following commodity:

Commodity	Parts per million
Banana*	2.0

\*No U.S. registration as of February 10, 2006.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 15612, Mar. 29, 2006]

[↑ Back to Top](#)

#### §180.617 Metconazole; tolerances for residues.

(a) *General.* Tolerances are established for residues of metconazole, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified below is to be determined by measuring only metconazole [5-[(4-chlorophenyl)methyl]-2,2-dimethyl-1-(1H-1,2,4-triazol-1-ylmethyl)cyclopentanol] as the sum of its *cis*- and *trans*-isomers in or on the following commodities:

Commodity	Parts per million
Almond, hulls	4.0
Banana <sup>1</sup>	0.1
Barley, grain	2.5
Barley, hay	7.0
Barley, straw	7.0
Beet, sugar, dried pulp	0.70
Beet, sugar, molasses	0.08
Beet, sugar, roots	0.07
Bushberry subgroup 13-07B	0.40
Cattle, meat byproducts	0.04
Corn, field, forage	3.0
Corn, field, grain	0.02
Corn, field, stover	30
Corn, pop, grain	0.02

Corn, pop, stover	30
Corn, sweet, forage	3.0
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	30.0
Cotton, gin byproducts	8.0
Cotton, undelinted seed	0.25
Egg	0.04
Fruit, stone, group 12-12	0.2
Goat, meat byproducts	0.04
Grain, aspirated grain fractions	7.0
Horse, meat byproducts	0.04
Nut, tree, group 14-12	0.04
Oat, grain	1.0
Oat, hay	17
Oat, straw	6.0
Pea and bean, dried shelled, except soybean, subgroup 6C	0.15
Peanut	0.04
Peanut, refined oil	0.05
Rapeseed subgroup 20A	0.08
Rye, grain	0.25
Rye, straw	14
Sheep, meat byproducts	0.04
Soybean, forage	3.0
Soybean, hay	6.0
Soybean, hulls	0.08
Soybean, seed	0.05
Sugarcane, cane	0.06
Sunflower subgroup 20B	0.7
Vegetable, tuberous and corn, subgroup 1C	0.04
Wheat, grain	0.15
Wheat, hay	16
Wheat, milled byproducts	0.20
Wheat, straw	18

<sup>1</sup>No U.S. registration as of August 30, 2006.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 56388, Sept. 27, 2006, as amended at 71 FR 76196, Dec. 20, 2006; 73 FR 22828, Apr. 28, 2008; 74 FR 21266, May 7, 2009; 76 FR 50904, Aug. 17, 2011; 76 FR 81396, Dec. 28, 2011; 77 FR 26456, May 4, 2012; 77 FR 66723, Nov. 7, 2012; 79 FR 12411, Mar. 5, 2014; 80 FR 30625, May 29, 2015]

[↑ Back to Top](#)

#### §180.618 Benthialdicarb-isopropyl; tolerance for residues.

(a) *General.* Tolerances are established for the combined residues of benthialdicarb-isopropyl, isopropyl[(S)-1-[[[(1R)-1-(6-fluoro-2-benzothiazolyl)ethyl]amino] carbonyl]-2-methylpropyl]carbamate and isopropyl[(S)-1-[[[(1S)-1-(6-fluoro-2-benzothiazolyl)ethyl]amino] carbonyl]-2-methylpropyl]carbamate, in or on the following raw agricultural commodities:

Commodity	Parts per million
Grape, imported	0.25
Grape, raisin	1.0
Tomato	0.45

Note: There are no U.S. registrations as of July 30, 2006.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 52003, Sept. 1, 2006]

[↑ Back to Top](#)

**§180.619 Epoxiconazole; tolerances for residues.**

(a) *General.* Tolerances are established for the residues of the fungicide epoxiconazole [(*re*-1-[[[(2*R*,3*S*)-3-(2-chlorophenyl)-2-(4-fluorophenyl)oxiranyl]methyl]-1*H*-1,2,4-triazole])] in or on the following commodities:

Commodity	Parts per million
Banana*	0.5
Coffee*	0.05

\*No U.S. Registration as of August 4, 2006

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional Registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 53989, Sept. 13, 2006]

[↑ Back to Top](#)

**§180.620 Etofenprox; tolerances for residues.**

(a) *General.* A tolerance is established for residues of the insecticide etofenprox, including its metabolites and degradates, in or on the commodity in the table in this paragraph. Compliance with the tolerance level specified in this paragraph is to be determined by measuring only etofenprox, 2-(4-ethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether, in or on the commodity.

Commodity	Parts per million
Cattle, fat	10.0
Cattle, meat	0.40
Cattle, meat byproducts	10.0
Egg	0.40
All food commodities (including feed commodities) not otherwise listed in this subsection	5.0
Goat, fat	10.0
Goat, meat	0.40
Goat, meat byproducts	10.0
Hog, fat	4.0
Hog, meat	0.20
Hog, meat byproducts	4.0
Horse, fat	10.0
Horse, meat	0.40
Horse, meat byproducts	10.0
Milk	0.60
Poultry, fat	1.0
Poultry, meat	0.01
Poultry, meat byproducts	1.0
Rice, grain	0.01
Sheep, fat	10.0
Sheep, meat	0.40
Sheep, meat byproducts	10.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[76 FR 23498, Apr. 27, 2011, as amended at 78 FR 70877, Nov. 27, 2013]

[↑ Back to Top](#)

**§180.621 Dithianon; tolerances for residues.**

(a) *General.* Tolerances are established for residues of dithianon, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only dithianon, 5, 10-dihydro-5,10-dioxonaphtho(2,3-*b*)-1,4-dithiin-2,3-dicarbonitrile.

Commodity	Parts per million

Fruit, pome, group 11 <sup>1</sup>	5
Grape <sup>2</sup>	3
Hop, dried cones <sup>1</sup>	100

<sup>1</sup>No U.S. registration as of September 5, 2006.

<sup>2</sup>No U.S. registration as of January 29, 2010.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[75 FR 5522, Feb. 3, 2010]

[↑ Back to Top](#)

### §180.622 Ethaboxam; tolerances for residues.

(a) *General.* Tolerances are established for residues of ethaboxam, including its metabolites and degradates, in or on the commodities listed in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only ethaboxam (*N*-(cyano-2-thienylmethyl)-4-ethyl-2-(ethylamino)-5-thiazolecarboxamide) in or on the commodity.

Commodity	Parts per million
Ginseng	0.10
Grape <sup>1</sup>	6.0
Pepper/eggplant subgroup 8-10B	0.90
Vegetable, cucurbit, group 9	0.30
Vegetable, tuberous and corm, subgroup 1C	0.01

<sup>1</sup>There is no U.S. registration as of September 27, 2006.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 56392, Sept. 27, 2006, as amended at 82 FR 36090, Aug. 3, 2017]

[↑ Back to Top](#)

### §180.623 Flufenoxuron; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide, flufenoxuron, 1-[4-(2-chloro- $\alpha,\alpha,\alpha$ -trifluoro-p-tolyloxy)-2-fluorophenyl]-3-(2,6-difluorobenzoyl)urea, in or on the following food commodities.

Commodity	Parts per million
Apple <sup>1</sup>	0.50
Cattle, fat <sup>1</sup>	4.5
Cattle, meat <sup>1</sup>	0.10
Cattle, meat byproducts <sup>1</sup>	0.50
Goat, fat <sup>1</sup>	4.5
Goat, meat <sup>1</sup>	0.10
Goat, meat byproducts <sup>1</sup>	0.50
Grape <sup>1</sup>	0.70
Grape, raisin <sup>1</sup>	2.0
Horse, fat <sup>1</sup>	4.5
Horse, meat <sup>1</sup>	0.10
Horse, meat byproducts <sup>1</sup>	0.50
Milk	0.20
Milk, fat <sup>1</sup>	4.0
Orange <sup>1</sup>	0.30
Orange, oil <sup>1</sup>	60
Pear <sup>1</sup>	0.50

Sheep, fat <sup>1</sup>	4.5
Sheep, meat <sup>1</sup>	0.10
Sheep, meat byproducts <sup>1</sup>	0.50

<sup>1</sup>There are no U.S. registrations as of September 30, 2006.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional restrictions.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 57436, Sept. 29, 2006]

[↑ Back to Top](#)

#### §180.624 Metrafenone; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide metrafenone, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified in the following table is to be determined by measuring only metrafenone (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6-methylphenyl)methanone in or on the following commodities:

Commodity	Parts per million
Apricot	0.70
Cherry subgroup 12-12A	2.0
Fruit, pome, group 11-10	1.5
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	4.5
Grape, raisin	17
Hop, dried cones	70
Peach subgroup 12-12B	0.70
Vegetable, cucurbit, group 9	0.50
Vegetable, fruiting, group 8-10	0.90
White button mushroom	0.50

(b) *Section 18 emergency exemption.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[71 FR 54917, Sept. 20, 2006, as amended at 75 FR 75393, Dec. 3, 2010; 79 FR 63053, Oct. 22, 2014; 84 FR 12520, Apr. 2, 2019]

[↑ Back to Top](#)

#### §180.625 Orthosulfamuron; tolerances for residues.

(a) *General.* Tolerances are established for residues of orthosulfamuron 1-(4,6-dimethoxypyrimidin-2-yl)-3-[2-(dimethylcarbamoyl)-phenylsulfamoyl] urea) *per se* in or on the following commodities:

Commodity	Parts per million
Rice, grain	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect and inadvertant residues.* [Reserved]

[72 FR 8931, Feb. 28, 2007, as amended at 80 FR 72599, Nov. 20, 2015]

[↑ Back to Top](#)

#### §180.626 Prothioconazole; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of prothioconazole, 2-[2-(1-chlorocyclopropyl)-3-(2-chlorophenyl)-2-hydroxypropyl]-1,2-dihydro-3H-1,2,4-triazole-3-thione, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only

prothioconazole and its metabolite prothioconazole-desthio, or  $\alpha$ -(1-chlorocyclopropyl)- $\alpha$ -[(2-chlorophenyl)methyl]-1H-1,2,4-triazole-1-ethanol, calculated as parent in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	0.02
Alfalfa, hay	0.02
Beet, sugar, roots	0.25
Berry, low growing, except strawberry, subgroup 13-07H	0.20
Bushberry, subgroup 13-07B	2.0
Corn, sweet kernel plus cob with husks removed	0.04
Cotton, gin byproducts	4.0
Cottonseed subgroup 20C	0.4
Grain, aspirated grain fractions	11
Grain, cereal, forage, fodder and straw, group 16, except sorghum, and rice; forage	8.0
Grain, cereal, forage, fodder and straw, group 16, except sorghum, and rice; hay	7.0
Grain, cereal, forage, fodder and straw, group 16, except sorghum, and rice; stover	10
Grain, cereal, forage, fodder and straw, group 16, except sorghum, straw	5.0
Grain, cereal, group 15, except sweet corn and sorghum	0.35
Pea and bean, dried shelled, except soybean, subgroup 6C	0.9
Peanut	0.02
Potato	0.02
Rapeseed subgroup 20A	0.15
Rice, hulls	0.90
Soybean, forage	4.5
Soybean, hay	17
Soybean, seed	0.15
Sunflower subgroup 20B <sup>1</sup>	0.2
Vegetable, cucurbit, crop group 9	0.30

<sup>1</sup>There are no U.S. registrations allowing use of prothioconazole on the commodities in the Sunflower subgroup 20B as of August 16, 2017.

(2) Tolerances are established for residues of prothioconazole, 2-[2-(1-chlorocyclopropyl)-3-(2-chlorophenyl)-2-hydroxypropyl]-1,2-dihydro-3H-1,2,4-triazole-3-thion, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only prothioconazole and its metabolites prothioconazole-desthio, or  $\alpha$ -(1-chlorocyclopropyl)- $\alpha$ -[(2-chlorophenyl)methyl]-1H-1,2,4-triazole-1-ethanol, and conjugates that can be converted to these two compounds by acid hydrolysis, calculated as parent in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.1
Cattle, meat	0.02
Cattle, meat byproducts	0.2
Goat, fat	0.1
Goat, meat	0.02
Goat, meat byproducts	0.2
Hog, meat byproducts	0.05
Horse, fat	0.1
Horse, meat	0.02
Horse, meat byproducts	0.2
Milk	0.02
Poultry liver	0.02
Sheep, fat	0.1
Sheep, meat	0.02
Sheep, meat byproducts	0.2

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 11783, Mar. 14, 2007, as amended at 73 FR 14719, Mar. 19, 2008; 74 FR 14749, Apr. 1, 2009; 74 FR 46699, Sept. 11, 2009; 75 FR 29914, May 28, 2010; 76 FR 61592, Oct. 5, 2011; 78 FR 67052, Nov. 8, 2013; 81 FR 78923, Nov. 10, 2016; 82 FR 38846, Aug. 16, 2017; 83 FR 52991, Oct. 19, 2018]

[↑ Back to Top](#)

#### §180.627 Fluopicolide; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide fluopicolide [2,6-dichloro-*N*-[[3-chloro-5-(trifluoromethyl)-2-pyridinyl]methyl]benzamide], including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified below is to be determined by measuring only fluopicolide [2,6-dichloro-*N*-[[3-chloro-5-(trifluoromethyl)-2-pyridinyl]methyl]benzamide] in or on the commodity.

Commodity	Parts per million
Basil, dried, leaves	200
Basil, fresh leaves	40
Bean, moth, succulent	0.90
Bean, runner, succulent	0.90
Bean, snap, succulent	0.90
Bean, wax, succulent	0.90
Bean, yardlong, succulent	0.90
Brassica, head and stem, subgroup 5A	5.0
Citrus, dried pulp	0.03
Citrus, oil	1.0
Fruit, citrus, crop group 10-10	0.01
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2.0
Grape, raisin	6.0
Hop, dried cones	15
Potato, granules/flakes	0.15
Potato, processed potato waste	0.2
Vegetable, brassica (cole) leafy subgroup 5B	18
Vegetable, bulb, crop group 3-07	7.0
Vegetable, cucurbit, group 9	0.50
Vegetable, fruiting, crop group 8-10	1.6
Vegetable, leafy, except brassica, group 4	25
Vegetable, leaves of root and tuber, group 2	15.0
Vegetable root, subgroup 1A	0.15
Vegetable, tuberous and corm, subgroup 1C	0.09

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for residues of the fungicide fluopicolide [2,6-dichloro-*N*-[[3-chloro-5-(trifluoromethyl)-2-pyridinyl]methyl]benzamide], including its metabolites and degradates, in or on the commodities in the table in this paragraph. Compliance with the tolerance levels specified below is to be determined by measuring only fluopicolide [2,6-dichloro-*N*-[[3-chloro-5-(trifluoromethyl)-2-pyridinyl]methyl]benzamide] in or on the commodity.

Commodity	Parts per million
Corn, field, forage	0.08
Corn, field, grain	0.01
Corn, field, stover	0.20
Wheat, aspirated grain fractions	0.07
Wheat, forage	0.20
Wheat, grain	0.02
Wheat, hay	0.50
Wheat, milled byproducts	0.07
Wheat, straw	0.50

[72 FR 14447, Mar. 28, 2007, as amended at 73 FR 5455, Jan. 30, 2008; 73 FR 30498, May 28, 2008; 76 FR 22054, Apr. 20, 2011; 79 FR 12401, Mar. 5, 2014; 79 FR 45693, Aug. 6, 2014; 81 FR 65924, Sept. 26, 2016; 83 FR 9712, Mar. 7, 2018]

[↑ Back to Top](#)

#### §180.628 Chlorantraniliprole; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide chlorantraniliprole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only chlorantraniliprole, 3-bromo-*N*-[4-chloro-2-methyl-6-[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide.

Commodity	Parts per million
Acerola	2.0
Alfalfa, seed	7.0
Almond, hulls	5.0
Animal feed, nongrass, group 18, forage	25
Animal feed, nongrass, group 18, hay	90

Apple, wet pomace	2.5
Artichoke, globe <sup>1</sup>	4.0
Artichoke, globe	2.0
Asparagus	13
Atemoya	4.0
Avocado	4.0
Banana	4.0
Beet, sugar, molasses	9.0
Berry, large shrub/tree, subgroup 13-07C	2.5
Berry, low growing, subgroup 13-07G	1.0
Biriba	4.0
Brassica, head and stem, subgroup 5A	4.0
Brassica, leafy greens, subgroup 5B	11
Bushberry, subgroup 13-07B	2.5
Cacao bean	0.08
Cacao bean, chocolate	1.5
Cacao bean, cocoa powder	1.5
Cacao bean, roasted bean	0.8
Cactus	13
Canistel	4.0
Cattle, fat	0.5
Cattle, meat	0.1
Cattle, meat byproducts	0.5
Cherimoya	4.0
Citrus, dried pulp	14
Coffee, green bean	0.4
Coffee, instant	2.0
Corn, field, grain	0.04
Corn, field, milled byproducts	0.1
Corn, pop, grain	0.04
Corn, sweet, kernel plus cobs with husk removed	0.02
Cotton, gin byproduct	30
Cotton, hulls	0.40
Cottonseed subgroup 20C	0.3
Crayfish	8.0
Custard apple	4.0
Egg	1.0
Feijoa	4.0
Fig	4.0
Fruit, caneberry, subgroup 13-07A	1.8
Fruit, citrus, group 10-10	1.4
Fruit, pome, group 11-10	1.2
Fruit, small vine climbing, subgroup 13-07F	2.5
Fruit, stone, group 12-12	2.5
Fruit, stone, group 12-12, except cherry, chickasaw plum, and damson plum <sup>1</sup>	4.0
Goat, fat	0.5
Goat, meat	0.1
Goat, meat byproducts	0.5
Grain, aspirated grain fractions	640
Grain, cereal, except rice and corn, group 15	6.0
Grain, cereal, forage, fodder and straw, group 16	40
Grape, raisin	5.0
Grass forage, fodder and hay, group 17	90
Guava	4.0
Herb subgroup 19A, dried leaves	90
Herb subgroup 19A, fresh leaves	25
Hog, fat	0.05
Hog, meat	0.02
Hog, meat byproducts	0.05
Hop, dried cones <sup>1</sup>	90
Hop, dried cones	40
Horse, fat	0.5
Horse, meat	0.1
Horse, meat byproducts	0.5
llama	4.0
Jaboticaba	2.0
Longan	4.0
Lychee	2.0
Mango	4.0
Milk	0.1
Nut, tree, group 14 <sup>1</sup>	0.04
Nut, tree, group 14-12	0.02



Olive	4.0
Olive, oil	40
Onion, bulb, subgroup 3-07A	0.30
Onion, green, subgroup 3-07B	3.0
Papaya	4.0
Passionfruit	4.0
Peanut	0.06
Peanut, hay	90
Peppermint, tops	9.0
Persimmon	4.0
Pineapple	1.5
Pineapple, process residue	3.0
Pistachio <sup>1</sup>	0.04
Pomegranate	4.0
Poultry, fat	0.2
Poultry, meat	0.05
Poultry, meat byproducts	0.2
Pulasan	4.0
Quinoa, forage	40
Quinoa, grain	6.0
Quinoa, hay	40
Quinoa, straw	40
Rambutan	4.0
Rapeseed subgroup 20A	2.0
Rice, grain	0.15
Rice, hulls	0.4
Sapodilla	4.0
Sapote, black	4.0
Sapote, mamey	4.0
Sapote, white	4.0
Sheep, fat	0.5
Sheep, meat	0.1
Sheep meat byproducts	0.5
Soursop	4.0
Spanish lime	4.0
Spearmint, tops	9.0
Spice, subgroup 19B	90
Star apple	4.0
Starfruit	4.0
Sugar apple	4.0
Sugarcane, cane	14
Sugarcane, molasses	420
Sunflower subgroup 20B	2.0
Tea, dried	50.0
Teff, forage	40
Teff, grain	6.0
Teff, hay	40
Teff, straw	40
Ti, leaves	13.0
Ti, root	0.3
Vegetable, cucurbit, group 9	0.5
Vegetable, foliage of legume, group 7	90
Vegetable, fruiting, group 8-10	1.4
Vegetable, leafy, except brassica, group 4	13
Vegetable, leaves of root and tuber, group 2	40.0
Vegetable, legume, group 6	2.0
Vegetable, root and tuber, group 1	0.30
Wax jambu	4.0

<sup>1</sup>This tolerance expires on December 14, 2016.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[75 FR 5532, Feb. 3, 2010, as amended at 75 FR 17566, Apr. 7, 2010; 76 FR 44821, July 27, 2011; 76 FR 59909, Sept. 28, 2011; 77 FR 60315, Oct. 3, 2012; 77 FR 75561, Dec. 21, 2012; 78 FR 57285, Sept. 18, 2013; 79 FR 7401, Feb. 7, 2014; 81 FR 38604, June 14, 2016; 81 FR 61619, Sept. 7, 2016]

[↑ Back to Top](#)

**§180.629 Flutriafol; tolerances for residues.**

(a) *General.* Tolerances are established for the residues of flutriafol, [(±)-α-(2-fluorophenyl)-α-(4-fluorophenyl)-1*H*-1,2,4-triazole-1-ethanol], including its metabolites and degradates in or on the following commodities. Compliance with the following tolerances is to be determined by measuring flutriafol only.

Commodity	Parts per million
African tree nut	0.02
Almond	0.60
Almond, hull	15
Banana <sup>1</sup>	0.30
Beet sugar	0.08
Brassica, head and stem (subgroup 5A)	1.5
Brassica, leafy greens (subgroup 5B)	7.0
Brazil nut	0.02
Bur oak	0.02
Butternut	0.02
Cajou	0.02
Cashew	0.02
Castanha-do-maranhao	0.02
Cattle, fat	0.05
Cattle, liver	1.0
Cattle, meat byproducts, except liver	0.05
Cattle, muscle	0.05
Coconut	0.02
Coffee, green, bean <sup>1</sup>	0.15
Coffee, instant <sup>1</sup>	0.30
Coquito nut	0.02
Corn, field, forage	5.0
Corn, field, grain	0.01
Corn, field, refined oil	0.02
Corn, field, stover	15
Corn, pop	0.01
Corn, pop, stover	15
Cotton, gin byproducts	6.0
Cotton, undelinted seed	0.50
Dika nut	0.02
Egg	0.01
Fruit, pome, group 11-09	0.40
Fruit, stone, group 12-10	1.5
Goat, fat	0.05
Goat, liver	1.0
Goat, meat byproducts, except liver	0.05
Goat, muscle	0.05
Grain, aspirated fractions	6.0
Grape	1.5
Grape, raisin	2.4
Guiana chestnut	0.02
Hazelnut	0.02
Heartnut	0.02
Hickory nut	0.02
Hog, fat	0.01
Hog, meat byproducts	0.05
Hog, muscle	0.01
Hop, dried cones	20
Horse, fat	0.05
Horse, liver	1.0
Horse, meat byproducts, except liver	0.05
Horse, muscle	0.05
Japanese horse-chestnut	0.02
Lettuce, head	1.5
Macadamia nut	0.02
Milk	0.02
Mongongo nut	0.02
Monkey-pot	0.02
Pachira nut	0.02
Peanut	0.09
Peanut, hay	15
Pecan	0.02
Poultry, fat	0.01
Poultry, meat byproducts	0.01
Radicchio	1.5

Sapucaia nut	0.02
Sheep, fat	0.05
Sheep, liver	1.0
Sheep, meat byproducts, except liver	0.05
Sheep, muscle	0.05
Sorghum, grain, forage	2.0
Sorghum, grain, grain	1.5
Sorghum, grain, stover	6.0
Soybean, seed	0.35
Strawberry	1.5
Tomato, paste	1.5
Vegetable, cucurbit, group 9	0.30
Vegetable, fruiting, group 8-10	1.0
Vegetable, leafy, except <i>Brassica</i> , crop group 4, except head lettuce and radicchio	10
Walnut, black	0.02
Walnut, English	0.02
Wheat, bran	0.30
Wheat, forage	30
Wheat, germ	0.25
Wheat, grain	0.15
Wheat, hay	15
Wheat, straw	9.0

<sup>1</sup>There are no U.S. registrations as of October 22, 2013.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for the indirect or inadvertent residues of the fungicide flutriafol, including its metabolites and degradates, in or on the commodities in the table below when present therein as a result of the application of flutriafol to the growing crops listed in the table to paragraph (a) of this section. Compliance with the following tolerance levels specified below is to be determined by measuring only flutriafol ((±)-α-(2-fluorophenyl)-α-(4-fluorophenyl)-1*H*-1,2,4-triazole-1-ethanol) in or on the following commodities:

Commodity	Parts per million
Corn, sweet, forage	0.09
Corn, sweet, kernel plus cob with husk removed	0.01
Corn, sweet, stover	0.07

[75 FR 26673, May 12, 2010, as amended at 76 FR 69647, Nov. 9, 2011; 77 FR 47301, Aug. 8, 2012; 77 FR 48901, Aug. 15, 2012; 78 FR 75262, Dec. 11, 2013; 79 FR 32673, June 6, 2014; 80 FR 5951, Feb. 4, 2015; 80 FR 71952, Nov. 18, 2015]

[↑ Back to Top](#)

### §180.631 Pyrasulfotole; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide pyrasulfotole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of pyrasulfotole ((5-hydroxy-1,3-dimethyl-1*H*-pyrazol-4-yl)[2-(methylsulfonyl)-4-(trifluoromethyl)phenyl]methanone) and its desmethyl metabolite (5-hydroxy-3-methyl-1*H*-pyrazol-4-yl)[2-(methylsulfonyl)-4-(trifluoromethyl)phenyl]methanone), calculated as the stoichiometric equivalent of pyrasulfotole, in or on the commodities:

Commodity	Parts per million
Aspirated grain fractions	0.40
Barley, grain	0.02
Barley, hay	0.30
Barley, straw	0.20
Cattle, fat	0.03
Cattle, liver	3.0
Cattle, meat	0.02
Cattle, meat byproducts, except liver	0.70
Eggs	0.02
Goat, fat	0.03
Goat, liver	3.0
Goat, meat	0.02
Goat, meat byproducts, except liver	0.70
Grass, forage	25
Grass, hay	3.5
Hog, fat	0.02

Hog, liver	0.30
Hog, meat	0.02
Hog, meat byproducts, except liver	0.05
Horse, fat	0.03
Horse, liver	3.0
Horse, meat	0.02
Horse, meat byproducts, except liver	0.70
Milk	0.03
Oat, forage	0.10
Oat, grain	0.08
Oat, hay	0.50
Oat, straw	0.20
Poultry, fat	0.02
Poultry, meat	0.02
Poultry, meat byproducts	0.20
Rye, forage	0.20
Rye, grain	0.02
Rye, straw	0.20
Sheep, fat	0.03
Sheep, liver	3.0
Sheep, meat	0.02
Sheep, meat byproducts, except liver	0.70
Sorghum, grain, forage	1.5
Sorghum, grain, grain	0.70
Sorghum, grain, stover	0.80
Wheat, forage	0.20
Wheat, grain	0.02
Wheat, hay	0.80
Wheat, straw	0.20

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 45649, Aug. 15, 2007, as amended at 76 FR 23898, Apr. 29, 2011]

[↑ Back to Top](#)

### §180.632 Fenazaquin; Tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide fenazaquin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only fenazaquin, or 4-[2-[4-(1,1-dimethylethyl)phenyl]-ethoxy]quinazoline.

Commodity	Parts per million
Almond, hulls	4
Avocado	0.15
Berry, low growing, subgroup 13-07G	2
Bushberry, subgroup 13-07B	0.8
Caneberry, subgroup 13-07A	0.7
Fruit, Citrus, Group 10 except Grapefruit <sup>2</sup>	0.5
Fruit, citrus, group 10-10	0.4
Fruit, citrus, group 10-10, oil	20
Fruit, pome, group 11-10	0.6
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.7
Fruit, stone, group 12-12	2
Grape, raisin	0.8
Hop, dried cones	30
Nuts, Tree, Group 14-12	0.02
Pea and bean, dried shelled, except soybean, subgroup 6C	0.3
Pea and bean, succulent shelled, subgroup 6B	0.03
Peppermint, fresh leaves	10
Pineapple <sup>1</sup>	0.2
Spearmint, fresh leaves	10
Tea, dried <sup>1</sup>	9
Vegetable, cucurbit, group 9	0.3
Vegetable, fruiting, group 8-10	0.3
Vegetable, legume, edible podded, subgroup 6A	0.4

<sup>1</sup>There are no U.S. registrations as of May 25, 2017 for use on pineapple and tea.

<sup>2</sup>This tolerance expires on October 11, 2019.

(b) *Section is emergency exemptions.* [Reserved]

(c) *Tolerances with regional registration.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 44393, Aug. 8, 2007, as amended at 80 FR 25958, May 6, 2015; 82 FR 24071, May 25, 2017; 84 FR 14622, Apr. 11, 2019]

[↑ Back to Top](#)

### §180.633 Florasulam; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide florasulam, including its metabolites and degradates, in or on the commodities below. Compliance with the tolerance levels specified below is to be determined by measuring only florasulam, N-(2, 6-difluorophenyl)-8-fluoro-5-methoxy (1, 2, 4) triazole (1, 5-c)pyrimidine-2-sulfonamide, in or on the commodities.

Commodity	Parts per million
Barley, grain	0.01
Barley, hay	0.05
Barley, straw	0.05
Oat, forage	0.05
Oat, grain	0.01
Oat, hay	0.05
Oat, straw	0.05
Rye, forage	0.05
Rye, grain	0.01
Rye, straw	0.05
Teff, forage	0.05
Teff, grain	0.01
Teff, hay	0.05
Teff, straw	0.05
Wheat, forage	0.05
Wheat, grain	0.01
Wheat, hay	0.05
Wheat, straw	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 55077, Sept. 28, 2007, as amended at 83 FR 35147, July 25, 2018]

[↑ Back to Top](#)

### §180.634 Tembotrione; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide tembotrione, including its metabolites and degradates, in or on the commodities listed in the table to this paragraph. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of tembotrione, 2-[2-chloro-4-(methylsulfonyl)-3-[(2,2,2-trifluoroethoxy)methyl]benzoyl]-1,3-cyclohexanedione and its metabolite, 2-[2-chloro-4-(methylsulfonyl)-3-[(2,2,2-trifluoroethoxy)methyl]benzoyl]-4,6-dihydroxy-1,3-cyclohexanedione, calculated as the stoichiometric equivalent of tembotrione, in or on the following commodities.

Commodity	Parts per million
Cattle, liver	0.40
Cattle, meat byproducts, except liver	0.07
Corn, field, forage	0.60
Corn, field, grain	0.02
Corn, field, stover	0.45
Corn, pop, grain	0.02
Corn, pop, stover	0.35
Corn, sweet, forage	0.35

Corn, sweet, stover	0.60
Goat, liver	0.40
Goat, meat byproducts, except liver	0.07
Horse, liver	0.40
Horse, meat byproducts, except liver	0.07
Poultry, liver	0.07
Sheep, liver	0.40
Sheep, meat byproducts, except liver	0.07

(2) Tolerances are established for residues of the herbicide tembotrione, including its metabolites and degradates, in or on the commodities listed in the table to this paragraph. Compliance with the tolerance levels specified below is to be determined by measuring only tembotrione, 2-[2-chloro-4-(methylsulfonyl)-3-[(2,2,2-trifluoroethoxy)methyl]benzoyl]-1,3-cyclohexanedione in or on the following commodities.

Commodity	Parts per million
Corn, sweet, kernel plus cob with husks removed	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[72 FR 55085, Sept. 28, 2007, as amended at 74 FR 47894, Sept. 18, 2009]

[↑ Back to Top](#)

### §180.635 Spinetoram; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide spinetoram, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of XDE-175-J: 1-*H-as-indaceno*[3,2-d]oxacyclododecin-7,15-dione,2-[(6deoxy-3-O-ethyl-2,4-di-O-methyl- $\alpha$ -L-mannopyranosyl)oxy]-13-[[*(2R,5S,6R)*-5(dimethylamino)tetrahydro-6-methyl-2*H*-pyran-2-yl]oxy]-9-ethyl-2,3,3a,4,5,5a,5b,6,9,10,11,12,13,14,16a,16b-hexadecahydro-14-methyl-,(*2R,3aR,5aR,5bS,9S,13S,14R,16aS,16bR*); XDE-175-L: 1-*H-as-indaceno*[3,2-d]oxacyclododecin-7,15-dione,2-[(6deoxy-3-O-ethyl-2,4-di-O-methyl- $\alpha$ -L-mannopyranosyl)oxy]-13-[[*(2R,5S,6R)*-5(dimethylamino)tetrahydro-6-methyl-2*H*-pyran-2-yl]oxy]-9-ethyl-2,3,3a,5a,5b,6,9,10,11,12,13,14,16a,16b-tetradecahydro-4,14-dimethyl-,(*2S,3aR,5aS,5bS,9S,13S,14R,16aS,16bS*); ND-J: (*2R,3aR,5aR,5bS,9S,13S,14R,16aS,16bR*)-9-ethyl-14-methyl-13[[*(2S,5S,6R)*-6-methyl-5-(methylamino)tetrahydro-2*H*-pyran-2-yl]oxy]-7,15-dioxo-2,3,3a,4,5,5a,5b,6,7,9,10,11,12,13,14,15,16a,16b-octadecahydro-1-*H-as-indaceno*[3,2d]oxacyclododecin-2-yl-6-deoxy-3-O-ethyl-2,4-di-O-methyl- $\alpha$ -L-mannopyranoside; and NF-J: (*2R,3S,6S*)-6-[[*(2R,3aR,5aR,5bS,9S,13S,14R,16aS,16bR)*-2-[(6-deoxy-3-O-ethyl-2,4-di-O-methyl- $\alpha$ -L-mannopyranosyl)oxy]-9-ethyl-14-methyl-7,15-dioxo-2,3,3a,4,5,5a,5b,6,7,9,10,11,12,13,14,15,16a,16b-octadecahydro-1-*H-as-indaceno*[3,2d]oxacyclododecin-13-yl]oxy]-2-methyltetrahydro-2*H*-pyran-3-yl(methyl)formamide, calculated as the stoichiometric equivalent of spinetoram.

Commodity	Parts per million
Acerola	0.30
Almond, hulls	19
Amaranth grain, grain	1.0
Apple, wet pomace	0.50
Artichoke, globe	0.30
Asparagus	0.04
Atemoya	0.30
Avocado	0.30
Banana	0.25
Beet, sugar, molasses	0.75
Berry, low growing, subgroup 13-07G, except cranberry	0.90
Biriba	0.30
Brassica, head and stem, subgroup 5A	2.0
Brassica, leafy greens, subgroup 5B	10
Bushberry subgroup 13-07B	0.50
Caneberry subgroup 13-07A	0.80
Canistel	0.30
Cattle, fat	5.5
Cattle, liver	0.85
Cattle, meat	0.20
Cattle, meat byproducts (except liver)	0.60
Cherimoya	0.30
Citrus, dried pulp	0.50
Citrus, oil	3.0

Coffee, green bean	0.04
Corn, sweet, kernel plus cob with husks removed	0.04
Cotton, gin byproducts	1.5
Cottonseed subgroup 20C	0.04
Cranberry	0.04
Custard apple	0.30
Date	0.10
Egg	0.04
Feijoa	0.30
Fig	0.10
Fruit, citrus, group 10-10	0.30
Fruit, pome, group 11-10	0.20
Fruit, small, vine climbing, subgroup 13-07F, except fuzzy kiwifruit	0.50
Fruit, stone 12-12	0.30
Goat, fat	5.5
Goat, liver	0.85
Goat, meat	0.20
Goat, meat byproducts (except liver)	0.60
Grain, aspirated fractions	20
Grain, cereal, group 15, except rice, sorghum, pearl millet and proso millet	0.04
Grain, cereal, group 16, forage	3.5
Grain, cereal, group 16, hay	10
Grain, cereal, group 16, stover	10
Grain, cereal, straw, group 16, except rice	1.0
Grape, raisin	0.70
Guava	0.30
Herb, dried, subgroup 19A	22
Herb, fresh, subgroup 19A	3.0
Hog, fat	0.40
Hog, meat	0.04
Hog, meat byproducts	0.04
Hop, dried cones	22
Horse, fat	5.5
Horse, liver	0.85
Horse, meat	0.20
Horse, meat byproducts (except liver)	0.60
llama	0.30
Jaboticaba	0.30
Longan	0.30
Lychee	0.30
Mango	0.30
Milk	0.30
Milk, fat	7.5
Millet, pearl, grain	1.0
Millet, proso, grain	1.0
Nut, tree, group 14-12	0.10
Onion, bulb, subgroup 3-07A	0.10
Onion, green, subgroup 3-07B	2.0
Papaya	0.30
Passionfruit	0.30
Pea and bean, dried shelled, except soybean, subgroup 6C	0.04
Pea and bean, succulent shelled, subgroup 6B	0.04
Peanut	0.04
Peanut, hay	11
Peppermint, tops	3.5
Pineapple	0.04
Pineapple, processed residue	0.15
Pomegranate	0.30
Poultry, fat	0.10
Poultry, meat	0.04
Poultry, meat byproducts	0.04
Pulasan	0.30
Quinoa, grain	0.04
Rambutan	0.30
Sapodilla	0.30
Sapote, black	0.30
Sapote, mamey	0.30
Sapote, white	0.30
Sheep, fat	5.5
Sheep, liver	0.85
Sheep, meat	0.20
Sheep, meat products (except liver)	0.60
Sorghum, grain, grain	1.0

Soursop	0.30
Soybean, seed	0.04
Spanish lime	0.30
Spearmint, tops	3.5
Spice, subgroup 19B, except black pepper	1.7
Star apple	0.30
Star fruit	0.30
Sugar apple	0.30
Tea, dried <sup>1</sup>	70
Tea, instant <sup>1</sup>	70
Ti, leaves	10
Vegetable, cucurbit, group 9	0.30
Vegetable, foliage of legume, group 7	8.0
Vegetable, fruiting, group 8-10	0.40
Vegetable, leafy, except Brassica, group 4	8.0
Vegetable, leaves of root and tuber, group 2	10
Vegetable, legume, edible podded, subgroup 6A	0.30
Vegetable, root and tuber, group 1	0.10
Watercress	8.0
Wax jambu	0.30

<sup>1</sup>There are no U.S. registrations as of August 8, 2018 for use on tea.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registration.* [Reserved]

(d) *Indirect and inadvertent residues.* [Reserved]

[72 FR 57499, Oct. 10, 2007, as amended at 73 FR 14714, Mar. 19, 2008; 74 FR 40759, Aug. 13, 2009; 80 FR 80282, Dec. 24, 2015; 83 FR 38981, Aug. 8, 2018]

[↑ Back to Top](#)

#### §180.636 1,3-dichloropropene; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the fungicide *cis*- and *trans*-1,3-dichloropropene and its metabolites *cis*- and *trans*-3-chloroacrylic acid, and *cis*- and *trans*-3-chloroallyl alcohol in or on the following commodities.

Commodity	Parts per million
Grape	0.018

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 8218, Feb. 13, 2008]

[↑ Back to Top](#)

#### §180.637 Mandipropamid; tolerances for residues.

(a) *General.* Tolerances are established for residues of mandipropamid, including its metabolites and degradates, in or on the commodities listed in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only mandipropamid (4-chloro-*N*-[2-[3-methoxy-4-(2-propynyloxy)phenyl]ethyl]- $\alpha$ -(2-propynyloxy)benzeneacetamide) in or on the commodity.

Commodity	Parts per million
Asparagus bean, edible podded	0.90
Basil, dried leaves	200
Basil, fresh leaves	30
Bean ( <i>Phaseolus</i> spp.), edible podded	0.90
Bean ( <i>Vigna</i> spp.), edible podded	0.90
Catjang bean, edible podded	0.90
Celtuce	20
Chinese longbean, edible podded	0.90
Citrus, dried pulp	0.70
Citrus, oil	15



Cowpea, edible podded	0.90
Fennel, Florence, fresh leaves and stalk	20
French bean, edible podded	0.90
Fruit, citrus, group 10-10	0.50
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	1.4
Garden bean, edible podded	0.90
Ginseng	0.30
Goa bean, edible podded	0.90
Grape, raisin	3.0
Green bean, edible podded	0.90
Guar bean, edible podded	0.90
Hop, dried cones	50
Jackbean, edible podded	0.90
Kidney bean, edible podded	0.90
Kohlrabi	3.0
Lablab bean, edible podded	0.90
Leaf petiole vegetable subgroup 22B	20
Moth bean, edible podded	0.90
Mung bean, edible podded	0.90
Navy bean, edible podded	0.90
Onion, bulb, subgroup 3-07A	0.05
Onion, green, subgroup 3-07B	4.0
Potato, wet peel	0.15
Rice bean, edible podded	0.90
Scarlet runner bean, edible podded	0.90
Snap bean, edible podded	0.90
Sword bean, edible podded	0.90
Urd bean, edible podded	0.90
Vegetable, <i>Brassica</i> , head and stem, group 5-16	3.0
Vegetable, cucurbit, group 9	0.6
Vegetable, fruiting, group 8-10	1.0
Vegetable, leafy, group 4-16	25
Vegetable soybean, edible podded	0.90
Vegetable, tuberous and corm, subgroup 1C	0.09
Velvet bean, edible podded	0.90
Wax bean, edible podded	0.90
Winged pea, edible podded	0.90
Yardlong bean, edible podded	0.90

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of mandipropamid, including its metabolites and degradates, in or on the commodities listed in the table below resulting from use of the pesticide pursuant to FFIFRA section 18 emergency exemptions. Compliance with the tolerance levels specified below is to be determined by measuring only mandipropamid (4-chloro-N-[2-[3-methoxy-4-(2-propynyloxy)phenyl]ethyl]- $\alpha$ -(2-propynyloxy)benzeneacetamide) in or on the commodity. The tolerances expire on the date specified in the table.

Commodity	Parts per million	Expiration/revocation date
Basil, dried	240	12/31/15

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent tolerances.* [Reserved]

[73 FR 2816, Jan. 16, 2008, as amended at 74 FR 33169, July 10, 2009; 76 FR 55804, Sept. 9, 2011; 77 FR 74119, Dec. 13, 2012; 78 FR 76992, Dec. 20, 2013; 81 FR 17088, Mar. 28, 2016; 84 FR 10700, Mar. 22, 2019 ]

[↑ Back to Top](#)

### §180.638 Pyroxsulam; tolerances for residues.

(a) *General.* Tolerances are established for residues of pyroxsulam, including its metabolites and degradates, in or on the commodities listed in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only pyroxsulam, N-(5,7-dimethoxy[1, 2,4]triazolo[1, 5-a]pyrimidin-2-yl)-2-methoxy-4-(trifluoromethyl)-3-pyridinesulfonamide, in or on the commodity.

Commodity	Parts per million
Teff, forage	0.06
Teff, grain	0.01
Teff, hay	0.01
Teff, straw	0.03
Wheat, forage	0.06
Wheat, grain	0.01

Wheat, hay	0.01
Wheat, straw	0.03

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 10402, Feb. 27, 2008, as amended at 82 FR 30990, July 5, 2017; 83 FR 31895, July 10, 2018]

[↑ Back to Top](#)

### §180.639 Flubendiamide; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of flubendiamide, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified in the table is to be determined by measuring only flubendiamide  $N^2$ -[1, 1-dimethyl-2-(methylsulfonyl)ethyl]-3-iodo- $N^1$ -[2-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]-1,2-benzenedicarboxamide, in or on the following commodities:

Commodity	Parts per million
Almond, hulls	9.0
Apple, wet pomace	5.0
Corn, field, forage	8.0
Corn, field, grain	0.03
Corn, field, stover	15
Corn, pop, grain	0.02
Corn, pop, stover	15
Corn, sweet, forage	9.0
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	25
Cotton gin byproducts	60
Cotton, undelinted seed	0.90
Fruit, pome, group 11	1.5
Fruit, stone, group 12	1.6
Grape	1.4
Nut, tree, group 14	0.06
Okra	0.30
Tea <sup>1</sup>	50
Vegetable, cucurbit, group 9	0.20
Vegetable, fruiting, group 8	0.60
Vegetable, leafy, except <i>Brassica</i> , group 4	11

<sup>1</sup>There are no U.S. registrations as of July 5, 2017, for use of flubendiamide on tea.

(2) Tolerances are established for residues of flubendiamide, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified in the table is to be determined by measuring only flubendiamide  $N^2$ -[1,1-dimethyl-2-(methylsulfonyl)ethyl]-3-iodo- $N^1$ -[2-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]-1,2-benzenedicarboxamide, in or on the following commodities:

Commodity	Parts per million
Alfalfa, forage	25
Alfalfa, hay	65
Artichoke, globe	1.6
Berry, low growing, subgroup 13-07G, except cranberry	1.5
<i>Brassica</i> , head and stem, subgroup 5A	3.0
<i>Brassica</i> , leafy greens, subgroup 5B	25
Cattle, fat	0.70
Cattle, meat	0.08
Cattle, meat byproducts	0.60
Egg	0.40
Fruit, small fruit vine climbing except fuzzy kiwifruit, subgroup 13-07F	1.4
Goat, fat	0.70
Goat, meat	0.08
Goat, meat byproducts	0.60
Grain, aspirated grain fractions	153
Hog, fat	0.15
Hog, meat	0.03
Hog, meat byproducts	0.15
Horse, fat	0.70

Horse, meat	0.08
Horse, meat byproducts	0.60
Milk	0.15
Milk, fat	1.0
Pea and bean, dried shelled, except soybean, subgroup 6C	0.60
Pea and bean, succulent shelled, subgroup 6B	0.05
Peanut, hay	60
Peanut, meal	0.03
Peanut, nutmeat	0.02
Peanut, refined oil	0.03
Pistachio	0.06
Poultry, fat	3.0
Poultry, liver	0.60
Poultry, meat	0.10
Rice, grain <sup>1</sup>	0.50
Safflower, seed	5.0
Sheep, fat	0.70
Sheep, meat	0.08
Sheep, meat byproducts	0.60
Sorghum, grain, forage	12
Sorghum, grain, grain	5.0
Sorghum, grain, stover	14
Soybean, forage	18
Soybean, hay	60
Soybean, hulls	0.80
Soybean, seed	0.25
Sugarcane, cane	0.30
Sunflower, seed	5.0
Turnip, greens	25
Vegetable, foliage of legume, except soybean, subgroup 7A	35
Vegetable, legume, edible podded, subgroup 6A	0.50

<sup>1</sup>There are no U.S. registrations for rice, grain.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for residues of flubendiamide, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified in the table is to be determined by measuring only flubendiamide N2-[1, 1-dimethyl-2-(methylsulfonyl)ethyl]-3-iodo-N1-[2-methyl-4- [1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl]-1, 2-benzenedicarboxamide, in or on the following commodities:

Commodity	Parts per million
Barley, hay	0.04
Barley, straw	0.07
Buckwheat	0.07
Clover, forage	0.15
Clover, hay	0.04
Grass, forage	0.15
Grass, hay	0.04
Millet, pearl, forage	0.15
Millet, pearl, hay	0.04
Millet, proso, forage	0.15
Millet, proso, hay	0.04
Millet, proso, straw	0.07
Oats, forage	0.15
Oats, hay	0.04
Oats, straw	0.07
Rye, forage	0.15
Rye, straw	0.07
Teosinte, forage	0.15
Teosinte, hay	0.04
Teosinte, straw	0.07
Triticale, forage	0.15
Triticale, hay	0.04
Triticale, straw	0.07
Wheat, forage	0.15
Wheat, hay	0.03
Wheat, straw	0.03

[76 FR 16307, Mar. 23, 2011, as amended at 76 FR 55273, Sept. 7, 2011; 77 FR 73945, Dec. 12, 2012; 82 FR 30982, July 5, 2017]

[↑ Back to Top](#)

### §180.640 Pyridalyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of pyridalyl, pyridine,2-[3-[2,6-dichloro-4-[(3,3-dichloro-2-propenyl)oxy]phenoxy]propoxy]-5-(trifluoromethyl, in or on the following raw agricultural commodities:)

Commodity	Parts per million
Brassica, head and stem, subgroup 5A	3.5
Mustard greens	30
Turnip greens	30
Vegetable, fruiting, group 8	1.0
Vegetables, leafy, except Brassica, group 4	20

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 25533, May 7, 2008]

[↑ Back to Top](#)

### §180.641 Spirotetramat; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide spirotetramat, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of spirotetramat (cis-3-(2,5-dimethylphenyl)-8-methoxy-2-oxo-1-azaspiro[4.5]dec-3-en-4-yl-ethyl carbonate) and its metabolites cis-3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]dec-3-en-2-one, cis-3-(2,5-dimethylphenyl)-3-hydroxy-8-methoxy-1-azaspiro[4.5]decane-2,4-dione, cis-3-(2,5-dimethylphenyl)-8-methoxy-2-oxo-1-azaspiro[4.5]dec-3-en-4-yl beta-D-glucopyranoside, and cis-3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]decane-2-one, calculated as the stoichiometric equivalent of spirotetramat, in or on the following commodities.

Commodity	Parts per million
Acerola	2.5
Almond, hulls	9.0
Artichoke, globe	1.5
Asparagus <sup>1</sup>	0.10
Aspirated grain fractions	10.0
Avocado	0.60
Beet, sugar, molasses	0.30
Beet, sugar, roots	0.15
Berry, low growing, except strawberry, subgroup 13-07H	0.30
Black sapote	0.60
Brassica, head and stem, subgroup 5A	2.5
Brassica, leafy, subgroup 5B	8.0
Bushberry subgroup 13-07B	3.0
Canistel	0.60
Carrot, roots	0.15
Citrus, oil	6.0
Coffee, green bean	0.20
Coffee, instant	0.50
Corn, sweet, kernel plus cob with husks removed	1.5
Cotton gin byproducts <sup>1</sup>	10.0
Cotton, undelinted seed <sup>1</sup>	0.30
Feijoa	2.5
Fruit, citrus, group 10-10	0.60
Fruit, pome, group 11-10	0.70
Fruit, stone, group 12-12	4.5
Grape, raisin	3.0
Guava	2.5
Hop, dried cones	10.0
Jaboticaba	2.5
Longan	13.0
Lychee	13.0
Mamey sapote	0.60
Mango	0.60

Nut, tree, group 14-12	0.25
Papaya	0.40
Passionfruit	2.5
Persimmon	2.5
Pineapple	0.30
Pistachio	0.25
Pomegranate	0.50
Potato, flakes	1.6
Pulasan	13.0
Rambutan	13.0
Sapodilla	0.60
Small fruit vine climbing subgroup, except fuzzy kiwifruit, subgroup 13-07F	1.3
Soybean forage	8.0
Soybean hay	16.0
Soybean seed	5.0
Spanish lime	13
Star apple	0.60
Starfruit	2.5
Strawberry <sup>1</sup>	0.40
Taro, leaves	9.0
Vegetable, bulb, group 3-07	0.80
Vegetable, cucurbit, group 9	0.30
Vegetable, foliage of legume, except soybean, subgroup 07A	7.0
Vegetable, fruiting, group 8-10	2.5
Vegetable, leafy, except brassica, group 4	9.0
Vegetable, legume, group 06, except soybean	2.5
Vegetable, tuberous and corm, subgroup 1C	0.60
Watercress	2.0
Wax jambu	2.5
White sapote	0.60

<sup>1</sup>There are no U.S. registrations for these commodities.

(2) Tolerances are also established for residues of the insecticide spirotetramat, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of spirotetramat (*cis*-3-(2,5-dimethylphenyl)-8-methoxy-2-oxo-1-azaspiro[4.5]dec-3-en-4-yl-ethyl carbonate) and its metabolite *cis*-3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]dec-3-en-2-one, calculated as the stoichiometric equivalent of spirotetramat, in or on the following commodities:

Commodity	Parts per million
Cattle, fat	0.02
Cattle, meat	0.02
Cattle, meat byproducts	0.20
Eggs	0.02
Goat, fat	0.02
Goat, meat	0.02
Goat, meat byproducts	0.20
Hog, meat byproducts	0.02
Horse, fat	0.02
Horse, meat	0.02
Horse, meat byproducts	0.20
Milk	0.01
Poultry, meat byproducts	0.02
Sheep, fat	0.02
Sheep, meat	0.02
Sheep, meat byproducts	0.20

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registrations are established for residues of the insecticide spirotetramat, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of spirotetramat (*cis*-3-(2,5-dimethylphenyl)-8-methoxy-2-oxo-1-azaspiro[4.5]dec-3-en-4-yl-ethyl carbonate) and its metabolites *cis*-3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]dec-3-en-2-one, *cis*-3-(2,5-dimethylphenyl)-3-hydroxy-8-methoxy-1-azaspiro[4.5]decane-2,4-dione, *cis*-3-(2,5-dimethylphenyl)-8-methoxy-2-oxo-1-azaspiro[4.5]dec-3-en-4-yl beta-D-glucopyranoside, and *cis*-3-(2,5-dimethylphenyl)-4-hydroxy-8-methoxy-1-azaspiro[4.5]decan-2-one, calculated as the stoichiometric equivalent of spirotetramat, in or on the following commodities.

Commodity	Parts per million
Banana	4.0

(d) *Indirect or inadvertant residues.* [Reserved]

[73 FR 39256, July 9, 2008, as amended at 76 FR 28681, May 18, 2011; 77 FR 8746, Feb. 15, 2012; 77 FR 75859, Dec. 26, 2012; 78 FR 28512, May 15, 2013; 78 FR 66651, Nov. 6, 2013; 81 FR 73347, Oct. 25, 2016; 82 FR 27149, June 14, 2017]

[↑ Back to Top](#)

#### §180.643 Uniconazole; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide/plant growth regulator uniconazole-P, (E)-(S)-1-(4-chlorophenyl)-4,4-dimethyl-2-(1H-1,2,4-triazol-1-yl)pent-1-en-3-ol, its *R*-enantiomer and its *Z*-isomer in or on the following raw agricultural commodities:

Commodity	Parts per million
Vegetable, fruiting, group 8	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertant residues.* [Reserved]

[73 FR 51736, Sept. 5, 2008]

[↑ Back to Top](#)

#### §180.644 Cyprosulfamide; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide safener cyprosulfamide, *N*-[[4-[(cyclopropylamino)carbonyl] phenyl]sulfonyl]-2-methoxybenzamide, in or on the following raw agricultural commodities:

Commodity	Parts per million
Corn, field, forage	0.20
Corn, field, grain	0.01
Corn, field, stover	0.20
Corn, pop, grain	0.01
Corn, pop, stover	0.20
Corn, sweet, forage	0.40
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	0.35

(2) Tolerances are established for residues of the herbicide safener cyprosulfamide, *N*-[[4-[(cyclopropylamino)carbonyl] phenyl]sulfonyl]-2-methoxybenzamide, and its metabolite 4-(aminosulfonyl)-*N*-cyclopropylbenzamide, calculated as cyprosulfamide, in or on the following raw agricultural commodities:

Commodity	Parts per million
Cattle, meat byproducts	0.02
Goat, meat byproducts	0.02
Horse, meat byproducts	0.02
Sheep, meat byproducts	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertant residues.* [Reserved]

[73 FR 60974, Oct. 15, 2008]

[↑ Back to Top](#)

#### §180.645 Thiencarbazone-methyl; tolerances for residues.

(a)(1) *General.* Tolerances are established for residues of the thiencarbazone-methyl, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only only thiencarbazone-methyl [methyl 4-[[[(4,5-dihydro-3-methoxy-4-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl)-carbonyl]amino]sulfonyl]-5-methyl-3-thiophenecarboxylate] in or on the following food and feed commodities.

Commodity	Parts per million
-----------	-------------------

Corn, field, forage	0.04
Corn, field, grain	0.01
Corn, field, stover	0.02
Corn, pop, grain	0.01
Corn, pop, stover	0.01
Corn, sweet, forage	0.05
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	0.05
Wheat, forage	0.15
Wheat, grain	0.01
Wheat, hay	0.01
Wheat, straw	0.01

(2) Tolerances are established for residues of thien carbazole-methyl, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of thien carbazole-methyl [methyl 4-[[[(4,5-dihydro-3-methoxy-4-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl)-carbonyl]amino]sulfonyl]-5-methyl-3-thiophenecarboxylate] and its metabolite BYH 18636-MMT [5-methoxy-4-methyl-2,4-dihydro-3*H*-1,2,4-triazol-3-one], calculated as the stoichiometric equivalent of thien carbazole-methyl, in or on the following food commodities of animal origin:

Commodity	Parts per million
Cattle, meat	0.02
Cattle, meat byproducts	0.02
Goat, meat	0.02
Goat, meat byproducts	0.02
Horse, meat	0.02
Horse, meat byproducts	0.02
Milk	0.02
Sheep, meat	0.02
Sheep, meat byproducts	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for residues of thien carbazole-methyl, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of thien carbazole-methyl [methyl 4-[[[(4,5-dihydro-3-methoxy-4-methyl-5-oxo-1*H*-1,2,4-triazol-1-yl)-carbonyl]amino]sulfonyl]-5-methyl-3-thiophenecarboxylate] and its metabolite BYH 18636-MMT-glucoside [2-hexopyranosyl-5-methoxy-4-methyl-2,4-dihydro-3*H*-1,2,4-triazol-3-one], calculated as the stoichiometric equivalent of thien carbazole-methyl, in or on the following food commodities:

Commodity	Parts per million
Soybean, forage	0.04
Soybean, hay	0.15

[73 FR 60968, Oct. 15, 2008, as amended at 83 FR 29033, June 25, 2018]

[↑ Back to Top](#)

### §180.646 Ipconazole; tolerances for residues.

(a) *General.* Tolerances are established for residues of ipconazole, including its metabolites and degradates, in or on the commodities listed in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only ipconazole (2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1*H*-1,2,4-triazol-1-ylmethyl)cyclopentanol) in or on the commodity.

Commodity	Parts per million
Cotton, gin byproducts	0.01
Cotton, undelinted seed	0.01
Grain, cereal, forage, fodder and straw, group 16, except rice	0.01
Grain, cereal group 15, except rice	0.01
Peanut	0.01
Soybean, forage	0.01
Vegetable, legume, group 6	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[73 FR 69559, Nov. 19, 2008, as amended at 79 FR 15240, Mar. 19, 2014]

[↑ Back to Top](#)

#### §180.647 d-Phenothrin; tolerances for residues.

(a) *General.* A tolerance of 0.01 parts per million is established for residues of the insecticide d-phenothrin in or on all food/feed crops following wide-area mosquito adulticide applications.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[74 FR 32443, July 8, 2009]

[↑ Back to Top](#)

#### §180.648 Meptyldinocap; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the fungicide meptyldinocap, 2-(1-methylheptyl)-4,6-dinitrophenyl (2E)-2-butenate and 2,4-DNOP, 2,4-dinitro-6-(1-methylheptyl)phenol expressed as meptyldinocap in or on the following commodities:

Commodity	Parts Per Million
Grape	0.20

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[74 FR 48396, Sept. 23, 2009]

[↑ Back to Top](#)

#### §180.649 Saflufenacil; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of saflufenacil, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of saflufenacil, 2-chloro-5-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2H)-pyrimidinyl]-4-fluoro-N-[[methyl(1-methylethyl)amino]sulfonyl]benzamide, and its metabolites N-[2-chloro-5-(2,6-dioxo-4-(trifluoromethyl)-3,6-dihydro-1(2H)-pyrimidinyl)-4-fluorobenzoyl]-N'-isopropylsulfamide and N-[4-chloro-2-fluoro-5-({[(isopropylamino)sulfonyl]amino}carbonyl)phenyl]urea, calculated as the stoichiometric equivalent of saflufenacil, in or on the commodities.

Commodity	Parts per million
Alfalfa, forage	0.08
Alfalfa, hay	0.10
Almond, hulls	0.10
Banana <sup>1</sup>	0.03
Barley, bran	1.5
Barley, grain	1.0
Barley, straw	15
Coffee, green bean <sup>1</sup>	0.03
Cotton, gin byproducts	0.45
Cottonseed subgroup 20C	0.20
Fruit, citrus, group 10	0.03
Fruit, pome, group 11	0.03
Fruit, stone, group 12	0.03
Grain, aspirated grain fractions	50
Grain, cereal, forage, fodder and straw group 16 (except barley and wheat straw)	0.10
Grain, cereal, group 15 (except barley and wheat grain)	0.03
Grape	0.03
Grass, forage	15



Grass, hay	20
Grass, seed screenings	0.15
Grass, straw	0.15
Mango <sup>1</sup>	0.03
Nut, tree, group 14	0.03
Olive	0.03
Pea and bean, dried shelled, except soybean, subgroup 6C	0.30
Pea and bean, succulent shelled, subgroup 6B	0.03
Pea, hay	17
Pistachio	0.03
Pomegranate	0.03
Rapeseed subgroup 20A	0.45
Soybean, hulls	0.50
Soybean, seed	0.10
Sugarcane, cane <sup>2</sup>	0.05
Sugarcane, molasses <sup>2</sup>	0.08
Sunflower subgroup 20B	1.0
Vegetable, foliage of legume, group 7 (except pea, hay)	0.10
Vegetable, legume, edible podded, subgroup 6A	0.03
Wheat, grain	0.60
Wheat, straw	6.0

<sup>1</sup>No U.S. registration as of December 7, 2011.

<sup>2</sup>No U.S. registration as of February 21, 2014.

(2) Tolerances are established for residues of saflufenacil, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only saflufenacil, 2-chloro-5-[3,6-dihydro-3-methyl-2,6-dioxo-4-(trifluoromethyl)-1(2*H*)-pyrimidinyl]-4-fluoro-*N*-[[methyl(1-methylethyl)amino]sulfonyl]benzamide, in or on the commodities.

Commodity	Parts per million
Cattle, fat	0.04
Cattle, liver	50
Cattle, meat	0.02
Cattle, meat byproducts, except liver	0.30
Fish-freshwater finfish	0.01
Fish-shellfish, crustacean	0.01
Goat, fat	0.04
Goat, liver	50
Goat, meat	0.02
Goat, meat byproducts, except liver	0.30
Hog, fat	0.01
Hog, liver	2.0
Hog, meat	0.01
Hog, meat byproducts, except liver	0.02
Horse, fat	0.04
Horse, liver	50
Horse, meat	0.02
Horse, meat byproducts, except liver	0.30
Milk	0.01
Sheep, fat	0.04
Sheep, liver	50
Sheep, meat	0.02
Sheep, meat byproducts, except liver	0.30

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[74 FR 46689, Sept. 11, 2009, as amended at 76 FR 27261, May 11, 2011; 76 FR 76309, Dec. 7, 2011; 79 FR 9866, Feb. 21, 2014; 79 FR 52219, Sept. 3, 2014; 80 FR 22420, Apr. 22, 2015; 80 FR 73667, Nov. 25, 2015]

[↑ Back to Top](#)

## §180.650 Isoxaben; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide isoxaben, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only isoxaben, *N*-[3-(1-ethyl-1-methylpropyl)-5-isoxazolyl]-2, 6-dimethoxybenzamide, in or on the commodity.

Commodity	Parts per million
Almond, hulls	0.40
Apple	0.01
Bushberry subgroup 13-07B	0.01
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.01
Nut, tree, group 14-12	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[75 FR 69360, Nov. 12, 2010, as amended at 83 FR 5312, Feb. 7, 2018]

[↑ Back to Top](#)

#### §180.651 Imazosulfuron; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide imazosulfuron, including its metabolites and degradates, in or on the following commodities. Compliance with the tolerance levels specified in the following table below is to be determined by measuring only imazosulfuron, 2-chloro-*N*-[[4,6-dimethoxy-2-pyrimidinyl]amino]carbonyl]imidazo-[1,2- $\alpha$ ]pyridine-3-sulfonamide, in or on the commodity.

Commodity	Parts per million
Melon subgroup 9A	0.02
Pepper, bell	0.02
Pepper, non-bell	0.02
Rice, grain	0.02
Tomato	0.02
Vegetable, tuberous and corm, subgroup 1C	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[75 FR 81884, Dec. 29, 2010, as amended at 78 FR 44444, July 24, 2013]

[↑ Back to Top](#)

#### §180.652 Ethiprole; tolerances for residues.

(a) *General.* Tolerances are established for residues of ethiprole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only ethiprole, 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-(ethylsulfinyl)-1*H*-pyrazole-3-carbonitrile.

**TABLE 1 TO PARAGRAPH (a)**

Commodity	Parts per million
Coffee, green bean <sup>1</sup>	0.1
Rice, grain <sup>1</sup>	1.7
Tea, dried <sup>1</sup>	30

<sup>1</sup>There are no U.S. registrations for this commodity as of June 28, 2019.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[76 FR 18921, Apr. 6, 2011, as amended at 84 FR 30939, June 28, 2019]

[↑ Back to Top](#)**§180.653 Indaziflam; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the herbicide indaziflam, *N*-[(1*R*,2*S*)-2,3-dihydro-2,6-dimethyl-1*H*-inden-1-yl]-6-(1-fluoroethyl)-1,3,5-triazine-2,4-diamine, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the table below is to be determined by measuring only indaziflam, in or on the commodity.

Commodity	Parts per million
Almond, hulls	0.15
Banana <sup>1</sup>	0.01
Bushberry subgroup 13-07B	0.01
Caneberry subgroup 13-07A	0.01
Coffee, green bean	0.01
Fruit, citrus, group 10-10	0.01
Fruit, pome, group 11-10	0.01
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.01
Fruit, stone, group 12-12	0.01
Fruit, tropical and subtropical, small fruit, edible peel, subgroup 23A	0.01
Hop, dried cones	0.06
Nut, tree, group 14-12	0.01
Palm, oil <sup>1</sup>	0.03
Sugarcane, refined sugar <sup>1</sup>	0.01

<sup>1</sup>No U.S. Registrations as of 12/02/2013.

<sup>2</sup>Tolerance without a corresponding U.S. registration.

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for residues of the herbicide indaziflam, *N*-[(1*R*,2*S*)-2,3-dihydro-2,6-dimethyl-1*H*-inden-1-yl]-6-(1-fluoroethyl)-1,3,5-triazine-2,4-diamine, including its metabolites and degradates in or on the specified agricultural commodities, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. Compliance with the tolerance levels specified in the table in this paragraph (b) is to be determined by measuring only indaziflam and FDAT, 6-[(1*R*)-1-fluoroethyl]-1,3,5-triazine-2,4-diamine (converted to parent equivalents), in or on the commodity. The tolerances expire on the date specified in the table.

Commodity	Parts per million	Expiration date
Grass, forage, fodder, and hay, Group 17, forage	30	12/31/20
Grass, forage, fodder, and hay, Group 17, hay	100	12/31/20

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[76 FR 18905, Apr. 6, 2011, as amended at 79 FR 4630, Jan. 29, 2014; 82 FR 30987, July 5, 2017; 83 FR 8002, Feb. 23, 2018]

[↑ Back to Top](#)**§180.654 Isopyrazam; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the fungicide isopyrazam, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only isopyrazam (3-(difluoromethyl)-1-methyl-*N*-[1,2,3,4-tetrahydro-9-(1-methylethyl)-1,4-methanonaphthalen-5-yl]-1*H*-pyrazole-4-carboxamide), as the sum of its *syn*-isomer (3-(difluoromethyl)-1-methyl-*N*-[(1*R*S, 4*S*R, 9*R*S)-1,2,3,4-tetrahydro-9-(1-methylethyl)-1,4-methanonaphthalen-5-yl]-1*H*-pyrazole-4-carboxamide) and *anti*-isomer (3-(difluoromethyl)-1-methyl-*N*-[(1*R*S, 4*S*R, 9*S*R)-1,2,3,4-tetrahydro-9-(1-methylethyl)-1,4-methanonaphthalen-5-yl]-1*H*-pyrazole-4-carboxamide) in or on the commodity.

Commodity	Parts per million
Apple <sup>1</sup>	0.70
Banana <sup>1</sup>	0.05
Peanut <sup>1</sup>	0.01
Pepper, bell <sup>1</sup>	0.50
	0.50

Tomato <sup>1</sup>	
Vegetable, cucurbit, subgroup 9A <sup>1</sup>	0.30

<sup>1</sup>There are no U.S. registrations for use of isopyrazam on these commodities.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[76 FR 61596, Oct. 5, 2011, as amended at 78 FR 78745, Dec. 27, 2013; 82 FR 24075, May 25, 2017]

[↑ Back to Top](#)

#### §180.655 Flazasulfuron; tolerances for residues.

(a) *General.* Tolerances are established for residues of flazasulfuron, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only flazasulfuron (*N*-[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]-3-(trifluoromethyl)-2-pyridinesulfonamide]).

Commodity	Parts per million
Almond, hulls	0.01
Fruit, citrus, group 10-10	0.01
Grape	0.01
Nut, tree, group 14-12	0.01
Olive	0.01
Sugarcane	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 10968, Feb. 24, 2012, as amended at 79 FR 52989, Sept. 5, 2014; 82 FR 24066, May 25, 2017]

[↑ Back to Top](#)

#### §180.656 Amisulbrom; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide amisulbrom, including its metabolites and degradates, in or on the commodities listed below. Compliance with the tolerance levels is to be determined by measuring only amisulbrom, 3-[(3-bromo-6-fluoro-2-methyl-1*H*-indole-1-yl) sulfonyl]-*N*, *N*-dimethyl-1*H*-1, 2, 4-triazole-1-sulfonamide].

Commodity <sup>1</sup>	Parts per million
Grape	0.40
Grape, raisin	1.0
Tomato	0.50
Tomato, paste	1.2

<sup>1</sup>There is no U.S. registration for use of amisulbrom on grape or tomato.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[76 FR 59914, Sept. 28, 2011]

[↑ Back to Top](#)

#### §180.657 Metaflumizone; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide metaflumizone, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of metaflumizone (*E* and *Z* isomers; 2-[2-(4-cyanophenyl)-1-[3-

(trifluoromethyl) phenyl]ethylidene]-*N*-[4-(trifluoromethoxy)phenyl] hydrazinecarboxamide) and its metabolite 4-{2-oxo-2-[3-(trifluoromethyl) phenyl]ethyl}-benzotrile, calculated as the stoichiometric equivalent of metaflumizone, in or on the following commodities:

Commodity	Parts per million
Almond, hulls	0.04
Eggplant <sup>1</sup>	1.5
Fruit, citrus, group 10-10	0.04
Fruit, pome, group 11-10	0.04
Fruit, stone, group 12-12	0.04
Grape	0.04
Nut, tree, group 14-12	0.04
Pepper <sup>1</sup>	1.5
Tomato <sup>1</sup>	0.60
Tomato, paste <sup>1</sup>	1.2

<sup>1</sup>There are no U.S. registrations as of April 4, 2014.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 10386, Feb. 22, 2012, as amended at 79 FR 18810, Apr. 4, 2014; 80 FR 66800, Oct. 30, 2015]

[↑ Back to Top](#)

#### §180.658 Penthiopyrad; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of penthiopyrad, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only penthiopyrad (*N*-[2-(1,3-dimethylbutyl)-3-thienyl]-1-methyl-3-(trifluoromethyl)-1H-pyrazole-4-carboxamide).

Commodity	Parts per million
Alfalfa, forage	7.0
Alfalfa, hay	20
Almond, hulls	6.0
Apple, wet pomace	1.5
Barley, grain	0.15
Barley, hay	80
Barley, milled byproducts	0.90
Barley, straw	1.0
Beet, sugar, dried pulp	1.5
Beet, sugar, roots	0.5
Berry, low growing, subgroup 13-07G	3.0
<i>Brassica</i> , leafy greens, subgroup 4-16B	50
Buckwheat, grain	0.15
Bushberry subgroup 13-07B	6
Caneberry subgroup 13-07A	10
Celtuce	30
Corn, field, forage	40
Corn, field, grain	0.01
Corn, field, refined oil	0.05
Corn, field, stover	15
Corn, pop, grain	0.01
Corn, sweet, kernel plus cob with husks removed	0.01
Cotton, gin byproducts	15
Fennel, Florence, fresh leaves and stalk	30
Fruit, pome, group 11-10	0.50
Fruit, stone, group 12-12	4
Grain, aspirated fractions	30
Kohlrabi	5
Leaf petiole vegetable subgroup 22B	30
Leafy greens subgroup 4-16A	30
Millet, <i>spp.</i>	0.80
Nut, tree, group 14 <sup>1</sup>	0.06
Nut, tree, group 14-12	0.05
Oat, forage	40
Oat, grain	0.15

Oat, hay	80
Oat, straw	1.0
Oilseed group 20	1.5
Pea and bean, dried shelled, except soybean, subgroup 6C	0.40
Peanut	0.04
Peanut, hay	30
Peanut, refined oil	0.06
Pistachio <sup>1</sup>	0.06
Potato, processed potato waste	0.20
Rye, forage	40
Rye, grain	0.15
Rye, straw	1.0
Sorghum, forage	40
Sorghum, grain, grain	0.80
Sorghum, stover	15
Soybean, seed	0.40
Teosinte, grain	0.15
Tomato, paste	3.5
Triticale, forage	40
Triticale, grain	0.15
Triticale, hay	80
Triticale, straw	1.0
Vegetable, <i>brassica</i> , head and stem, group 5-16	5
Vegetable, bulb, group 3-07	3.0
Vegetable, cucurbit, group 9	0.60
Vegetable, foliage of legume, group 7, hay	200
Vegetable, foliage of legume, group 7, vines/forage	50
Vegetable, fruiting, group 8-10	3.0
Vegetable, leaves of root and tuber, group 2	50
Vegetable, legume, edible podded, subgroup 6A	4.0
Vegetable, legume, succulent shelled, subgroup 6B	0.40
Vegetable, root, subgroup 1B, except sugar beet	3.0
Vegetable, tuber and corm, subgroup 1C	0.06
Wheat, forage	40
Wheat, grain	0.15
Wheat, hay	80
Wheat, milled byproducts	0.30
Wheat, straw	1.0

<sup>1</sup>This tolerance expires on December 6, 2019.

(2) Tolerances are established for residues of penthiopyrad, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of penthiopyrad (*N*-[2-(1,3-dimethylbutyl)-3-thienyl]-1-methyl-3-(trifluoromethyl)-1H-pyrazole-4-carboxamide) and its metabolite (1-methyl-3-trifluoromethyl-1H-pyrazole-4-carboxamide), calculated as the stoichiometric equivalent of penthiopyrad, in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.03
Cattle, meat	0.03
Cattle, meat byproducts	0.09
Goat, fat	0.03
Goat, meat	0.03
Goat, meat byproducts	0.09
Horse, fat	0.03
Horse, meat	0.03
Horse, meat byproducts	0.09
Milk	0.02
Sheep, fat	0.03
Sheep, meat	0.03
Sheep, meat byproducts	0.09

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 14297, Mar. 9, 2012, as amended at 84 FR 26359, June 6, 2019]

[↑ Back to Top](#)

**§180.659 Pyroxasulfone; tolerances for residues.**

(a) *General.* (1) Tolerances are established for residues of the herbicide pyroxasulfone, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of pyroxasulfone, 3-[[[5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methyl]sulfonyl]-4,5-dihydro-5,5-dimethylisoxazole, and its metabolite, 5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-carboxylic acid (M-3), calculated as the stoichiometric equivalent of pyroxasulfone, in or on the commodity.

Commodity	Parts per million
Corn, field, grain	0.02
Corn, pop, grain	0.015
Corn, sweet, kernel plus cob with husks removed	0.015
Cottonseed, subgroup 20C	0.04
Wheat, grain	0.03

(2) Tolerances are established for residues of the herbicide pyroxasulfone, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of pyroxasulfone, 3-[[[5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methyl]sulfonyl]-4,5-dihydro-5,5-dimethylisoxazole, and its metabolites, 5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methanesulfonic acid (M-1); 5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-carboxylic acid (M-3); and [5-(difluoromethoxy)-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methanesulfonic acid (M-25), calculated as the stoichiometric equivalent of pyroxasulfone, in or on the commodity.

Commodity	Parts per million
Corn, field, forage	0.09
Corn, field, stover	0.15
Corn, pop, stover	0.15
Corn, sweet, forage	0.10
Corn, sweet, stover	0.15
Cotton, gin byproducts	0.20
Soybean, forage	1.0
Soybean, hay	2.0
Wheat, forage	6.0
Wheat, hay	1.0
Wheat, straw	0.60

(3) Tolerances are established for residues of the herbicide pyroxasulfone, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of pyroxasulfone, 3-[[[5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methyl]sulfonyl]-4,5-dihydro-5,5-dimethylisoxazole, and its metabolites, 5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-carboxylic acid (M-3); [5-(difluoromethoxy)-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methanesulfonic acid (M-25); and 3-[1-carboxy-2-(5,5-dimethyl-4,5-dihydroisoxazol-3-ylthio)ethylamino]-3-oxopropanoic acid (M-28), calculated as the stoichiometric equivalent of pyroxasulfone, in or on the commodity.

Commodity	Parts per million
Soybean, seed	0.06

(4) Tolerances are established for residues of the herbicide pyroxasulfone, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only the sum of pyroxasulfone [3-[[[5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methyl]sulfonyl]-4,5-dihydro-5,5-dimethylisoxazole] and its metabolites [5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methanesulfonic acid (M-1) and 5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-carboxylic acid (M-3), calculated as the stoichiometric equivalent of pyroxasulfone, in or on the commodity.

Commodity	Parts per million
Milk	0.003

(5) Tolerances are established for residues of the herbicide pyroxasulfone, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of pyroxasulfone (3-[[[5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)pyrazol-4-yl]methyl]sulfonyl]-4,5-dihydro-5,5-dimethyl-1,2-oxazole), and its metabolites, M-1 (5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-yl) methanesulfonic acid), M-3 (5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1*H*-pyrazol-4-carboxylic acid), M-25 (5-(difluoromethoxy)-3-(trifluoromethyl)-1*H*-pyrazol-4-yl]methanesulfonic acid) and M-28 (3-[1-carboxy-2-(5,5-dimethyl-4,5-dihydroisoxazol-3-ylthio)ethylamino]-3-oxopropanoic acid) calculated as the stoichiometric equivalent of pyroxasulfone, in or on the following commodities:

Commodity	Parts per
-----------	-----------

	million
Flax, seed	0.07
Leaf petiole vegetable subgroup 22B	0.80
Pea and bean, dried shelled, except soybean, subgroup 6C	0.15
Peanut	0.30
Peanut, hay	4.0
Peanut, meal	0.40
Potato, granules/flakes	0.20
Peppermint, fresh leaves	0.20
Peppermint, oil	0.70
Soybean, vegetable, succulent shelled	0.40
Spearmint, fresh leaves	0.20
Spearmint, oil	0.70
Sunflower subgroup 20B	0.30
Vegetable, bulb, group 3-07	0.15
Vegetable, foliage of legume, except soybean, subgroup 7A	3.0
Vegetable, soybean, edible podded	0.40
Vegetable, tuberous and corm, subgroup 1C	0.08

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerance with regional registrations.* Tolerances are established for residues of the herbicide pyroxasulfone, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of pyroxasulfone (3-[(5-difluoromethoxy-1-methyl-3-(trifluoromethyl)pyrazol-4-yl)methylsulfonyl]-4,5-dihydro-5,5-dimethyl-1,2-oxazole), and its metabolites, M-1 (5-difluoromethoxy-1-methyl-3-trifluoromethyl-1H-pyrazol-4-yl)methanesulfonic acid), M-3 (5-difluoromethoxy-1-methyl-3-trifluoromethyl-1H-pyrazol-4-carboxylic acid), M-25 (5-difluoromethoxy-3-trifluoromethyl-1H-pyrazol-4-yl)methanesulfonic acid) and M-28 (3-[1-carboxy-2-(5,5-dimethyl-4,5-dihydroisoxazol-3-ylthio)ethylamino]-3-oxopropanoic acid) calculated as the stoichiometric equivalent of pyroxasulfone, in or on the commodity.

Commodity	Parts per million
Grass, forage	0.50
Grass, hay	1.0

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 12213, Feb. 29, 2012, as amended at 78 FR 13257, Feb. 27, 2013; 78 FR 46279, July 31, 2013; 79 FR 34633, June 18, 2014; 82 FR 18235, Apr. 18, 2017; 83 FR 22859, May 17, 2018; 83 FR 54264, Oct. 29, 2018]

[↑ Back to Top](#)

### §180.660 Pyriofenone; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide pyriofenone, including its metabolites and degradates, in or on the following commodities listed in the table. Compliance with the tolerance levels specified in the table is to be determined by measuring only pyriofenone, (5-chloro-2-methoxy-4-methyl-3-pyridinyl)(2,3,4-trimethoxy-6-methylphenyl) methanone, in or on the following commodities:

Commodity	Parts per million
Berry, low growing, subgroup 13-07G (except cranberry)	0.50
Bushberry subgroup 13-07B	1.5
Caneberry subgroup 13-07A	0.90
Fruit, small vine climbing subgroup 13-07D	1.5
Vegetables, cucurbit, crop group 9	0.30
Vegetable, fruiting, group 8-10	0.3

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 13506, Mar. 7, 2012, as amended at 82 FR 18240, Apr. 18, 2017; 84 FR 24987, May 30, 2019]

[↑ Back to Top](#)

### §180.661 Fluopyram; tolerances for residues.



(a) *General.* (1) Tolerances are established for residues of the fungicide Fluopyram, *N*-[2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl]-2-(trifluoromethyl)benzamide, including its metabolites and degradates in or on the commodities in the table below. Compliance with the tolerance levels specified in the table is to be determined by measuring only fluopyram in or on the commodity.

Commodity	Parts per million
Almond, hulls	10
Artichoke, globe	4.0
Banana <sup>1</sup>	1.0
Bean, dry	0.70
Beet, sugar	0.10
Berry, low growing, except cranberry, subgroup 13-07G	2.0
Brassica, head and stem, subgroup 5A	4.0
Brassica, leafy greens, subgroup 5B	50
Bushberry subgroup 13-07B	7.0
Caneberry subgroup 13-07A	5.0
Cherry subgroup 12-12A	2.0
Citrus, oil	8.0
Corn, field, grain	0.02
Corn, pop, grain	0.02
Corn, sweet, kernel plus cob with husks removed	0.01
Cotton, gin byproducts	30
Cottonseed subgroup 20C	0.80
Cranberry <sup>1</sup>	2
Dill, seed	70
Fruit, citrus, group 10-10	1.0
Fruit, pome, group 11-10	0.80
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2.0
Grain, aspirated grain fractions	50
Grain, cereal, forage, fodder and straw, group 16	20
Grain, cereal, group 15, except corn and rice	4.0
Grape, raisin	3.0
Herb subgroup 19A	40
Hop, dried cones	60
Leafy greens subgroup 4A	40
Leafy petioles subgroup 4B	20
Lentil, dry seed <sup>1</sup>	0.7
Melon subgroup 9A	1.0
Nut, tree, group 14-12	0.05
Onion, bulb, subgroup 3-07A	0.40
Onion, green, subgroup 3-07B	15
Pea, dry seed <sup>1</sup>	0.7
Pea and bean, succulent shelled, subgroup 6B	0.20
Peach subgroup 12-12B	1.0
Peanut	0.20
Pepper/eggplant subgroup 8-10B	4.0
Plum subgroup 12-12C	0.50
Potato, wet peel	0.30
Rapeseed subgroup 20A	5.0
Soybean, seed	0.30
Squash/cucumber subgroup 9B	0.60
Sunflower subgroup 20B	0.70
Tomato subgroup 8-10A	1.0
Vegetable, leaves of root and tuber, group 2	30
Vegetable, legume, edible podded, subgroup 6A	4.0
Vegetable, root, except sugar beet, subgroup 1B	0.30
Vegetable, tuberous and corm, subgroup 1C	0.10

<sup>1</sup>There are no U.S. registrations.

(2) Tolerances are established for residues of the fungicide fluopyram, *N*-[2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl]-2-(trifluoromethyl)benzamide, including its metabolites and degradates. Compliance with the tolerance levels specified in the table below is to be determined by measuring only the sum of fluopyram and its metabolite, 2-(trifluoromethyl)benzamide, calculated as the stoichiometric equivalent of fluopyram, in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.70
Cattle, meat	0.80
Cattle, meat byproducts	7.5

Egg	0.08
Goat, fat	0.70
Goat, meat	0.80
Goat, meat byproducts	7.5
Hog, fat	0.20
Hog, meat	0.02
Hog, meat byproducts	0.20
Horse, fat	0.70
Horse, meat	0.80
Horse, meat byproducts	7.5
Milk	0.40
Poultry, fat	0.04
Poultry, meat	0.04
Poultry, meat byproducts	0.20
Sheep, fat	0.70
Sheep, meat	0.80
Sheep, meat byproducts	7.5

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(1), are established for indirect or inadvertent residues of fungicide fluopyram, N-[2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl]-2-(trifluoromethyl)benzamide, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified in the table is to be determined by measuring only fluopyram in or on the commodity.

Commodity	Parts per million
Sugarcane, cane	0.08

(d) *Indirect or inadvertent residues.* It is recommended that tolerances be established for indirect or inadvertent residues of fungicide fluopyram, N-[2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl]-2-(trifluoromethyl)benzamide, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified in the table is to be determined by measuring only fluopyram in or on the commodity.

Commodity	Parts per million
Alfalfa, forage	0.45
Alfalfa, hay	1.1
Soybean, seed	0.10

[81 FR 12023, Mar. 8, 2016, as amended at 84 FR 31213, July 1, 2019]

[↑ Back to Top](#)

### §180.662 Trinexapac-ethyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the plant growth inhibitor, trinexapac-ethyl, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring both trinexapac-ethyl, ethyl 4-(cyclopropylhydroxymethylene)-3,5-dioxocyclohexanecarboxylate and the associated metabolite, trinexpac, 4-(cyclopropylhydroxymethylene)-3,5-dioxocyclohexanecarboxylic acid, calculated as the stoichiometric equivalent of trinexapac-ethyl, in or on the commodity.

Commodity	Parts per million
Barley, bran	2.5
Barley, grain	2.0
Barley, hay	0.8
Barley, straw	0.4
Cattle, fat	0.02
Cattle, meat	0.02
Cattle, meat byproducts	0.04
Goat, fat	0.02
Goat, meat	0.02
Goat, meat byproducts	0.04
Grass, forage	1.5
Grass, hay	4.0
Grass, seed screenings	40.0
Grass, straw	10.0
Hog, fat	0.02
Hog, meat	0.02
Hog, meat by-products	0.03

Horse, fat	0.02
Horse, meat	0.02
Horse, meat byproducts	0.04
Oat, forage	1.0
Oat, grain	4.0
Oat, hay	1.5
Oat, straw	0.9
Poppy, seed imported <sup>1</sup>	8
Rice, bran	1.5
Rice, grain	0.4
Rice, straw	0.07
Rice, wild, grain	0.4
Rye, bran	6.0
Rye, grain	4.0
Rye, hay	1.5
Rye, straw	0.9
Sheep, fat	0.02
Sheep, meat	0.02
Sheep, meat byproducts	0.04
Sugarcane, cane	0.8
Sugarcane, molasses	2.5
Wheat, bran	6.0
Wheat, forage	1.0
Wheat, grain	4.0
Wheat, hay	1.5
Wheat, middlings	10.5
Wheat, straw	0.9

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 12745, Mar. 2, 2012, as amended at 77 FR 60919, Oct. 3, 2012; 80 FR 28848, May 20, 2015; 83 FR 11422, Mar. 15, 2018]

[↑ Back to Top](#)

### §180.663 Ametoctradin; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide ametoctradin, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only ametoctradin (5-ethyl-6-octyl[1,2,4]triazolo[1,5-a]pyrimidin-7-amine).

Commodity	Parts per million
Brassica, head and stem, subgroup 5A	9.0
Brassica, leafy greens, subgroup 5B	50
Grape	4.0
Grape, raisin	8.0
Hop, dried cones	100
Onion, bulb, subgroup 3-07A	1.5
Onion, green, subgroup 3-07B	20.0
Spinach	50.0
Vegetable, cucurbit, group 9	3.0
Vegetable, fruiting, group 8-10	1.5
Vegetable, leafy, except Brassica, group 4, except spinach	40.0
Vegetable, tuberous and corm, subgroup 1C	0.05

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 21734, May 9, 2012, as amended at 82 FR 34877, July 27, 2017]

[↑ Back to Top](#)

### §180.664 Penflufen; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide penflufen, including its metabolites and degradates, in or on the following commodities listed in the table. Compliance with the tolerance levels specified in the table is to be determined by measuring only penflufen *N*-[2-(1,3-dimethylbutyl)phenyl]-5-fluoro-1,3-dimethyl-1*H*-pyrazole-4-carboxamide, in or on the following commodities.

Commodity	Parts per million
Alfalfa, forage	0.01
Alfalfa, hay	0.01
Beet, sugar, roots	0.01 ppm
Beet, sugar, tops	0.01 ppm
Cotton, gin by-products	0.01
Grain cereal, forage, fodder and straw, group 16	0.01
Grain, cereal, group 15	0.01
Oilseed, group 20	0.01
Vegetable, bulb, group 3-07	0.01 ppm
Vegetable, foliage of legume, group 7	0.01
Vegetable, legume, group 6	0.01
Vegetable, tuberous and corm subgroup 1C	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 28281, May 14, 2012, as amended at 81 FR 72007, Oct. 19, 2016]

[↑ Back to Top](#)

#### §180.665 Sedaxane; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide sedaxane, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only sedaxane, *N*-[2-[1,1'-bicyclopropyl]-2-ylphenyl]-3-(difluoromethyl)-1-methyl-1*H*-pyrazole-4-carboxamide, as the sum of its *cis*- and *trans*-isomers in or on the commodity.

Commodity	Parts per million
Beet, sugar, roots	0.01
Canola, seed	0.01
Cotton, gin byproducts	0.01
Cotton, undelinted seed	0.01
Grain, cereal, forage, fodder and straw, group 16	0.10
Grain, cereal, group 15	0.01
Peanut	0.01
Peanut, hay	0.08
Potato	0.02
Potato, wet peel	0.075
Rapeseed, subgroup 20A	0.01
Soybean, forage	0.05
Soybean, hay	0.04
Soybean, seed	0.01
Vegetable, foliage of legume, except soybean, subgroup 7A	0.01
Vegetable, legume, group 6	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect inadvertent residues.* [Reserved]

[77 FR 36924, June 20, 2012, as amended at 78 FR 33748, June 5, 2013; 78 FR 60719, Oct. 2, 2013; 80 FR 43329, July 22, 2015; 82 FR 57871, Dec. 8, 2017; 84 FR 44707, Aug. 27, 2019]

[↑ Back to Top](#)

#### §180.666 Fluxapyroxad; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide fluxapyroxad, including its metabolites and degradates, in or on the commodities listed in the table below. Compliance with the tolerance levels specified below is to be

determined by measuring only fluxapyroxad, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-1H-pyrazole-4-carboxamide in or on the commodity.

Commodity	Parts per million
Almond, hulls	4.0
Apple, wet pomace	2.0
Banana <sup>1</sup>	3.0
Beet, sugar	0.1
Beet, sugar, dried pulp	0.1
Beet, sugar, tops	7.0
Berry, low growing, subgroup 13-07G	4.0
Bushberry, subgroup 13-07B	7.0
Caneberry, subgroup 13-07A	5.0
Cattle, fat	0.06
Cattle, meat	0.01
Cattle, meat byproduct	0.04
Citrus, dried pulp	3.0
Citrus, oil	40
Coffee, green bean <sup>1</sup>	0.2
Corn, field, grain	0.01
Corn, oil	0.03
Corn, pop, grain	0.01
Corn, sweet, kernels plus cobs with husks removed	0.15
Cotton, gin byproducts	20
Cotton, undelinted seed	0.30
Egg	0.01
Fish-freshwater finfish	0.01
Fish-shellfish, crustacean	0.01
Fruit, citrus, group 10-10	1.0
Fruit, pome, group 11	0.8
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2.0
Fruit, stone, group 12-12	3.0
Goat, fat	0.06
Goat, meat	0.01
Goat, meat byproduct	0.04
Grain, aspirated fractions	20.0
Grain, cereal, forage, fodder and straw, group 16	20
Grain, cereal, group 15, (except corn, field, grain; except corn, pop, grain; except corn, kernels plus cobs with husks removed; except rice; except wheat)	3.0
Grape, raisin	5.7
Grass, forage, fodder and hay, group 17	40
Hog, meat byproducts	0.01
Horse, fat	0.06
Horse, meat	0.01
Horse, meat byproduct	0.04
Mango <sup>1</sup>	0.7
Milk	0.01
Milk, fat	0.15
Non-grass animal feed, group 18	30
Nut, tree, group 14-12	0.06
Oilseeds, group 20 (except cottonseed)	0.9
Papaya <sup>1</sup>	0.6
Pea and bean, dried shelled except soybean, subgroup 6C	0.4
Pea and bean, succulent shelled, subgroup 6B	0.5
Peanut	0.01
Peanut, refined oil	0.02
Plum, prune, dried	3.0
Potato, wet peel	0.1
Poultry, fat	0.01
Poultry, meat	0.01
Poultry, meat byproduct	0.01
Rice, bran	4.5
Rice, bran	8.5
Rice, grain	5.0
Rice, hulls	8.0
Rice, hulls	15.0
Sheep, fat	0.06
Sheep, meat	0.01
Sheep, meat byproduct	0.04
Soybean, hulls	0.3
Soybean, seed	0.15
Sugarcane, cane	3.0

Vegetable, brassica leafy, group 5	4.0
Vegetable, bulb, group 3-07	1.5
Vegetable, cucurbit, group 9	0.50
Vegetable, foliage of legume, group 7	30
Vegetables, fruiting, group 8	0.7
Vegetable, leafy, except brassica, group 4	30
Vegetable, legume, edible podded, subgroup 6A	2.0
Vegetable, root, except sugarbeet, subgroup 1B	0.90
Vegetable, tuberous and corm, subgroup 1C	0.02
Wheat, bran	0.6
Wheat, grain	0.3

<sup>1</sup>There are no U.S. registrations for this commodity as of November 8, 2016.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for the combined indirect or inadvertent residues of the fungicide fluxapyroxad, including its metabolites and degradates, in or on the commodities listed in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only fluxapyroxad, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-1H-pyrazole-4-carboxamide in or on the commodity.

Commodity	Parts per million
Peppermint, tops	0.01
Spearmint, tops	0.01

[77 FR 28275, May 14, 2012, as amended at 77 FR 46307, Aug. 3, 2012; 79 FR 10677, Feb. 26, 2014; 80 FR 45078, July 29, 2015; 81 FR 27025, May 5, 2016; 81 FR 78511, Nov. 8, 2016]

[↑ Back to Top](#)

#### §180.667 Cyflufenamid, tolerance for residues.

(a) *General.* Tolerances are established for residues of the fungicide cyflufenamid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only cyflufenamid, [N(Z)]-N-[(cyclopropylmethoxy)amino][2,3-difluoro-6-(trifluoromethyl)phenyl]methylene]benzeneacetamide.

Commodity	Parts per million
Apple, wet pomace	0.10
Berry, low growing, subgroup 13-07G, except cranberry	0.20
Cherry subgroup 12-12A	0.60
Fruit, pome, group 11	0.06
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.15
Grape, raisin	0.30
Hop, dried cones	5.0
Vegetable, cucurbit, group 9	0.10
Vegetable, fruiting, group 8-10	0.20

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 38210, June 27, 2012, as amended at 83 FR 5717, Feb. 9, 2018]

[↑ Back to Top](#)

#### §180.668 Sulfoxaflor; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide sulfoxaflor, including its metabolites and degradates, in or on the commodities in the table. Compliance with the tolerance levels specified is to be determined by measuring only sulfoxaflor (*N*-[methyloxido[1-[6-(trifluoromethyl)-3-pyridinyl]ethyl]- $\gamma^4$ -sulfanylidene]cyanamide).

Commodity	Parts per million
Alfalfa, forage	7
Alfalfa, hay	20

Alfalfa, seed	40
Alfalfa, silage	9
Almond, hulls	6.0
Artichoke, globe	0.7
Arugula <sup>1</sup>	6
Asparagus	0.01
Barley, grain	0.40
Barley, hay	1.0
Barley, straw	2.0
Bean, dry seed	0.20
Bean, succulent	4.0
Beet, sugar, dried pulp	0.07
Beet, sugar, molasses	0.25
Berry, low growing, subgroup 13-7G	0.70
Brassica, leafy greens, subgroup 4-16B, except watercress	2
Bushberry subgroup 13-07B	2
Cacao, dried bean	0.05
Caneberry subgroup 13-07A	1.5
Cattle, fat	0.2
Cattle, meat	0.4
Cattle, meat byproducts	0.8
Cauliflower	0.08
Celtuce	2
Citrus, dried pulp	3.6
Corn, field, forage	0.5
Corn, field, grain	0.015
Corn, field, stover	0.8
Corn, pop, grain	0.015
Corn, pop, stover	0.8
Corn, sweet, forage	0.6
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	0.7
Cotton, gin byproducts	6.0
Cotton, hulls	0.35
Cottonseed subgroup 20C	0.20
Cress, garden <sup>1</sup>	6
Cress, upland <sup>1</sup>	6
Egg	0.06
Fennel, Florence, fresh leaves and stalk	2
Fruit, citrus, group 10-10	0.70
Fruit, pome, group 11-10	0.50
Fruit, small, vine climbing, subgroup 13-07F, except fuzzy kiwi fruit	2.0
Fruit, stone, group 12-12	3
Goat, fat	0.2
Goat, meat	0.4
Goat, meat byproducts	0.8
Grain, aspirated fractions	20.0
Grape, raisin	6.0*
Hog, fat	0.03
Hog, meat	0.3
Hog, meat byproducts	0.6
Horse, fat	0.2
Horse, meat	0.4
Horse, meat byproducts	0.8
Kohlrabi	2
Leaf petiole vegetable subgroup 22B	2
Leafy greens subgroup 4-16A	6
Milk	0.3
Millet, proso, forage	0.4
Millet, pearl, forage	0.4
Millet, proso, grain	0.3
Millet, pearl, grain	0.3
Nut, tree, group 14-12	0.015
Oat, grain	0.4
Oat, hay	1
Oat, straw	2
Onion, bulb, subgroup 3-07A	0.01
Onion, green, subgroup 3-07B	0.70
Pineapple	0.1
Poultry, fat	0.02
Poultry, meat	0.1
Poultry, meat byproducts	0.3

Rapeseed, meal	0.50
Rapeseed subgroup 20A	0.40
Rye, forage	1
Rye, grain	0.08
Rye, hay	1.5
Rye, straw	2
Sheep, fat	0.2
Sheep, meat	0.4
Sheep, meat byproducts	0.8
Sorghum, grain, forage	0.4
Sorghum, grain, grain	0.3
Sorghum, grain, stover	1
Soybean, seed	0.20
Sunflower subgroup 20B	0.3
Teff, forage	1
Teff, grain	0.08
Teff, hay	1.5
Teff, straw	2
Teosinte, grain	0.015
Tomato, paste	2.60
Tomato, puree	1.20
Triticale, forage	1
Triticale, grain	0.08
Triticale, hay	1.5
Triticale, straw	2
Vegetable, <i>brassica</i> , head and stem, group 5-16, except cauliflower	2
Vegetable, cucurbit, group 9	0.40
Vegetable, fruiting, group 8-10	0.70
Vegetable, leaves of root and tuber, group 2	3.0
Vegetable, legume, foliage, group 7	3.0
Vegetable, root and tuber, group 1	0.05
Watercress	6.0
Wheat, forage	1.0
Wheat, grain	0.08
Wheat, hay	1.5
Wheat, straw	2.0

<sup>1</sup> This tolerance expires on January 24, 2020.

(b) *Section 18 emergency exemptions.* Time-limited tolerances specified in the following table are established for residues of sulfoxaflor (*N*-[methyloxido[1-[6-(trifluoromethyl)-3-pyridinyl]ethyl]- $\lambda^4$ -sulfanylidene]cyanamide), including its metabolites and degradates, in or on the specified agricultural commodities, resulting from use of the pesticide pursuant to FIFRA section 18 emergency exemptions. Compliance with the tolerance levels specified in the following table is to be determined by measuring only sulfoxaflor in or on the commodity. The tolerances expire on the date specified in the table.

Commodity	Parts per million	Expiration/revocation date
Sorghum, forage	0.4	12/31/20
Sorghum, grain	0.3	12/31/20
Sorghum, stover	0.9	12/31/20

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 59565, Sept. 28, 2012, as amended at 78 FR 38227, June 26, 2013; 80 FR 4515, Jan. 28, 2015; 82 FR 57151, Dec. 4, 2017; 84 FR 35553, July 24, 2019]

[↑ Back to Top](#)

### §180.669 Picoxystrobin; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide picoxystrobin, including its metabolites and degradates, in or on the commodities listed below. Compliance with the tolerance levels specified below is to be determined by measuring only picoxystrobin, methyl ( $\alpha E$ )- $\alpha$ -(methoxymethylene)-2-[[[6-(trifluoromethyl)-2-pyridinyl]oxy]methyl]benzeneacetate.

Commodity	Parts per million
Alfalfa, forage	4.0
Alfalfa, hay	5.0
Alfalfa, seed	9.0
Almond, hulls	7.0



Barley, bran	0.5
Barley, grain	0.3
Beet, sugar, dried pulp	1.5
Bluegrass, forage	30
Bluegrass, hay	60
Bromegrass, forage	30
Bromegrass, hay	60
Cattle, fat	0.01
Cattle, meat	0.01
Cattle, meat byproducts	0.01
Corn, field, refined oil	0.07
Cotton, gin byproducts	20
Cottonseed subgroup 20C	2.0
Eggs	0.01
Fescue, forage	30
Fescue, hay	60
Goat, fat	0.01
Goat, meat	0.01
Goat, meat byproducts	0.01
Grain, aspirated grain fractions	10
Grain, cereal, forage, fodder, and straw, group 16, forage	15
Grain, cereal, forage, fodder, and straw, group 16, hay	5
Grain, cereal, forage, fodder, and straw, group 16, stover	10
Grain, cereal, forage, fodder, and straw, group 16, straw	2
Grain, cereal, group 15, except rice and barley	0.04
Hog, fat	0.01
Hog, meat	0.01
Hog, meat byproducts	0.01
Horse, fat	0.01
Horse, meat	0.01
Horse, meat byproducts	0.01
Leaf petiole vegetable subgroup 22B	20
Lettuce, head	4.0
Milk	0.01
Nut, tree, group 14-12	0.08
Onion, bulb, subgroup 3-07A	0.50
Onion, green, subgroup 3-07B	10
Orchardgrass, forage	30
Orchardgrass, hay	60
Pea and bean, dried shelled, except soybean, subgroup 6C	0.06
Pea and bean, succulent shelled, subgroup 6B	0.90
Peanut	0.05
Peanut, hay	30
Potato, wet peel	0.10
Poultry, fat	0.01
Poultry, meat	0.01
Poultry, meat byproducts	0.01
Rapeseed subgroup 20A	0.08
Ryegrass, forage	30
Ryegrass, hay	60
Sheep, fat	0.01
Sheep, meat	0.01
Sheep, meat byproducts	0.01
Soybean, forage	1
Soybean, hay	3
Soybean, hulls	0.2
Soybean, seed	0.05
Sunflower subgroup 20B	2.0
Switchgrass, forage	30
Switchgrass, hay	60
Vegetable, brassica, head and stem, group 5-16	2.0
Vegetable, cucurbit, group 9	0.30
Vegetable, foliage of legume, except soybean, subgroup 7A	40
Vegetable, fruiting, group 8-10	0.70
Vegetable, leafy, group 4-16, except lettuce, head	30
Vegetable, leaves of root and tuber, group 2	30
Vegetable, legume, edible podded, subgroup 6A	2.0
Vegetable, root, subgroup 1A	0.50
Vegetable, tuberous and corm, subgroup 1C	0.03
Wheat, bran	0.06
Wheat, germ	0.09

(b) Section 18 emergency exemptions. [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[77 FR 72231, Dec. 5, 2012, as amended at 83 FR 39610, Aug. 10, 2018]

[↑ Back to Top](#)

### §180.671 Fenpyrazamine; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide fenpyrazamine, in or on the following commodities. Compliance with the tolerance levels specified in the following table is to be determined by measuring only fenpyrazamine S-allyl 5-amino-2-isopropyl-4-(2-methylphenyl)-3-oxo-2,3-dihydropyrazole-1-carbothioate, in or on the following commodities:

Commodity	Parts per million
Almond	0.02
Almond, hulls	1.5
Berry, low growing, subgroup 13-07G	3
Bushberry subgroup 13-07B	5
Caneberry subgroup 13-07A	5
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	3
Ginseng	0.7
Grape, juice	4
Lettuce, head	1.5
Lettuce, leaf	2
Pistachio	0.02

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[78 FR 14465, Mar. 6, 2013]

[↑ Back to Top](#)

### §180.672 Cyantraniliprole; tolerances for residues.

(a) *General.* Tolerances are established for the combined residues of the insecticide cyantraniliprole, 3-bromo-1-(3-chloro-2-pyridinyl)-N-[4-cyano-2-methyl-6-[(methylamino)carbonyl]phenyl]-1H-pyrazole-5-carboxamide, including its metabolites and degradates, in or on commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only cyantraniliprole in or on the commodity.

Commodity	Parts per million
Almond, hulls	8.0
Artichoke, globe <sup>1</sup>	0.10
Berry, low growing, except strawberry, subgroup 13-07H, except blueberry, lowbush and lingonberry	0.08
Brassica, leafy greens, subgroup 4-16B	30
Bushberry, subgroup 13-07B	4.0
Caneberry subgroup 13-07A	4.0
Cattle, fat	0.10
Cattle, meat	0.10
Cattle, meat byproducts	0.40
Celtuce	20
Cherry, subgroup 12-12A	6.0
Citrus, oil	2.4
Coffee, green bean	0.05
Corn, field, grain	0.01
Corn, pop, grain	0.01
Corn, sweet, kernel plus cob with husks removed	0.01
Cotton, gin byproducts	10
Fennel, Florence, fresh leaves and stalk	20
Fruit, citrus, group 10-10	0.70
Fruit, pome, group 11-10	1.5
Goat, fat	0.10
Goat, meat	0.10
Goat, meat byproducts	0.40
Grain, aspirated grain fractions	200

Grape, wine <sup>1</sup>	2.0
Horse, fat	0.10
Horse, meat	0.10
Horse, meat byproducts	0.40
Kohlrabi	3.0
Leaf petiole vegetable subgroup 22B	20
Leafy greens subgroup 4-16A	20
Milk	0.20
Nut, tree, group 14-12	0.04
Oilseed group 20	1.5
Olive <sup>1</sup>	1.5
Olive, oil <sup>1</sup>	2.0
Onion, bulb, subgroup 3-07A	0.04
Onion, green, subgroup 3-07B	8.0
Peach, subgroup 12-12B	1.5
Peanut	0.01
Peanut hay	3.0
Plum, subgroup 12-12C	0.50
Pomegranate <sup>1</sup>	0.01
Rice, grain	0.02
Rice, hulls	0.05
Rice, straw	0.015
Sheep, fat	0.10
Sheep, meat	0.10
Sheep, meat byproducts	0.40
Soybean, forage	15
Soybean, hay	50
Soybean, hulls	1.0
Soybean, seed	0.40
Strawberry	1.0
Tea <sup>1</sup>	30
Vegetable, <i>Brassica</i> , head and stem, group 5-16	3.0
Vegetable, cucurbit, group 9	0.70
Vegetable, foliage of legume, except soybean, group 7A	40
Vegetable, fruiting, group 8-10	2.0
Vegetable, leaves of root and tuber, group 2	40
Vegetable, legume, dried shelled, except soybean, subgroup 6C	1.0
Vegetable, legume, edible podded, subgroup 6A	2.0
Vegetable, legume, succulent shelled, subgroup 6B	0.20
Vegetable, root, except sugar beet, subgroup 1B	0.40
Vegetable, tuberous and corm, subgroup 1C	0.15

<sup>1</sup>There are no U.S. registrations for these commodities.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertant residues.* Tolerances are established for indirect or inadvertant tolerances for residues of cyantranilprole, 3-bromo-1-(3-chloro-2-pyridinyl)-N-[4-cyano-2-methyl-6-((methylamino)carbonyl)phenyl]-1H-pyrazole-5-carboxamide, including its metabolites and degradates, in or on commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only cyantranilprole in or on the commodity.

Commodity	Parts per million
Animal feed, nongrass, group 18	0.20
Beet, sugar, roots	0.02
Grain, cereal, forage, fodder and straw, group 16	0.50
Grass forage, fodder and hay, group 17	0.50

[79 FR 6833, Feb. 5, 2014, as amended at 82 FR 14629, Mar. 22, 2017; 83 FR 56268, Nov. 13, 2018]

[↑ Back to Top](#)

### §180.673 Triforine; tolerances for residues.

(a) *General.* Tolerances are established for residues of triforine, including its metabolites and degradates. Compliance with the tolerance levels specified in the following table is to be determined by measuring only triforine (*N,N'*-[1,2-piperazinediylbis(2,2,2-trichloroethylidene)]bis[formamide]), in or on the following commodities.

Commodity	Parts per million
Blueberry <sup>1</sup>	1.0
Tomato <sup>1</sup>	0.5

<sup>1</sup>There are no U.S. registrations for blueberry and tomato.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[78 FR 32151, May 29, 2013. Redesignated at 78 FR 36677, June 19, 2013]

[↑ Back to Top](#)

#### §180.674 Proquinazid; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide, proquinazid, including its metabolites and degradates, in or on the commodities listed in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only proquinazid, [6-Iodo-2-propoxy-3-propyl-3H-quinazolin-4-one), in or on the following commodities:

Commodity	Parts per million
Grape <sup>1</sup>	0.50
Grape, raisin <sup>1</sup>	1.0

<sup>1</sup>No U.S. registrations for Proquinazid.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[79 FR 18815, Apr. 4, 2014]

[↑ Back to Top](#)

#### §180.675 Tolfenpyrad; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the insecticide tolfenpyrad, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only tolfenpyrad (4-chloro-3-ethyl-1-methyl-N-[[4-(4-methylphenoxy)phenyl]methyl]-1H-pyrazole-5-carboxamide) in or on the commodity.

Commodity	Parts per million
Almond hulls	6.0
Apple, wet pomace	3.0
Avocado	1.5
Berry, low growing, subgroup 13-07G, except cranberry and lowbush blueberry	3.0
Brassica, leafy greens, subgroup 4-16B	40
Bushberry, subgroup 13-07B	7.0
Caneberry, subgroup 13-07A	7.0
Celtuce	30
Citrus, dried pulp <sup>1</sup>	8.0
Citrus, dried pulp	4.0
Citrus, oil <sup>1</sup>	70.0
Citrus, oil	30
Cotton, gin byproducts	15.0
Cottonseed, subgroup 20C	0.70
Fennel, Florence, fresh leaves and stalk	30
Fruit, citrus, group 10-10 <sup>1</sup>	1.5
Fruit, citrus, group 10-10	0.80
Fruit, pome, group 11-10	1.0
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	2.0
Fruit, stone, group 12-12	2.0

Grape, raisin	6.0
Leaf petiole vegetable subgroup 22B	30
Leafy greens, subgroup 4-16A	30
Nuts, tree, group 14-12	0.05
Onion, bulb, subgroup 3-07A	0.09
Onion, green, subgroup 3-07B	10
Persimmon	2.0
Plum, prune	3.0
Pomegranate	2.0
Tea	30.0
Vegetable, <i>Brassica</i> , head and stem, group 5-16	5.0
Vegetable, cucurbit, group 9	0.70
Vegetable, fruiting, group 8-10	1.5
Vegetable, tuberous and corm, subgroup 1C	0.01

<sup>1</sup>This tolerance expires on December 24, 2018.

(2) Tolerances are established for residues of the insecticide tolfenpyrad, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of tolfenpyrad, 4-chloro-3-ethyl-1-methyl-*N*-[[4-(4-methylphenoxy)phenyl]methyl]-1*H*-pyrazole-5-carboxamide, and its metabolite 4-[4-[(4-chloro-3-ethyl-1-methylpyrazol-5-yl)carbonylamino-methyl]phenoxy]-benzoic acid, calculated as the stoichiometric equivalent of tolfenpyrad.

Commodity	Parts per million
Cattle, fat	0.01
Cattle, meat	0.01
Cattle, meat byproducts	0.35
Goat, fat	0.01
Goat, meat	0.01
Goat, meat byproducts	0.35
Horse, fat	0.01
Horse, meat	0.01
Horse, meat byproducts	0.35
Milk	0.03
Sheep, fat	0.01
Sheep, meat	0.01
Sheep, meat byproducts	0.35

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registration.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[79 FR 1605, Jan. 9, 2014, as amended at 81 FR 68944, Oct. 5, 2016; 82 FR 46934, Oct. 10, 2017; 83 FR 29023, June 22, 2018; 83 FR 65550, Dec. 21, 2018]

[↑ Back to Top](#)

### §180.676 Fenpropidin; tolerances for residues.

(a) *General.* Tolerances are established for the residues of fenpropidin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only fenpropidin (1-[3-[4-(1,1-dimethylethyl)phenyl]-2-methylpropyl]piperidine).

Commodity	Parts per million
Banana <sup>1</sup>	10

<sup>1</sup>There are no U.S. registrations as of December 13, 2013.

(b) *Section 18 tolerance.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[79 FR 8096, Feb. 11, 2014]

[↑ Back to Top](#)

**§180.677 Cyflumetofen; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the insecticide cyflumetofen, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels for cyflumetofen is to be determined by measuring only cyflumetofen, 2-methoxyethyl  $\alpha$ -cyano- $\alpha$ -[4-(1,1-dimethylethyl)phenyl]- $\beta$ -oxo-2-(trifluoromethyl)benzenepropanoate, in or on the commodity.

Commodity	Parts per million
Almond, hulls	4.0
Citrus, oil	16
Fruit, citrus, group 10-10	0.30
Fruit, pome, group 11-10	0.30
Grape	0.60
Nut, tree, group 14-12	0.01
Strawberry	0.60
Tea, dried <sup>1</sup>	40
Tomato	0.40

<sup>1</sup>There are no U.S. registrations for this commodity as of May 8, 2019.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[79 FR 29108, May 21, 2014, as amended at 84 FR 20042, May 8, 2019]

[↑ Back to Top](#)

**§180.678 Tricyclazole; tolerances for residues.**

(a) *General.* (1) Tolerances are established for residues of the fungicide tricyclazole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only tricyclazole (5-methyl-1,2,4-triazolo[3,4-b]benzothiazole).

Commodity	Parts per million
Rice, grain <sup>1</sup>	3.0

<sup>1</sup>There are no U.S. Registrations on Rice as of June 11, 2014.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[79 FR 33468, June 11, 2014]

[↑ Back to Top](#)

**§180.679 Flupyradifurone; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the insecticide flupyradifurone, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only flupyradifurone, 4-[[[6-chloro-3-pyridinyl)methyl]](2,2-difluoroethyl)amino]-2(5H)-furanone.

Commodity	Parts per million
Alfalfa, forage	9.0
Alfalfa, hay	20
Almond, hulls	15
Bean, succulent	0.20
Berry, low growing, except cranberry subgroup 13-07G	1.5
Brassica, head and stem subgroup 5A	6.0
Brassica, leafy greens subgroup 5B	40
Bushberry, except cranberry subgroup 13-07B	4.0

Cactus, fruit	0.30
Cactus, pads	0.70
Caneberry subgroup 13-07A	5.0
Cattle, fat	0.20
Cattle, meat	0.30
Cattle, meat byproducts	1.0
Cilantro, fresh leaves	30
Coffee, green bean <sup>1</sup>	1.5
Corn, field, grain	0.05
Corn, pop, grain	0.05
Corn, sweet, kernels plus cobs with husks removed	0.05
Cotton, gin byproducts	40
Cottonseed, subgroup 20C	0.80
Egg	0.01
Fruit, citrus, dried pulp	10
Fruit, citrus, group 10-10	3.0
Fruit, pome, group 11-10	0.70
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	3.0
Fruit, stone, group 12-12	1.5
Goat, fat	0.20
Goat, meat	0.30
Goat, meat byproducts	1.0
Grain, aspirated grain fractions	40
Grain, cereal, forage, fodder and straw, group 16	30
Grain, cereal, group 15, except rice and corn	3.0
Grape, raisin	5.0
Hog, fat	0.01
Hog, meat	0.01
Hog, meat byproducts	0.04
Hops, dried cones	10
Horse, fat	0.20
Horse, meat	0.30
Horse, meat byproducts	1.0
Kava, fresh leaves	40
Kava, roots	0.90
Leaf petioles, subgroup 4B	9.0
Leafy greens, subgroup 4A	30
Milk	0.15
Nut, tree, group 14-12	0.02
Onion, bulb, subgroup 3-07A	0.09
Onion, green, subgroup 3-07B	3.0
Pea and bean, dried, shelled except soybean, subgroup 6C	3.0
Pea, succulent	2.0
Peanut	0.04
Peanut, hay	20
Pitaya	0.30
Quinoa, grain	3.0
Sheep, fat	0.20
Sheep, meat	0.30
Sheep, meat byproducts	1.0
Soybean, seed	1.5
Taro leaves	30
Tropical and subtropical, medium to large fruit, smooth, inedible peel subgroup 24B	0.60
Turnip greens	40
Vegetable, cucurbit, group 9	0.40
Vegetable, foliage of legume, group 7	30
Vegetable, fruiting, group 8-10	1.5
Vegetable, legume, edible podded, subgroup 6A	3.0
Vegetable, root, except sugar beet, subgroup 1B	0.90
Vegetable, tuberous and corm, subgroup 1C	0.05

<sup>1</sup>No U.S. registration.

(b) *Section 18 emergency exemptions.* Time-limited tolerances are established for residues of flupyradifurone, including its metabolites and degradates in or on the specified commodities listed in the table below, resulting from use of the pesticide under section 18 emergency exemptions granted by EPA. The time-limited tolerances expire and are revoked on the date specified in the table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only flupyradifurone, 4-[[[6-chloro-3-pyridinyl)methyl](2,2-difluoroethyl)amino]-2(5H)-furanone in or on the commodity.

Commodity	Parts per million (ppm)	Expiration date
-----------	-------------------------	-----------------

Sorghum, syrup	90.0	12/31/19
Sweet sorghum, forage	30.0	12/31/19

(c) *Tolerances with regional restrictions.* Tolerances are established for residues of the insecticide flupyradifurone, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring only flupyradifurone, 4-[[[(6-chloro-3-pyridinyl)methyl](2,2-difluoroethyl)amino]-2(5H)-furanone.

Commodity	Parts per million
Clover, forage	20
Clover, hay	30

(d) *Indirect or inadvertent residues.* [Reserved]

[80 FR 3487, Jan. 23, 2015, as amended at 81 FR 65557, Sept. 23, 2016; 82 FR 13256, Mar. 10, 2017]

[↑ Back to Top](#)

### §180.680 Fluensulfone; tolerances for residues.

(a) *General.* Tolerances are established for residues of the nematicide fluensulfone, including its metabolites and degradates, in or on the commodities in the table 1 to §180.680. Compliance with the tolerance levels specified in the following table below is to be determined by measuring only the sum of fluensulfone, 5-chloro-2-[(3,4,4-trifluoro-3-buten-1-yl)sulfonyl]thiazole and its metabolite, 3,4,4-trifluoro-but-3-ene-1-sulfonic acid, calculated as the stoichiometric equivalent of fluensulfone, in or on the commodity.

**TABLE 1 TO §180.680**

Commodity	Parts per million
Almond, hulls	5
Berry, low growing, subgroup 13-07G	0.5
Brassica, head and stem, subgroup 5A	1.5
Brassica, leafy greens, subgroup 5B	20
Fruit, citrus, group 10-10	0.3
Fruit, citrus, group 10-10, dried pulp	0.9
Fruit, citrus, group 10-10, oil	15
Fruit, pome, group 11-10	0.4
Fruit, small, vine climbing, subgroup 13-07D	0.8
Fruit, stone, group 12-12	0.15
Grape, raisin	1.5
Nut, tree, group 14-12	0.02
Potato, chips	2
Potato, granules/flakes	2
Sugarcane, cane	0.06
Sugarcane, molasses	0.3
Tomato, paste	1.5
Vegetables, cucurbits, group 9	0.7
Vegetables, fruiting, group 8-10	0.7
Vegetables, leafy, except Brassica, group 4	4
Vegetables, leaves of root and tuber, group 2, except sugar beet	50
Vegetables, root, except sugar beet, subgroup 1B	4
Vegetables, tuberous and corm, subgroup 1C	0.8

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for residues of the nematicide fluensulfone, including its metabolites and degradates, in or on the commodities in table 2 to §180.680. Compliance with the tolerance levels specified in the following table below is to be determined by measuring only the sum of fluensulfone, 5-chloro-2-[(3,4,4-trifluoro-3-buten-1-yl)sulfonyl]thiazole and its metabolite, 3,4,4-trifluoro-but-3-ene-1-sulfonic acid, calculated as the stoichiometric equivalent of fluensulfone, in or on the commodity.

**TABLE 2 TO §180.680**

Commodity	Parts per million
Barley, bran	0.15
Barley, grain	0.1



Barley, hay	15
Barley, straw	6
Buckwheat, grain	0.1
Grain, cereal, forage, fodder and straw, group 16	3
Grain, cereal, group 15	0.05
Oat, forage	6
Oat, grain	0.1
Oat, hay	15
Oat, straw	6
Wheat, bran	0.15
Wheat, forage	6
Wheat, germ	0.1
Wheat, grain	0.1
Wheat, hay	15
Wheat, milled byproducts	0.15
Wheat, straw	6

[84 FR 24047, May 24, 2019]

[↑ Back to Top](#)

### §180.681 Isofetamid; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide isofetamid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only isofetamid, *N*-[1,1-dimethyl-2-[2-methyl-4-(1-methylethoxy)phenyl]-2-oxoethyl]-3-methyl-2-thiophenecarboxamide, in or on the following commodities:

Commodity	Parts per million
Almond	0.01
Almond, hulls	0.01
Apple, wet pomace	2.0
Berry, low growing, subgroup 13-07G	4.0
Bushberry subgroup 13-07B	5.0
Caneberry subgroup 13-07A	4.0
Canola, refined oil	0.03
Cherry subgroup 12-12A	4.0
Flax, seed, oil	0.03
Fruit, pome, group 11-10	0.60
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	3.0
Fruit, small vine climbing, except grape, subgroup 13-07E	10.0
Grape, raisin	5.0
Lettuce, head	5.0
Lettuce, leaf	7.0
Mustard, seed, oil	0.03
Pea and bean, dried shelled, except soybean, subgroup 6C	0.040
Pea and bean, succulent shelled, subgroup 6B	0.030
Peach subgroup 12-12B	3.0
Plum, Prune, Dried	1.50
Plum subgroup 12-12C	0.80
Rapeseed subgroup 20A	0.015
Sesame, oil	0.03
Vegetable, legume, edible podded, subgroup 6A	1.50

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[80 FR 45443, July 30, 2015, as amended at 81 FR 70974, Oct. 14, 2016; 82 FR 27154, June 14, 2017]

[↑ Back to Top](#)

### §180.682 Bicyclopyrone; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide bicyclopyrone (4-hydroxy-3-[[2-[(2-methoxyethoxy)methyl]-6-(trifluoromethyl)-3-pyridinyl]carbonyl]bicyclo[3.2.1]oct-3-en-2-one), including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of the common moieties SYN503780 (2-[(2-methoxyethoxy)methyl]-6-

(trifluoromethyl)-3-pyridinecarboxylic acid) and CSCD686480 (2-[(2-hydroxyethoxy)methyl]-6-(trifluoromethyl)-3-pyridinecarboxylic acid), calculated as the stoichiometric equivalent of bicyclopyrone, in or on the commodities.

Commodity	Parts per million
Barley, bran	0.15
Barley, grain	0.07
Barley, hay	0.30
Barley, straw	0.40
Cattle, meat byproducts	2.0
Corn, field, forage	0.30
Corn, field, grain	0.02
Corn, field, stover	0.40
Corn, pop, grain	0.02
Corn, pop, stover	0.40
Corn, sweet, forage	0.40
Corn, sweet, kernel plus cob with husks removed	0.03
Corn, sweet, stover	0.70
Goat, meat byproducts	2.0
Grain, aspirated fractions	0.30
Hog, meat byproducts	0.40
Horse, meat byproducts	2.0
Sheep, meat byproducts	2.0
Sugarcane, cane <sup>1</sup>	0.02
Wheat, bran	0.07
Wheat, forage	0.40
Wheat, grain	0.04
Wheat, hay	0.80
Wheat, straw	0.50

<sup>1</sup>There are no U.S. Registration on Sugarcane as of March 13, 2015.

(2) [Reserved]

(b) [Reserved]

[80 FR 22654, Apr. 23, 2015, as amended at 81 FR 86965, Dec. 2, 2016]

[↑ Back to Top](#)

#### §180.684 Benalaxyl-M; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide benalaxyl-M, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only benalaxyl [methyl N-(2,6-dimethylphenyl)-N-(phenylacetyl)-DL-alaninate] in or on the commodity.

Commodity	Parts per million
Grape <sup>1</sup>	3.0
Tomato <sup>1</sup>	0.20

<sup>1</sup>There is no U.S. registration for use on this commodity as of July 30, 2015.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[80 FR 45448, July 30, 2015]

[↑ Back to Top](#)

#### §180.685 Oxathiapiprolin; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide oxathiapiprolin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only oxathiapiprolin, 1-[4-[4-[5-(2,6-difluorophenyl)-4,5-dihydro-3-isoxazolyl]-2-thiazolyl]-1-piperidiny]-2-[5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]-ethanone, in or on the commodity.

Commodity	Parts per million
Basil, dried leaves	80
Basil, fresh leaves	10
Brassica leafy greens subgroup 4-16B	10
Cacao bean, dried bean	0.15
Caneberry subgroup 13-07A	0.50
Citrus, dried pulp	0.09
Citrus, oil	2.0
Fruit, citrus, group 10-10	0.06
Ginseng	0.15
Grape <sup>1</sup>	0.70
Leafy greens subgroup 4-16A	15
Onion, bulb, subgroup 3-07A	0.04
Onion, green, subgroup 3-07B	2.0
Pea, edible-podded	1.0
Pea, succulent shelled	0.05
Potato, wet peel	0.07
Soybean, seed	0.01
Stalk and stem vegetable subgroup 22A	2.0
Sunflower, seed	0.01
Tomato, dried	3.0
Vegetable, Brassica head and stem, group 5-16	1.5
Vegetable, cucurbit, group 9	0.20
Vegetable, fruiting, group 8-10	0.50
Vegetable, tuberous and corm, subgroup 1C	0.04

<sup>1</sup>There is no associated U.S. registration as of September 4, 2015.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* Tolerances are established for residues of the fungicide oxathiapiprolin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only oxathiapiprolin, 1-[4-[4-[5-(2,6-difluorophenyl)-4,5-dihydro-3-isoxazolyl]-2-thiazolyl]-1-piperidinyl]-2-[5-methyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]-ethanone, in or on the commodity.

Commodity	Parts per million
All other food commodities/feed commodities (other than those covered by a tolerance as a result of use on growing crops)	0.10

[80 FR 53473, Sept. 4, 2015, as amended at 81 FR 87467, Dec. 5, 2016; 82 FR 44945, Sept. 27, 2017]

[↑ Back to Top](#)

### §180.686 Benzovindiflupyr; tolerances for residues.

(a) *General.* Tolerances are established for residues of the fungicide benzovindiflupyr, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only benzovindiflupyr (*N*-[9-(dichloromethylene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1*H*-pyrazole-4-carboxamide) in or on the commodity.

Commodity	Parts per million
Barley, grain	1.5
Barley, hay	15.0
Barley, straw	15.0
Bluegrass, forage	0.15
Bluegrass, hay	7.0
Bluegrass, straw	6.0
Bromegrass, forage	0.15
Bromegrass, hay	7.0
Bromegrass, straw	6.0
Cattle, fat	0.02
Cattle, liver	0.06
Cattle, meat	0.01
Cattle, meat byproducts, except liver	0.01
Coffee, green bean <sup>1</sup>	0.09
Corn, field, forage	3.0
Corn, field, grain	0.02
Corn, field, stover	15.0
Corn, pop, grain	0.02

Corn, pop, stover	15.0
Corn, sweet, forage	4.0
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	5.0
Cottonseed, subgroup 20C	0.15
Cotton, gin byproducts	3.0
Fescue, forage	0.15
Fescue, hay	7.0
Fescue, straw	6.0
Fruit, pome, group 11-10	0.20
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	1.0
Goat, fat	0.02
Goat, liver	0.06
Goat, meat	0.01
Goat, meat byproducts, except liver	0.01
Grain, aspirated fractions	15.0
Grape, raisin	3.0
Horse, fat	0.02
Horse, liver	0.06
Horse, meat	0.01
Horse, meat byproducts, except liver	0.01
Milk	0.01
Milk, fat	0.02
Oat, grain	1.5
Oat, hay	15.0
Oat, straw	15.0
Onion, bulb, subgroup 3-07A	0.02
Onion, green, subgroup 3-07B	0.40
Orchardgrass, forage	0.15
Orchardgrass, hay	7.0
Orchardgrass, straw	6.0
Pea and bean, dried shelled, except soybean, subgroup 6C	0.20
Pea, field, hay	7.0
Pea, field, vine	1.5
Peanut	0.01
Peanut, hay	15.0
Potato, processed potato waste	0.10
Rapeseed, subgroup 20A	0.15
Rye, grain	0.1
Rye, hay	15.0
Rye, straw	15.0
Ryegrass, forage	0.15
Ryegrass, hay	7.0
Ryegrass, straw	6.0
Sheep, fat	0.02
Sheep, liver	0.06
Sheep, meat	0.01
Sheep meat byproducts, except liver	0.01
Soybean, forage	15.0
Soybean, hay	50.0
Soybean, hulls	0.20
Soybean, seed	0.07
Sugarcane, cane	0.30
Tomato, dried	4.0
Vegetable, cucurbit, group 9	0.30
Vegetable, fruiting, group 8-10	1.5
Vegetable, tuberous and corm, subgroup 1C	0.02
Wheat, forage	4.0
Wheat, grain	0.10
Wheat, hay	15.0
Wheat, straw	15.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[80 FR 59633, Oct. 2, 2015, as amended at 82 FR 52674, Nov. 14, 2017; 83 FR 29038, June 22, 2018]

[↑ Back to Top](#)

**§180.687 Teflubenzuron; tolerances for residues.**

(a) *General.* (1) Tolerances are established for residues of the insecticide teflubenzuron, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only teflubenzuron (*N*-[[[(3,5-dichloro-2,4-difluorophenyl)amino]carbonyl]-2,6-difluorobenzamide).

Commodity	Parts per million
Apple <sup>1</sup>	1.0
Broccoli <sup>1</sup>	0.20
Cauliflower <sup>1</sup>	0.01
Citrus, oil <sup>1</sup>	100
Coffee, bean, green <sup>1</sup>	0.60
Corn, field, grain <sup>1</sup>	0.01
Corn, field, refined oil <sup>1</sup>	0.02
Lemon <sup>1</sup>	0.80
Mango <sup>1</sup>	1.5
Melon, subgroup 9A <sup>1</sup>	0.30
Orange <sup>1</sup>	0.60
Papaya <sup>1</sup>	0.50
Pineapple <sup>1</sup>	0.80
Soybean, seed <sup>1</sup>	0.05
Soybean, hulls <sup>1</sup>	0.15
Sugarcane, cane <sup>1</sup>	0.01
Sunflower, seed <sup>1</sup>	0.30
Tomato <sup>1</sup>	1.5

<sup>1</sup>There are no U.S. registrations as of October 30, 2015.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[80 FR 66809, Oct. 30, 2015]

[↑ Back to Top](#)

**§180.688 Diethofencarb; tolerance for residue.**

(a) *General.* (1) Tolerances are established for residues of the fungicide diethofencarb, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only diethofencarb (1-methylethyl *N*-(3,4-diethoxyphenyl)carbamate).

Commodity	Parts per million
Banana*	0.10

\*There is no U.S. registration for use on this commodity as of November 4, 2015.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues* [Reserved]

[80 FR 68261, Nov. 4, 2015]

[↑ Back to Top](#)

**§180.689 Aminocyclopyrachlor; tolerances for residues.**

(a) *General.* Tolerances are established for residues of the herbicide aminocyclopyrachlor, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of aminocyclopyrachlor, 6-amino-5-chloro-2-cyclopropyl-4-pyrimidinecarboxylic acid,

and aminocyclopyrachlor methyl ester, methyl 6-amino-5-chloro-2-cyclopropyl-4-pyrimidinecarboxylate, calculated as the stoichiometric equivalent of aminocyclopyrachlor.

Commodity	Parts per million
Cattle, fat <sup>1</sup>	0.05
Cattle, meat <sup>1</sup>	0.01
Cattle, meat byproducts <sup>1</sup>	0.30
Goat, fat <sup>1</sup>	0.05
Goat, meat <sup>1</sup>	0.01
Goat, meat byproducts <sup>1</sup>	0.30
Horse, fat <sup>1</sup>	0.05
Horse, meat <sup>1</sup>	0.01
Horse, meat byproducts <sup>1</sup>	0.30
Milk <sup>1</sup>	0.01
Sheep, fat <sup>1</sup>	0.05
Sheep, meat <sup>1</sup>	0.01
Sheep, meat byproducts <sup>1</sup>	0.30

<sup>1</sup>There are no U.S. registrations as of August 11, 2016.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[81 FR 53018, Aug. 11, 2016]

[↑ Back to Top](#)

#### §180.690 Mandestrobin; tolerances for residues.

(a) *General.* Tolerances are established for residues of mandestrobin, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only mandestrobin, 2-[(2,5-dimethylphenoxy)methyl]- $\alpha$ -methoxy-N-methylbenzeneacetamide.

Commodity	Parts per million
Berry, low growing, subgroup 13-07G, except cranberry	3.0
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	5.0
Grape, raisin	7.0

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent tolerances.* [Reserved]

[81 FR 70043, Oct. 11, 2016]

[↑ Back to Top](#)

#### §180.691 Halauxifen-methyl; tolerances for residues.

(a) *General.* Tolerances are established for residues of the herbicide, halauxifen-methyl, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only halauxifen-methyl (methyl (4-amino-3-chloro-6-(4-chloro-2-fluoro-3-methoxyphenyl)-2-pyridine carboxylate).

Commodity	Parts per million
Barley, grain	0.01
Barley, hay	0.01
Barley, straw	0.01
Wheat, forage	0.50
Wheat, grain	0.01
Wheat, hay	0.03
Wheat, straw	0.015

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[81 FR 53025, Aug. 11, 2016]

[↑ Back to Top](#)

#### §180.692 Tioxazafen; tolerances for residues.

(a) *General.* Tolerances are established for residues of tioxazafen, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring the combined residues of tioxazafen [3-phenyl-5-(2-thienyl)-1,2,4-oxadiazole] and benzamidine, expressed as tioxazafen in or on the commodity.

Commodity	Parts per million
Corn, field, forage	0.02
Corn, field, grain	0.02
Corn, field, stover	0.02
Cotton, gin by-products	0.02
Cotton, undelinted seed	0.02
Soybean, forage	0.15
Soybean, hay	0.30
Soybean, meal	0.05
Soybean, seed	0.04

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[82 FR 20283, May 1, 2017]

[↑ Back to Top](#)

#### §180.693 Benzobicyclon; tolerances for residues.

(a) *General.* [Reserved]

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* Tolerances with regional registration, as defined in §180.1(l), are established for residues of the herbicide benzobicyclon, including its metabolites and degradates, in or on the commodity in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only benzobicyclon, 3-[2-chloro-4-(methylsulfonyl)benzoyl]-4-(phenylthio)bicyclo-[3.2.1]oct-3-en-2-one, in or on the following raw agricultural commodities:

Commodity	Parts per million
Rice, grain	0.01

(d) *Indirect or inadvertent residues.* [Reserved]

[82 FR 19001, Apr. 25, 2017]

[↑ Back to Top](#)

#### §180.694 Cyclaniliprole; tolerances for residues.

(a) *General.* Tolerances are established for residues of the insecticide cyclaniliprole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only cyclaniliprole, 3-bromo-N-[2-bromo-4-chloro-6-[(1-cyclopropylethyl)amino]carbonyl]phenyl]-1-(3-chloro-2-pyridinyl)-1H-pyrazole-5-carboxamide, in or on the commodity.

Commodity	Parts per million
-----------	-------------------

Almond, hulls	6.0
Apple, wet pomace	0.50
Berry, low growing, subgroup 13-07G	0.4
Bushberry subgroup 13-07B	1.5
Caneberry subgroup 13-07A	0.8
Cattle, fat	0.015
Cattle, meat	0.01
Cattle, meat byproducts	0.015
Fruit, citrus, group 10-10, oil	30
Fruit, pome, group 11-10	0.30
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.80
Fruit, small, vine climbing, except grape, subgroup 13-07E	1
Fruit, stone, group 12-12	1.0
Goat, fat	0.015
Goat, meat	0.01
Goat, meat byproducts	0.015
Grapefruit subgroup 10-10C	0.2
Horse, fat	0.015
Horse, meat	0.01
Horse, meat byproducts	0.015
Lemon/lime subgroup 10-10B	0.3
Milk	0.015
Nut, tree, group 14-12	0.03
Orange subgroup 10-10A	0.4
Potato, wet peel	0.06
Sheep, fat	0.015
Sheep, meat	0.01
Sheep, meat byproducts	0.015
Tea, dried <sup>1</sup>	50
Vegetable, <i>Brassica</i> , head and stem, group 5-16	1.0
Vegetable, cucurbit, group 9	0.15
Vegetable, fruiting, group 8-10	0.20
Vegetable, leafy, group 4-16	15
Vegetable, tuberous and corm, subgroup 1C	0.01

<sup>1</sup>There are no U.S. registrations for tea.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[82 FR 36094, Aug. 3, 2017, as amended at 84 FR 50763, Sept. 26, 2019]

[↑ Back to Top](#)

#### §180.696 Tolpyralate; tolerances for residues.

(a) *General.* Tolerances are established for residues of tolpyralate, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only tolpyralate, 1-[[1-ethyl-4-[3-(2-methoxyethoxy)-2-methyl-4-(methylsulfonyl)benzoyl]-1*H*-pyrazol-5-yl]oxy]ethyl methyl carbonate, in or on the commodity.

Commodity	Parts per million
Corn, field, forage	0.01
Corn, field, grain	0.01
Corn, field, stover	0.01
Corn, pop, grain	0.01
Corn, pop, stover	0.01
Corn, sweet, forage	0.01
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[82 FR 34882, July 27, 2017]



[↑ Back to Top](#)**§180.697 Flutianil; tolerances for residues.**

(a) *General.* Tolerances are established for the combined residues of the fungicide flutianil, including its metabolites and degradates in or on food commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only flutianil, (2Z)-2-[2-fluoro-5-(trifluoromethyl)phenyl]sulfanyl-2-[3-(2-methoxyphenyl)thiazolidin-2-ylidene]acetonitrile in or on the following commodities:

Commodity	Parts per million
Apple	0.15
Apple, wet pomace	0.30
Cantaloupe	0.07
Cherry	0.40
Cucumber	0.20
Grape	0.70
Squash	0.05
Strawberry	0.50

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[83 FR 12268, Mar. 21, 2018]

[↑ Back to Top](#)**§180.698 Chlormequat chloride; tolerances for residues.**

(a) *General.* Tolerances are established for the residues of the plant regulator chlormequat chloride, including its metabolites and degradates in or on food commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only chlormequat chloride [(2-chloroethyl) trimethylammonium chloride in or on the following commodities:

Commodity	Parts per million
Barley, grain <sup>1</sup>	2.0
Cattle, meat byproduct <sup>1</sup>	0.50
Cattle, meat <sup>1</sup>	0.20
Egg <sup>1</sup>	0.10
Goat, meat byproduct <sup>1</sup>	0.50
Goat, meat <sup>1</sup>	0.20
Hog, meat byproduct <sup>1</sup>	0.50
Hog, meat <sup>1</sup>	0.20
Milk <sup>1</sup>	0.50
Oat, grain <sup>1</sup>	10
Poultry, meat byproduct <sup>1</sup>	0.10
Poultry, meat <sup>1</sup>	0.04
Sheep, meat byproduct <sup>1</sup>	0.50
Sheep, meat <sup>1</sup>	0.20
Wheat, grain <sup>1</sup>	3.0

<sup>1</sup>There are no U.S. registrations for this commodity as of April 25, 2018.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[83 FR 17929, Apr. 25, 2019]

[↑ Back to Top](#)

**§180.699 Pydiflumetofen; tolerances for residues.**

(a) *General.* Tolerances are established for residues of pydiflumetofen, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only pydiflumetofen (3-(difluoromethyl)-*N*-methoxy-1-methyl-*N*-[1-methyl-2-(2,4,6-trichlorophenyl)ethyl]-1*H*-pyrazole-4-carboxamide) in or on the commodity:

Commodity	Parts per million
Almond, hulls	9
Apple, wet pomace	1
Barley, grain	4.0
Barley, hay	30
Barley, straw	30
Berry, low growing, subgroup 13-07G	1
Brassica, leafy greens, subgroup 4-16B	50
Bushberry subgroup 13-07B	5
Cattle, fat	0.03
Cattle, meat	0.01
Cattle, meat byproducts	0.03
Cherry subgroup 12-12A	2
Corn, field, flour	0.02
Corn, field, forage	6.0
Corn, field, grain	0.015
Corn, field, milled byproducts	0.06
Corn, field, stover	15
Corn, pop, forage	6.0
Corn, pop, grain	0.015
Corn, pop, stover	10
Corn, sweet, forage	5.0
Corn, sweet, kernel plus cob with husks removed	0.01
Corn, sweet, stover	9.0
Cotton, gin byproducts	7
Cottonseed subgroup 20C	0.4
Fruit, citrus, group 10-10	1
Fruit, citrus, group 10-10, oil	30
Fruit, pome, group 11-10	0.2
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	1.5
Goat, fat	0.03
Goat, meat	0.01
Goat, meat byproducts	0.03
Grain, aspirated fractions	100
Grape, raisin	2.0
Horse, fat	0.03
Horse, meat	0.01
Horse, meat byproducts	0.03
Leaf petiole vegetable subgroup 22B	15
Leafy greens subgroup 4-16A	40
Milk	0.03
Nut, tree, group 14-12	0.07
Oat, forage	10
Oat, grain	3.0
Oat, hay	40
Oat, straw	20
Onion, bulb, subgroup 3-07A	0.2
Onion, green, subgroup 3-07B	2
Pea and bean, succulent shelled, subgroup 6B	0.1
Pea, field, forage	6.0
Pea, field, hay	40
Peach subgroup 12-12B	1
Peanut	0.02
Peanut, hay	30
Peanut, refined oil	0.05
Peas and bean, dried shelled, except soybean, subgroup 6C	0.40
Plum, prune, dried	1
Plum subgroup 12-12C	0.6
Potato, processed potato waste	0.03
Potato, wet peel	0.03
Quinoa, grain	4.0
Rapeseed subgroup 20A	0.90
Rye, grain	0.30
Rye, hay	50
Rye, straw	30

Sheep, fat	0.03
Sheep, meat	0.01
Sheep, meat byproducts	0.03
Sorghum, grain, forage	1.5
Sorghum, grain, grain	3
Sorghum, grain, stover	10
Soybean, seed	0.40
Sunflower subgroup 20B	0.5
Tomato, dried	3.0
Vegetable, <i>Brassica</i> , head and stem, group 5-16	3
Vegetable, cucurbit, group 9	0.50
Vegetable, fruiting, group 8-10	0.60
Vegetable, leaves of root and tuber, group 2	10
Vegetable, legume, edible podded, subgroup 6A	1
Vegetable, root, subgroup 1A	0.5
Vegetable, tuberous and corm subgroup 1C	0.015
Wheat, forage	15
Wheat, germ	0.40
Wheat, grain	0.30
Wheat, hay	50
Wheat, milled byproducts	2.0
Wheat, straw	30

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[83 FR 24044, May 24, 2018, as amended at 84 FR 39767, Aug. 12, 2019]

[↑ Back to Top](#)

#### §180.700 Afidopyropen; Tolerances for residues.

(a) *General.* Tolerances are established for residues of afidopyropen, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only afidopyropen, [(3S,4R,4aR,6S,6aS,12R,12aS,12bS)-3-[(cyclopropylcarbonyl)oxy]-1,3,4,4a,5,6,6a,12,12a,12b-decahydro-6,12-dihydroxy-4,6a,12b-trimethyl-11-oxo-9-(3-pyridinyl)-2H,11H-naphtho[2,1-b]pyrano[3,4-e]pyran-4-yl)methyl cyclopropanecarboxylate, in or on the following food commodities:

Commodity	Parts per million
Almond, hulls	0.15
Apple, wet pomace	0.05
Brassica, head and stem, group 5-16	0.50
Brassica, leafy greens, subgroup 4-16B	5.0
Citrus, oil	0.40
Cotton, gin byproducts	2.0
Cotton, undelinted seed	0.08
Fruit, citrus, group 10-10	0.15
Fruit, pome, group 11-10	0.02
Fruit, stone, group 12-12	0.03
Grain, aspirated fractions	0.15
Leafy Greens, subgroup 4-16A	2.0
Leaf petiole vegetable subgroup 22B	3.0
Nut, tree, group 14-12	0.01
Soybean, seed	0.01
Tomato, dried	0.50
Vegetable, cucurbit, group 9	0.70
Vegetable, fruiting, group 8-10	0.20
Vegetable, tuberous and corm, subgroup 1C	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[83 FR 46401, Sept. 13, 2018]

[↑ Back to Top](#)**§180.701 Pyrfluquinazon; tolerances for residues.**

(a) *General.* (1) Tolerances are established for residues of the insecticide pyrfluquinazon, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of pyrfluquinazon (1-acetyl-3,4-dihydro-3-[(3-pyridinylmethyl)amino]-6-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-2(1*H*)-quinazolinone) and its metabolite IV-01 (3-[(pyridin-3-ylmethyl)amino]-6-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-3,4-dihydro-1*H*-quinazolin-2-one), calculated as the stoichiometric equivalent of pyrfluquinazon.

Commodity	Parts per million
Almond, hulls	0.60
Cherry subgroup 12-12A	0.30
Citrus, dried pulp	2.0
Citrus, oil	30
Cotton, gin byproducts	6.0
Cotton, undelinted seed	0.30
Fruit, citrus, group 10-10	0.70
Fruit, pome, group 11-10	0.07
Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F	0.30
Leaf petiole vegetable, subgroup 22B	1.5
Peach subgroup 12-12B	0.04
Plum subgroup 12-12C	0.02
Nut, tree, group 14-12	0.02
Tea, dried <sup>1</sup>	20
Vegetable, <i>brassica</i> , head and stem, group 5-16	0.60
Vegetable, cucurbit, group 9	0.07
Vegetable, fruiting, group 8-10	0.30
Vegetable, leafy, group 4-16	5.0
Vegetable, tuberous and corm, subgroup 1C	0.02

<sup>1</sup>There are no U.S. registrations as of November 26, 2018 for use on tea.

(2) Tolerances are established for residues of the insecticide pyrfluquinazon, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of pyrfluquinazon (1-acetyl-3,4-dihydro-3-[(3-pyridinylmethyl)amino]-6-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-2(1*H*)-quinazolinone) and the free and conjugated forms of its metabolites IV-01 (3-[(pyridin-3-ylmethyl)amino]-6-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-3,4-dihydro-1*H*-quinazolin-2-one) and IV-203 (6-[1,2,2,2-tetrafluoro-1-trifluoromethyl)ethyl]-1*H*-quinazolin-2,4-dione), calculated as the stoichiometric equivalent of pyrfluquinazon.

Commodity	Parts per million
Cattle, liver	0.04
Goat, liver	0.04
Horse, liver	0.04
Sheep, liver	0.04

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[83 FR 60371, Nov. 26, 2018]

[↑ Back to Top](#)**§180.702 Bixafen; tolerances for residues.**

(a) *General.* (1) Tolerances are established for residues of the fungicide bixafen, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only bixafen, *N*-(3,4-dichloro-5-fluorobiphenyl-2-yl)-3-(difluoromethyl)-1-methylpyrazole-4-carboxamide, in or on the commodity.

Commodity	Parts per million
Beet, sugar, dried pulp	1.0
Grain, aspirated grain fractions	80

Grain, cereal, forage, fodder, and straw, group 16, except rice	20
Grain, cereal, group 15, except rice and grain sorghum	0.40
Peanut	0.01
Peanut, hay	8.0
Radish, tops	3.0
Sorghum, grain, grain	3.0
Soybean, hulls	0.15
Soybean, seed	0.04
Vegetable, root, subgroup 1A	0.30
Vegetable, tuberous and corm, subgroup 1C	0.01

(2) Tolerances are established for residues of the fungicide bixafen, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of bixafen, *N*-(3,4-dichloro-5-fluorobiphenyl-2-yl)-3-(difluoromethyl)-1-methylpyrazole-4-carboxamide, and its desmethyl metabolite, *N*-(3',4'-dichloro-5-fluoro[1,1'-biphenyl]-2-yl)-3-(difluoromethyl)-1*H*-pyrazole-4-carboxamide, calculated as the stoichiometric equivalent of bixafen, in or on the commodity.

Commodity	Parts per million
Cattle, fat	0.08
Cattle, meat byproducts	0.40
Cattle, muscle	0.08
Goat, fat	0.08
Goat, meat byproducts	0.40
Goat, muscle	0.08
Horse, fat	0.08
Horse, meat byproducts	0.40
Horse, muscle	0.08
Milk	0.04
Sheep, fat	0.08
Sheep, meat byproducts	0.40
Sheep, muscle	0.08

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[83 FR 62485, Dec. 4, 2018]

[↑ Back to Top](#)

### §180.703 6-benzyladenine; tolerances for residues.

(a) *General.* Tolerances are established for residues of the plant growth regulator, 6-benzyladenine in or on the commodities listed in the table below. Compliance with the tolerance levels specified in this paragraph is to be determined by measuring only 6-benzyladenine in or on the commodity.

Commodity	Parts per million
Avocado	0.02
Cucumber	0.01
Melon	0.01
Pepper	0.01
Squash	0.01
Tomato	0.01

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[83 FR 64030, Dec. 13, 2018]

[↑ Back to Top](#)

### §180.704 Sulfometuron-methyl; tolerances for residues.

(a) *General.* (1) Tolerances are established for residues of the herbicide sulfometuron-methyl, including its metabolites and degradates, in or on the commodity in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only sulfometuron-methyl, (methyl 2-[[[(4,6-dimethyl-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]benzoate), in or on the following raw agricultural commodities:

Commodity	Parts per million
Sugarcane, cane <sup>1</sup>	0.1

<sup>1</sup>There are no U.S. Registrations on Sugarcane as of September 24, 2018.

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[84 FR 11420, Mar. 27, 2019]

[↑ Back to Top](#)

### §180.705 Mefentrifluconazole; tolerances for residues.

(a) *General.* Tolerances are established for residues of mefentrifluconazole, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only mefentrifluconazole,  $\alpha$ -[4-(4-chlorophenoxy)-2-(trifluoromethyl)phenyl]- $\alpha$ -methyl-1*H*-1,2,4-triazole-1-ethanol, in or on the commodity.

**TABLE 1 TO PARAGRAPH (a)**

Commodity	Parts per million
Almond, hulls	4
Beet, sugar, dried pulp	2
Beet, sugar, leaves	9
Beet, sugar, roots	0.6
Cattle, fat	0.2
Cattle, meat	0.03
Cattle, meat byproducts	0.3
Cherry subgroup 12-12A	4
Corn, field, grain	0.01
Corn, milled byproducts	0.03
Corn, pop, grain	0.01
Corn, sweet, kernel plus cob with husks removed	0.03
Egg	0.01
Fruit, citrus, group 10-10, dried pulp	2
Fruit, citrus, group 10-10, oil	15
Fruit, pome, group 11-10	1.5
Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F	1.5
Goat, fat	0.2
Goat, meat	0.03
Goat, meat byproducts	0.3
Grain, aspirated grain fractions	6
Grain, cereal, forage, fodder, and straw, group 16, forage	6
Grain, cereal, forage, fodder, and straw, group 16, hay	15
Grain, cereal, forage, fodder, and straw, group 16, stover	9
Grain, cereal, forage, fodder, and straw, group 16, straw	30
Grain, cereal, group 15, except wheat and corn	4
Grape, raisin	4
Grapefruit subgroup 10-10C	0.5
Hog, fat	0.015
Hog, meat	0.01
Hog, meat byproducts	0.03
Horse, fat	0.2
Horse, meat	0.03
Horse, meat byproducts	0.3
Lemon/lime subgroup 10-10B	1
Lentil, dry, seed	2
Milk	0.03
Milk, fat	0.8
Nut, tree, group 14-12	0.06

Orange subgroup 10-10A	0.6
Peach subgroup 12-12B	1.5
Peanut	0.01
Peanut, hay	30
Plum prune, dried	4
Plum subgroup 12-12C	2
Poultry, fat	0.015
Poultry, meat	0.01
Poultry, meat byproducts	0.01
Rapeseed subgroup 20A	1
Sheep, fat	0.2
Sheep, meat	0.03
Sheep, meat byproducts	0.3
Soybean, seed	0.4
Vegetable, foliage of legume, group 7	20
Vegetable, legume, group 6, except lentil and soybean seed	0.15
Vegetable, tuberous and corm, subgroup 1C	0.04
Wheat, grain	0.3

(b)-(d) [Reserved]

[84 FR 30945, June 28, 2019]

[↑ Back to Top](#)

### §180.706 Valifenalate; tolerances for residues.

(a)(1) Tolerances are established for residues of the fungicide valifenalate, including its metabolites and degradates, in or on the following commodities. Compliance with the tolerance levels is to be determined by measuring only valifenalate (methyl N-(isopropoxycarbonyl)-L-valyl-(3RS)-3-(4-chlorophenyl)-β-alainate), in or on the following commodities.

Commodity	Parts per million
Celery	5
Grape <sup>1</sup>	5
Grape, raisin <sup>1</sup>	6
Vegetable, bulb, group 3-07	0.6
Vegetable, cucurbit, group 9	0.3
Vegetable, fruiting, group 8-10	1

<sup>1</sup>As of July 1, 2019, valifenalate is not registered in the United States for use on this commodity.

(2) Tolerances are established for residues of the fungicide valifenalate, including its metabolites and degradates, in or on the following commodities. Compliance with the tolerance levels is to be determined by measuring only the sum of valifenalate, methyl N-(isopropoxycarbonyl)-L-valyl-(3RS)-3-(4-chlorophenyl)-β-alainate and valifenalate acid, 3-(4-chlorophenyl)-3-[[N-(isopropoxycarbonyl)-L-valyl]-amino] propionic acid calculated as the stoichiometric equivalent of valifenalate, in or on the following commodities.

Commodity	Parts per million
Potato	0.04
Potato, granules/flakes	0.09

(b) *Section 18 emergency exemptions.* [Reserved]

(c) *Tolerances with regional registrations.* [Reserved]

(d) *Indirect or inadvertent residues.* [Reserved]

[84 FR 31218, July 1, 2019]

[↑ Back to Top](#)

## Subpart D—Exemptions From Tolerances

[↑ Back to Top](#)

### §180.900 Exemptions from the requirement of a tolerance.

An exemption from a tolerance shall be granted when it appears that the total quantity of the pesticide chemical in or on all raw agricultural commodities for which it is useful under conditions of use currently prevailing or proposed will involve no hazard to the public health.

[69 FR 23117, Apr. 28, 2004]

[↑ Back to Top](#)

### §180.905 Pesticide chemicals; exemptions from the requirement of a tolerance.

(a) When applied to growing crops, in accordance with good agricultural practice, the following pesticide chemicals are exempt from the requirement of a tolerance:

- (1) Petroleum oils.
- (2) Piperonyl butoxide.
- (3) Pyrethrins.
- (4) Sabadilla.

(b) When applied to growing crops, in accordance with good agricultural practice, the pesticides rotenone or derris or cube roots are exempt from the requirement of a tolerance. There are no U.S. registrations for use of rotenone, derris, or cube roots on food commodities as of March 23, 2011.

(c) These pesticides are not exempted from the requirement of a tolerance when applied to a crop at the time of or after harvest.

[77 FR 59128, Sept. 26, 2012]

[↑ Back to Top](#)

### §180.910 Inert ingredients used pre- and post-harvest; exemptions from the requirement of a tolerance.

Residues of the following materials are exempted from the requirement of a tolerance when used in accordance with good agricultural practice as inert (or occasionally active) ingredients in pesticide formulations applied to growing crops or to raw agricultural commodities after harvest:

**TABLE 1 TO 180.910**

Inert ingredients	Limits	Uses
Acetic acid		Catalyst
Acetic anhydride		Solvent, cosolvent
Acetone		Do.
Alcohols, C <sub>2-33</sub> , manuf. of, by-products from, overheads (CAS Reg. No. 876065-86-0)		Solvent
Alkanoic and alkenoic acids, mono- and diesters of α-hydro-ω-hydroxypoly (oxyethylene) with molecular weight (in amu) range of 200 to 6,000		Emulsifiers
Alkyl (C <sub>8</sub> -C <sub>24</sub> ) benzenesulfonic acid and its ammonium, calcium, magnesium, potassium, sodium, and zinc salts		Surfactants, related adjuvants of surfactants
C <sub>10</sub> -C <sub>18</sub> -Alkyl dimethyl amine oxides (CAS Reg. Nos. 1643-20-5, 2571-88-2, 2605-79-0, 3332-27-2, 61788-90-7, 68955-55-5, 70592-80-2, 7128-91-8, 85408-48-6, and 85408-49-7)	15% by weight in pesticide formulation	Surfactant
α-alkyl(C <sub>6</sub> -C <sub>15</sub> )-ω-hydroxypoly(oxyethylene)sulfate, and its ammonium, calcium, magnesium, potassium, sodium, and zinc salts, poly(oxyethylene) content averages 2-4 moles (CAS Reg. Nos.: 3088-31-1, 3694-74-4, 9004-82-4, 9004-84-6, 9021-91-4, 9086-52-6, 13150-00-0, 15826-16-1, 25446-78-0, 26183-44-8, 27140-00-7, 27731-62-0, 32612-48-9, 34431-25-9, 35015-74-8, 50602-06-7, 52286-18-7, 52286-19-8, 54116-08-4, 55901-67-2, 61702-79-2, 61894-66-4, 62755-21-9, 63428-85-3, 63428-86-4, 63428-87-5, 65086-57-9, 65086-79-5, 65104-74-7, 65122-38-5, 67674-66-2, 67762-19-0, 67762-21-4, 67845-82-3, 67845-83-4, 67923-90-4, 68037-05-8, 68037-06-9, 68171-41-5, 68424-50-0, 68511-39-7, 68585-34-2, 68610-66-2, 68611-29-0, 68611-55-2, 68649-53-6, 68890-88-0, 68891-29-2, 68891-30-5, 68891-38-3, 69011-37-6, 73665-22-2, 75422-21-8, 78330-16-2, 78330-17-3, 78330-25-3, 78330-26-4, 78330-27-5, 78330-28-6, 78330-29-7, 78330-30-0, 96130-61-9, 106597-03-9, 110392-50-2, 119432-41-6, 125301-88-4, 125301-89-5, 125301-92-0, 125736-54-1, 157707-85-2, 160104-51-8, 160901-27-9, 160901-28-0, 160901-29-1, 160901-30-4, 161025-28-1, 161074-79-9, 162063-19-6, 219756-63-5)	Not to exceed 30% of formulation	Surfactants, related adjuvants of surfactants.
α-alkyl (C <sub>12</sub> -C <sub>15</sub> )-ω-hydroxypoly (oxypropylene) poly (oxyethylene) copolymers (where the poly (oxypropylene) content is 3-60 moles and the poly (oxyethylene) content is 5-80 moles)	Not more than 20% of pesticide formulations	Surfactant
α-Alkyl-ω-hydroxypoly (oxypropylene) and/or poly (oxyethylene) polymers where the alkyl chain contains a minimum of six carbons (CAS Reg. Nos.: 9002-92-0; 9004-95-9; 9004-98-2; 9005-00-9; 9035-85-2; 9038-29-3; 9038-43-1; 9040-05-5; 9043-30-5; 9087-53-0; 25190-05-0; 24938-91-8; 25231-21-4; 251553-55-6; 26183-52-8; 26468-86-0; 26636-39-5; 27252-75-1; 27306-79-2; 31726-34-8; 34398-01-1; 34398-05-5; 37251-67-5; 37311-00-5; 37311-01-6; 37311-02-7; 37311-04-9; 39587-22-9; 50861-66-0; 52232-09-4; 52292-17-8; 52609-19-5; 57679-21-7; 59112-62-8; 60828-78-6; 61702-78-1; 61723-78-2; 61725-89-1; 61791-13-7; 61791-20-6; 61791-28-4; 61804-34-0; 61827-42-7; 61827-84-7; 62648-50-4; 63303-01-5; 63658-45-7; 63793-		Surfactants, related adjuvants of surfactants



<p>60-2; 64366-70-7; 64415-24-3; 64415-25-4; 64425-86-1; 65104-72-5; 65150-81-4; 66455-14-9; 66455-15-0; 67254-71-1; 67763-08-0; 68002-96-0; 68002-97-1; 68131-39-5; 68131-40-8; 68154-96-1; 68154-97-2; 68154-98-3; 68155-01-1; 68213-23-0; 68213-24-1; 68238-81-3; 68238-82-4; 68409-58-5; 68409-59-6; 68439-30-5; 68439-45-2; 68439-46-3; 68439-48-5; 68439-49-6; 68439-50-9; 68439-51-0; 68439-53-2; 68439-54-3; 68458-88-8; 68526-94-3; 68526-95-4; 68551-12-2; 68551-13-3; 68551-14-4; 68603-20-3; 68603-25-8; 68920-66-1; 68920-69-4; 68937-66-6; 68951-67-7; 68954-94-9; 68987-81-5; 68991-48-0; 69011-36-5; 69013-18-9; 69013-19-0; 69227-20-9; 69227-21-0; 69227-22-1; 69364-63-2; 70750-27-5; 70879-83-3; 70955-07-6; 71011-10-4; 71060-57-6; 71243-46-4; 72066-65-0; 72108-90-8; 72484-69-6; 72854-13-8; 72905-87-4; 73018-31-2; 73049-34-0; 74432-13-6; 74499-34-6; 78330-19-5; 78330-20-8; 78330-21-9; 78330-23-1; 79771-03-2; 84133-50-6; 85422-93-1; 97043-91-9; 97953-22-5; 102782-43-4; 103331-86-8; 103657-84-7; 103657-85-8; 103818-93-5; 103819-03-0; 106232-83-1; 111905-54-5; 116810-31-2; 116810-32-3; 116810-33-4; 120313-48-6; 120944-68-5; 121617-09-2; 126646-02-4; 126950-62-7; 127036-24-2; 139626-71-4; 152231-44-2; 154518-36-2; 157627-86-6; 157627-88-8; 157707-41-0; 157707-43-2; 159653-49-3; 160875-66-1; 160901-20-2; 160901-09-7; 160901-19-9; 161025-21-4; 161025-22-5; 166736-08-9; 169107-21-5; 172588-43-1; 176022-76-7; 196823-11-7; 287935-46-0; 288260-45-7; 303176-75-2; 954108-36-2; 2222805-23-2)</p>		
<p>α-alkyl (minimum C<sub>6</sub> linear, branched, saturated and/or unsaturated)-ω-hydroxypolyoxyethylene polymer with or without polyoxypropylene, mixture of di- and monohydrogen phosphate esters and the corresponding ammonium, calcium, magnesium, monoethanolamine, potassium, sodium, and zinc salts of the phosphate esters; minimum oxyethylene content is 2 moles; minimum oxypropylene content is 0 moles (CAS Reg. Nos.: 9004-80-2, 9046-01-9, 26982-05-8, 31800-89-2, 37280-82-3, 37281-86-0, 39341-09-8, 39341-65-6, 39464-66-9, 39464-69-2, 42612-52-2, 50643-20-4, 50668-50-3, 51325-10-1, 51884-64-1, 52019-36-0, 57486-09-6, 58206-38-5, 58318-92-6, 58857-49-1, 59112-71-9, 60267-55-2, 61837-79-4, 62362-49-6, 62482-61-5, 63747-86-4, 63887-54-7, 63887-55-8, 66020-37-9, 66272-25-1, 66281-20-7, 67711-84-6, 67786-06-5, 67989-06-4, 68070-99-5, 68071-17-0, 68071-35-2, 68071-37-4, 68130-44-9, 68130-45-0, 68130-46-1, 68130-47-2, 68186-29-8, 68186-34-5, 68186-36-7, 68186-37-8, 68238-84-6, 68311-02-4, 68311-04-6, 68332-75-2, 68389-72-0, 68400-75-9, 68413-78-5, 68425-73-0, 68425-75-2, 68439-39-4, 68458-48-0, 68511-15-9, 68511-36-4, 68511-37-5, 68551-05-3, 68585-15-9, 68585-16-0, 68585-17-1, 68585-36-4, 68585-39-7, 68603-24-7, 68607-14-7, 68610-64-0, 68610-65-1, 68649-29-6, 68649-30-9, 68650-84-0, 68815-11-2, 68855-46-9, 68856-03-1, 68890-90-4, 68890-91-5, 68891-12-3, 68891-13-4, 68891-26-9, 68908-64-5, 68909-65-9, 68909-67-1, 68909-69-3, 68921-24-4, 68921-60-8, 68954-87-0, 68954-88-1, 68954-92-7, 68987-35-9, 69029-43-2, 69980-69-4, 70247-99-3, 70248-14-5, 70844-96-1, 70903-63-8, 71965-23-6, 71965-24-7, 72480-27-4, 72623-67-7, 72623-68-8, 72828-56-9, 72828-57-0, 73018-34-5, 73038-25-2, 73050-08-5, 73050-09-6, 73361-29-2, 73378-71-9, 73378-72-0, 73559-42-9, 73559-43-0, 73559-44-1, 73559-45-2, 74499-76-6, 76930-25-1, 78041-18-6, 78330-22-0, 78330-24-2, 82465-25-6, 84843-37-8, 91254-26-1, 93925-54-3, 95014-34-9, 96416-89-6, 99924-51-3, 103170-31-6, 103170-32-7, 106233-09-4, 106233-10-7, 108818-88-8, 110392-49-9, 111798-26-6, 111905-50-1, 116671-23-9, 117584-36-8, 119415-05-3, 120913-45-3, 121158-61-0, 121158-63-2, 123339-53-7, 125139-13-1, 125301-86-2, 125301-87-3, 126646-03-5, 129208-04-4, 129870-77-5, 129870-80-0, 130354-37-9, 136504-88-6, 143372-50-3, 143372-51-4, 144336-75-4, 146815-57-8, 151688-56-1, 154518-39-5, 154518-40-8, 155240-11-2, 159704-69-5, 160498-49-7, 160611-24-5, 171543-66-1, 172027-16-6, 172274-69-0, 176707-42-9, 181963-82-6, 188741-55-1, 191940-53-1, 210493-60-0, 210993-53-6, 246159-55-7, 251298-11-0, 261627-68-3, 290348-69-5, 290348-70-8, 317833-96-8, 340681-28-9, 422563-19-7, 422563-26-6, 522613-09-8, 717140-06-2, 717140-09-5, 717827-29-7, 762245-80-7, 762245-81-8, 866538-89-8, 866538-90-1, 873662-29-4, 913068-96-9, 936100-29-7, 936100-30-0, 1072943-56-6, 1087209-87-7, 1174313-54-2, 1187742-89-7, 1187743-35-6, 1205632-03-6, 1233235-49-8, 1451002-50-8, 1456802-88-2, 1456802-89-3, 1456803-12-5)</p>	<p>Not to exceed 30% of formulation</p>	<p>Surfactants, related adjuvants of surfactants.</p>
<p>N-alkyl (C<sub>8</sub>-C<sub>18</sub>) primary amines and their acetate salts where the alkyl group is linear and may be saturated and/or unsaturated (CAS Reg. Nos. 61790-57-6, 61790-58-7, 61790-59-8, 61790-60-1, 61788-46-3, 61790-33-8, 68155-38-4)</p>	<p>Concentration in formulated end-use products not to exceed 10% by weight in herbicide products, 4% by weight in insecticide products, and 4% by weight in fungicide products</p>	<p>Surfactants, related adjuvants of surfactants</p>
<p>Alkyl (C<sub>8</sub>-C<sub>18</sub>) sulfate and its ammonium, calcium, isopropylamine, magnesium, potassium, sodium, and zinc salts</p>		<p>Surfactants.</p>
<p>Aluminum hydroxide</p>		<p>Diluent, carrier</p>
<p>Aluminum oxide</p>		<p>Diluent</p>
<p>Aluminum stearate</p>		<p>Surfactant</p>
<p>Amides, C<sub>5</sub>-C<sub>9</sub>, N-[3-(dimethylamino) propyl] (CAS Reg. No. 1044764-00-2)</p>		<p>Surfactant</p>
<p>Amides, C<sub>6</sub>-C<sub>12</sub>, N-[3-(dimethylamino) propyl] (CAS Reg. No. 1044764-06-8)</p>		<p>Surfactant</p>
<p>Ammonium bicarbonate</p>		<p>Surfactant, suspending agent, dispersing agent</p>
<p>Ammonium carbamate</p>		<p>Synergist in aluminum phosphide formulations</p>
<p>Ammonium chloride</p>		<p>Intensifier when used with ammonium nitrate as a dessicant or defoliant. Fire suppressant in aluminum phosphide and magnesium phosphide formulations</p>
<p>Ammonium hydroxide</p>		<p>Solvent, cosolvent, neutralizer, solubilizing agent</p>
<p>Ammonium persulfate (CAS Reg.No. 7727-54-0)</p>	<p>0.05%</p>	<p>Preservative</p>
<p>Ammonium salts of fatty acids (C<sub>8</sub>-C<sub>18</sub> saturated) (CAS Reg. No. 5972-76-9, 63718-65-0, 16530-70-4, 32582-95-9, 2437-23-2, 191799-95-8, 16530-71-5, 93917-76-1, 5297-93-8, 94266-36-1, 1002-89-7)</p>		<p>Surfactant</p>
<p>Ammonium stearate</p>		<p>Surfactant</p>
<p>Ammonium sulfate</p>		<p>Solid diluent, carrier</p>
<p>Ammonium thiosulfate</p>		<p>Intensifier when used</p>

		with ammonium nitrate as desiccant or defoliant
Amyl acetate		Solvent, cosolvent, attractant
Ascorbyl palmitate		Preservative
Attapulgate-type clay		Solid diluent, carrier, thickener
<i>Bacillus simplex</i> strain BU288		Emulsifier
<i>Bacillus thuringiensis</i> fermentation solids and/or solubles		Diluent, carrier
Bentonite		Solid diluent, carrier
Benzoic acid		Preservative for formulation
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-, homopolymer (Alpha-pinene, homopolymer)(CAS Reg. No. 25766-18-1)		Surfactants, related adjuvants of surfactants
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-methylene-, homopolymer (Beta-pinene, homopolymer) (CAS Reg. No. 25719-60-2)		Surfactants, related adjuvants of surfactants
Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-, polymer with 6,6-dimethyl-2-methylenebicyclo [3.1.1] heptane (Copolymer of alpha- and beta-pinene) (CAS Reg. No. 31393-98-3)		Surfactants, related adjuvants of surfactants
2-Bromo-2-nitro-1,3-propanediol (CAS Reg. No. 52-51-7)	0.04% or less by weight of the total pesticide formulation	In-can preservative
Butane		Propellant
Butanedioic acid, 2-sulfo-, C-C9-11-isoalkyl esters, C10-rich, disodium salts (CAS Reg. No. 815583-91-6)	Not to exceed 10% by weight in pesticide formulation for agricultural use	Surfactant
<i>n</i> -Butanol (CAS Reg. No. 71-36-3)		Solvent, cosolvent
<i>n</i> -Butyl benzoate (CAS Reg. No.136-60-7)		Solvent
di- <i>n</i> -Butyl adipate (CAS Reg. No. 105-99-7)	Not to exceed 25% by weight of pesticide formulation	Plasticizer in pesticide formulations for varroa mite control around bee hives
<i>n</i> -Butyl-3-hydroxybutyrate (CAS Reg. No. 53605-94-0)		Solvent
Butylated hydroxyanisole		Antioxidant
Butylated hydroxytoluene		Do.
Calcareous shale		Solid diluent carrier
Calcite		Do.
Calcium carbonate		Do.
Calcium chloride		Stabilizer
Calcium phosphate		Solid diluent, carrier
Calcium hydroxide		Do.
Calcium hypochlorite		Sanitizing and bleaching agent
Calcium lactate pentahydrate (CAS Reg. No. 5743-47-5)		Nutrient, stabilizer
Calcium oxide		Solid diluent, carrier
Calcium salt of partially dimerized rosin, conforming to 21 CFR 172.210		Coating agent
Calcium silicate		Solid diluent, carrier
Calcium stearate		Do.
Carbon Dioxide (CAS Reg. No. 124-38-9)	None	Propellant
Carrageenan, conforming to 21 CFR 172.620	Minimum molecular weight (in amu): 100,000	Thickener
Cetyl alcohol (CAS Reg. No. 36653-82-4)	Not more than 5.0% of pesticide formulation	Evaporation retardant
Charcoal, activated	Meets specifications in the Food Chemical Codex	Carrier
Coconut shells		Solid diluent and carrier
Cod liver oil		Solvent, cosolvent
Croscarmellose sodium (CAS Reg. No. 74811-65-7)		Disintegrant, solid diluent, carrier, and thickener
<i>n</i> -Decyl alcohol (CAS Reg. No. 112-30-1)		Solvent or co-solvent
Dialkyl (C <sub>8</sub> -C <sub>18</sub> ) dimethyl ammonium chloride	Not more than	Flocculating agent in

	0.2% in silica, hydrated silica	the manufacture of silica, hydrated silica for use as a solid diluent, carrier
Diatomite (diatomaceous earth)		Solid diluent carrier
Diethylaminoethanol, ethoxylated, propoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-75-4)		Surfactant
Diethylaminoethanol, ethoxylated, propoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-83-4)		Surfactant
Diethylaminoethanol, ethoxylated, reaction product with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-72-1)		Surfactant
Diethylaminoethanol, ethoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-81-2)		Surfactant
Diethylene glycol abietate		Surfactants, related adjuvants of surfactants
1,1-Difluoroethane (CAS Reg. No. 75-37-6)	In pesticide formulations used for insect control in food- and feed-handling establishments and animals; in bird repellent pesticide formulations	Aerosol propellant
1,2-Dihydro-6-ethoxy-2,2,4-trimethylquinolene	Not more than 0.02% of pesticide formulation	Antioxidant
Diisopropanolamine (CAS Reg. No. 110-97-4)	Not to exceed 10% by weight of pesticide formulation	Neutralizer or stabilizer
Diisopropyl adipate (CAS Reg. No. 6938-94-9)	40% in mosquito control formulations	Solvent, co-solvent
Dimethyl adipate (CAS no. 627-93-0)	None	Solvent/co-solvent
Dimethylaminoethanol, ethoxylated, propoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-42-5)		Surfactant
Dimethylaminoethanol, ethoxylated, propoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-67-4)		Surfactant
Dimethylaminoethanol, ethoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-38-9)		Surfactant
Dimethylaminoethanol, ethoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-49-2)		Surfactant
<i>N,N</i> -Dimethyl 9-decenamide (CAS Reg. No. 1356964-77-6)	Not to exceed 20% by weight of pesticide formulation	Surfactant, solvent
<i>N,N</i> -Dimethyldodecanamide (CAS Reg. No. 3007-53-2)	Not to exceed 20% by weight of pesticide formulation	Surfactant, solvent
Dimethyl ether (methane, oxybis-) (CAS Reg. No. 115-10-6)		Propellant
Dimethyl glutarate (CAS no. 1119-40-0)	None	Solvent/co-solvent
3,6-Dimethyl-4-octyn-3,6-diol	Not more than 2.5% of pesticide formulation	Surfactants, related adjuvants of surfactants
Dimethyl succinate (CAS no. 106-65-0)	None	Solvent/co-solvent
<i>N,N</i> -Dimethyltetradecanamide (CAS Reg. No. 3015-65-4)	Not to exceed 20% by weight of pesticide formulation	Surfactant, solvent
Di- <i>n</i> -butyl carbonate (CAS Reg. No. 542-52-9)		Solvent
Dipropylene glycol		Solvent, cosolvent
Disodium phosphate		Anticaking agent, conditioning agent
Disodium zinc ethylenediaminetetraacetate dihydrate		Sequestrant
Distillates, (Fischer-Tropsch), heavy, C <sub>18</sub> -C <sub>50</sub> , branched, cyclic and linear (CAS Reg. No. 848301-69-9)		Solvent, diluent and/or dust suppressant
Distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS Reg. No. 64742-65-0)		Carrier
Dolomite		Solid diluent, carrier
Epoxidized linseed oil		Surfactants, related adjuvants of surfactants
Epoxidized soybean oil		Do.

Ethanesulfonic acid, 2-hydroxy- (CAS Reg. No. 107-36-8)		Chelator, sequestrant, or conditioning agent
Ethanesulfonic acid, 2-hydroxy-, ammonium salts (CAS Reg. No. 57267-78-4)		Do.
Ethanesulfonic acid, 2-hydroxy-, calcium salts (CAS Reg. No. 10550-47-7)		Do.
Ethanesulfonic acid, 2-hydroxy-, magnesium salts (CAS Reg. No. 17345-56-1)		Do.
Ethanesulfonic acid, 2-hydroxy-, potassium salts (CAS Reg. No. 1561-99-5)		Do.
Ethanesulfonic acid, 2-hydroxy-, sodium salts (CAS Reg. No. 1562-00-1)		Do.
Ethanesulfonic acid, 2-hydroxy-, zinc salts (CAS Reg. No. 129756-32-7)		Do.
Ethyl acetate		Solvent, cosolvent
Ethyl alcohol		Do.
Ethyl esters of fatty acids derived from edible fats and oils		Solvent, cosolvent
Ethyl maltol (CAS Reg. No.4940-11-8)	Not more than 0.2 % of the pesticide formulation	Odor masking agent
Ethylene glycol (CAS Reg. No. 107-21-1)	Without limitation	Encapsulating agent for pesticides being applied post-harvest as residual, and crack and crevice sprays in and around food and nonfood areas of residential and nonresidential structures, including food handling establishments
Ethylene oxide adducts of 2,4,7,9-tetramethyl-5-decynediol, the ethylene oxide content averages 3.5, 10 or 30 moles (CAS Reg. No. 9014-85-1)		Surfactants, related adjuvants of surfactants
(S,S)-Ethylenediamine disuccinic acid trisodium salt (CAS Reg. No. 178949-82-1)		Sequestrant or chelating agent
Ethylenediaminetetraacetic acid	3% of pesticide formulation	Sequestrant
Ethylenediaminetetraacetic acid, tetrasodium salt	5% of pesticide formulation	Sequestrant
2-Ethyl-1-hexanol (CAS Reg. No. 104-76-7)	Not more than 10% of pesticide	Solvent, adjuvant of surfactants
Fatty acids, conforming to 21 CFR 172.860		Binder, defoaming agent, lubricant
FD&C Blue No. 1	Not more than 0.2% of pesticide formulation	Dye
FD&C Red No. 40 (CAS Reg. No. 25956-17-6) conforming to 21 CFR 74.340	Not to exceed 0.002% by weight of pesticide formulation	Dye, coloring agent
Ferric Citrate (CAS Reg. No. 2338-05-8)		Stabilizer
Ferric sulfate		Solid diluent, carrier
Furcelleran		Thickener
D-Glucitol, 1-deoxy-1-(methyl-amino)-, N-C <sub>8-10</sub> acyl derivatives (CAS Reg. No. 1591782-62-5)	Not more than 40% by weight in pesticide formulation	Surfactant
D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-methyl- (CAS Reg. No. 5306-85-4); D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-ethyl- (CAS Reg. No. 30915-81-2); D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-propyl) (CAS Reg. No.107644-13-3); D-glucitol, 1,4:3,6-dianhydro-2,5-bis-O-(1-methylethyl)-, (iso-propyl diether) (CAS Reg. No. 103594-41-8); D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-butyl- (CAS Reg. No. 103594-42-9); D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-(1-methylpropyl)-, (CAS Reg. No. not assigned); and D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-(2-methylpropyl)-, (CAS Reg. No. not assigned)		solvent, co-solvent, viscosity modifier, and adjuvant
D-glucopyranose, oligomeric, C <sub>10-16</sub> -alkyl glycosides (CAS Reg. No. 110615-47-9)		Surfactant
D-glucopyranose, oligomeric, 6-(dihydrogen citrates), C <sub>8-20</sub> branched and linear alkyl glycosides, sodium salts (CAS Reg. No. 1079993-97-7)		Surfactant
D-glucopyranose, oligomeric, 6-(hydrogen sulfosuccinates), C <sub>8-20</sub> branched and linear alkyl glycosides, sodium salts (CAS Reg. No. 1079993-92-2)		Surfactant
D-glucopyranose, oligomeric, lactates, C <sub>8-20</sub> branched and linear alkyl glycosides (CAS Reg. No. 1079993-94-4)		Surfactant
D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum) (CAS Reg. No. 595585-15-2)		Stabilizer/suspension agent.
Glycerides, edible fats and oils derived from plants and animals, reaction products with sucrose (CAS Reg. Nos. 100403-38-1, 100403-41-6, 100403-39-2, 100403-40-5)		Emulsifier, dispersing agent
Glycerol mono-, di-, and triacetate		Solvent, cosolvent
Glyceryl monostearate		Emulsifier
Granite		Do.
Graphite		Solid diluent, carrier
Gum arabic (acacia)		Surfactant,

		suspending agent, dispersing agent
Gypsum		Solid diluent, carrier
Hexamethylenetetramine	For use in citrus washing solutions only at not more than 1%	Preservative
3-hexen-1-ol, (3Z)- (CAS Reg. No. 928-96-1)	Not more than 0.4% of the pesticide formulation	Odorant, alerting agent
<i>n</i> -Hexyl alcohol (CAS Reg. No. 111-27-3)		Solvent, cosolvent
C <sub>9</sub> rich aromatic hydrocarbons (CAS Reg. No. 64742-95-6)		Solvent
C <sub>10-11</sub> rich aromatic hydrocarbons (CAS Reg. No. 64742-94-5)		Solvent
C <sub>11-12</sub> rich aromatic hydrocarbons (CAS Reg. No. 64742-94-5)		Solvent
Hydrochloric acid		Solvent, neutralizer
Hydroxyethylmorpholine, ethoxylated, propoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-06-4)		Surfactant
Hydroxyethylmorpholine, ethoxylated, propoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-17-7)		Surfactant
Hydroxyethylmorpholine, ethoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-00-8)		Surfactant
Hydroxyethylmorpholine, ethoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-09-7)		Surfactant
Hydroxyethylpiperidine, ethoxylated, propoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-22-4)		Surfactant
Hydroxyethylpiperidine, ethoxylated, propoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-28-0)		Surfactant
Hydroxyethylpiperidine, ethoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-20-2)		Surfactant
Hydroxyethylpiperidine, ethoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-25-7)		Surfactant
Hydroxyethylidene diphosphonic acid (HEDP) (CAS Reg. No. 2809-21-4)	For use in antimicrobial pesticide formulations at not more than 1 percent	Stabilizer, chelator
Iron oxide		Solid diluent, carrier
Iron oxide yellow (CAS Reg. No. 20344-49-4)	Not to exceed 0.15% by weight of pesticide formulation	Colorant in pesticide formulations for varroa mite control around bee hives
Isoamyl acetate (CAS Reg. No. 123-92-2)		Buffering agent
Isobutane (CAS Reg. No. 75-28-5)	None	Propellant
Isobutyl Acetate (CAS Reg. No. 110-19-0)		Solvent
Isobutyl isobutyrate (CAS Reg. No. 97-85-8)	None	Solvent
Isobutyric Acid (CAS Reg. No. 79-31-2)		Solvent
Isopropyl-3-hydroxybutyrate (CAS Reg. No. 54074-94-1)		Solvent
Isopropyl myristate (CAS Reg. No. 110-27-0)		Solvent
Kaolinite-type clay		Solid diluent, carrier
Lactic acid		Solvent
Lactic acid, 2-ethylhexyl ester (CAS Reg. No. 6283-86-9)		Solvent
Lactic acid, 2-ethylhexyl ester, (2S)- (CAS Reg. No. 186817-80-1)		Solvent
Lactic acid, n-propyl ester, (S); (CAS Reg. No. 53651-69-7)		Solvent
Lauryl alcohol		Surfactant
Lignin (CAS Reg. No. 9005-53-2)		Surfactant, related adjuvants of surfactants
Lignin, alkali (CAS Reg. No. 8068-05-1)		Do.
Lignin, alkali, oxidized, sodium salt (CAS Reg. No. 68201-23-0)		Do.
Lignin alkali reaction products with disodium sulfite and formaldehyde (CAS Reg. No. 105859-97-0)		Do.
Lignin alkali reaction products with formaldehyde and sodium bisulfite (CAS Reg. No. 68512-35-6)		Do.
Lignosulfonic acid (CAS Reg. No. 8062-15-5)		Do.
Lignosulfonic acid, ammonium calcium salt (CAS Reg. No. 12710-04-2)		Do.
Lignosulfonic acid, ammonium magnesium salt (CAS Reg. No. 123175-37-1)		Do.
Lignosulfonic acid, ammonium salt (CAS Reg. No. 8061-53-8)		Do.
Lignosulfonic acid, ammonium sodium salt (CAS Reg. No. 166798-73-8)		Do.
Lignosulfonic acid, calcium magnesium salt (CAS Reg. No. 55598-86-2)		Do.
Lignosulfonic acid, calcium salt (CAS Reg. No. 8061-52-7)		Do.
Lignosulfonic acid, calcium sodium salt (CAS Reg. No. 37325-33-0)		Do.
Lignosulfonic acid, ethoxylated, sodium salt (CAS Reg. No. 68611-14-3)		Do.
Lignosulfonic acid, magnesium salt (CAS Reg. No. 8061-54-9)		Do.
Lignosulfonic acid, potassium salt (CAS Reg. No. 37314-65-1)		Do.
Lignosulfonic acid, sodium salt (CAS Reg. No. 8061-51-6)		Do.

Lignosulfonic acid, sodium salt, oxidized (CAS Reg. No. 68855-41-4)		Do.
Lignosulfonic acid, sodium salt, polymer with formaldehyde and phenol (CAS Reg. No. 37207-89-9)		Do.
Lignosulfonic acid, sodium salt, sulfomethylated (CAS Reg. No. 68512-34-5)		Do.
Lignosulfonic acid, zinc salt (CAS Reg. No. 57866-49-6)		Do.
d-Limonene (CAS Reg. No. 5989-27-5)		Solvent, fragrance
Magnesium carbonate		Anticaking agent, conditioning agent
Magnesium chloride		Safener
Magnesium lime		Solid diluent, carrier
Magnesium oxide		Do.
Magnesium silicate		Do.
Magnesium stearate		Surfactant
Magnesium sulfate		Solid diluent, carrier, safener
Methyl alcohol		Solvent
Methyl <i>n</i> -amyl ketone (CAS Reg. No. 110-43-0)		Solvent, cosolvent
Methyl 5-(dimethylamino)-2-methyl-5-oxopentanoate (1174627-68-9)		Solvent
Methyl esters of fatty acids derived from edible fats and oils		Solvent, cosolvent
Methyl esters of higher fatty acids conforming to 21 CFR 573.640		Antidusting agent, surfactant
Methyl isobutyl ketone		Solvent
2-methyl-2,4-pentanediol (CAS Reg. No. 107-41-5)	Without limitation	Growing crops and food animals
Methyl isobutyrate (CAS Reg. No. 547-63-7)	None	Solvent
2-methyl-1,3-propanediol (CAS Reg. No. 2163-42-0)		Solvent, surfactant
Methylated silicones		Antifoaming agent
Mono-, di-, and trimethylnaphthalenesulfonic acids and naphthalenesulfonic acids formaldehyde condensates, ammonium, sodium and potassium salts (CAS Reg. Nos. 9008-63-3, 9069-80-1, 9084-06-4, 36290-04-7, 91078-68-1, 141959-43-5, 68425-94-5, 67828-14-2)		Surfactants, related adjuvants of surfactants
Mica		Solid diluent, carrier
Mineral oil, U.S.P., or conforming to 21 CFR 172.878 or 178.3620(a) (CAS Reg. No. 8012-95-1)		Diluent, carrier, and solvent
Monoammonium phosphate	No more than 3.75% by weight in formulation	Postharvest fumigation in formulation with aluminum phosphide
Monoethanolamine (CAS Reg. No. 141-43-5)	Not to exceed 3.35% by weight in pesticide formulation	Solvent
Mono- and diglycerides of C <sub>8</sub> -C <sub>18</sub> fatty acids		Surfactants, related adjuvants of surfactants
Montmorillonite-type clay		Solid diluent, carrier
Nonyl, decyl, and undecyl glycoside mixture with a mixture of nonyl, decyl, and undecyl oligosaccharides and related reaction products (primarily decanol and undecanol) produced as an aqueous-based liquid (50 to 65% solids) from the reaction of primary alcohols (containing 15 to 20% secondary alcohol isomers) in a ratio of 20% C <sub>9</sub> , 40% C <sub>10</sub> , and 40% C <sub>11</sub> with carbohydrates (average glucose to alkyl chain ratio 1.3 to 1.8)		Surfactant.
α-( <i>p</i> -Nonylphenol)-ω-hydroxypoly(oxyethylene) mixture of dihydrogen phosphate and monohydrogen phosphate esters and the corresponding ammonium, calcium, magnesium, potassium, sodium, and zinc salts of the phosphate esters; the nonyl group is a propylene trimer isomer and the poly(oxyethylene) content averages 4-14 or 30 moles (CAS Reg. Nos. 51811-79-1, 59139-23-0, 67922-57-0, 68412-53-3, 68553-97-9, 68954-84-7, 99821-14-4, 152143-22-1, 51609-41-7, 37340-60-6, 106151-63-7, 68584-47-4, 52503-15-8, 68458-49-1)	Not to exceed 7% of pesticide formulation	Surfactants, related adjuvants of surfactants
α-( <i>p</i> -Nonylphenyl)-ω-hydroxypoly(oxyethylene) produced by the condensation of 1 mole of nonylphenol (nonyl group is a propylene trimer isomer) with an average of 4-14 or 30-90 moles of ethylene oxide; if a blend of products is used, the average number of moles of ethylene oxide reacted to produce any product that is a component of the blend shall be in the range of 4-14 or 30-90		Surfactants, related adjuvants of surfactants
α-( <i>p</i> -Nonylphenol)-ω-hydroxypoly(oxyethylene) sulfate, ammonium, calcium, magnesium, potassium, sodium, and zinc salts the nonyl group is propylene trimer isomer and the poly(oxyethylene) content averages 4 moles (CAS Reg. Nos. 9014-90-8, 9051-57-4, 9081-17-8, 68649-55-8, 68891-33-8)	Not to exceed 7% of pesticide formulation	Surfactants, related adjuvants of surfactants
1-Octanal (CAS Reg. No. 124-13-0)	Not more than 0.2% of the pesticide formulation	Odor masking agent
<i>n</i> -Octyl alcohol (CAS Reg. No. 111-87-5)		Solvent or co-solvent
Octyl and decyl glucosides mixture with a mixture of octyl and decyl oligosaccharides and related reaction products (primarily <i>n</i> -decanol) produced as an aqueous-based liquid (68-72% solids) from the reaction of straight chain alcohols (C <sub>8</sub> (45%), C <sub>10</sub> (55%)) with anhydrous glucose		Surfactants, related adjuvants of surfactants
Oleic acid		Diluent
Oleic acid diester of α-hydro-ω-hydroxypoly(oxyethylene); the poly(oxyethylene) having average molecular weight (in amu) 400		Surfactants, related adjuvants of surfactants
α-Oleoyl-ω-hydroxypoly(oxyethylene), average molecular weight (in amu) of 600		Emulsifier
Oleyl alcohol (CAS Reg. No. 143-28-2)	15%	Cosolvent
Oxalic acid	No more oxalic acid should be used than is	Calcium chelating hard water inhibitor

	necessary to chelate calcium and in no case should more than 2 lb oxalic acid per acre be used	
Palmitic acid		Diluent
Pentaerythritol ester of maleic anhydride modified wood rosin		Plasticizer
Pentaerythritol tetrakis (3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate) (CAS Reg. No. 6683-19-8)	Not to exceed 5% by weight of the pesticide formulation	Antioxidant, stabilizer
Petrolatum, conforming to 21 CFR 172.880		Coating agent
Petroleum hydrocarbons, light odorless conforming to 21 CFR 172.884		Solvent, diluent.
Petroleum hydrocarbons, synthetic isoparaffinic, conforming to 21 CFR 172.882		Do.
Petroleum naphtha, conforming to 21 CFR 172.250(d)		Component of coating agent
Petroleum wax, conforming to 21 CFR 172.886(d)		Coating agent
2-Phenoxyethanol (CAS Reg. No. 122-99-6)	0.2% by weight in pesticide formulation	Solvent or co-solvent
Phenylethyl acetate (CAS Reg. No. 103-45-7)	Not to exceed 0.015% in pesticide formulation	Solvent
Phosphoric acid		Buffer
Polyethylene, conforming to 21 CFR 177.1520(c)		Binder, carrier, and coating agent
Polyethylene glycol[ $\alpha$ -hydro- $\omega$ -hydroxypoly(oxyethylene)]; mean molecular weight (in amu) 194 to 9,500 conforms to 21 CFR 178.3750		Surfactants, related adjuvants of surfactants
Polyethyleneimine (CAS Reg. No. 9002-98-6)	Minimum number average molecular weight 1,300 amu	Emulsifier, surfactant, adjuvant, dispersant and/or coating
Polyglycerol esters of fatty acids conforming to 21 CFR 172.854		Surfactants, related adjuvants of surfactants
Polyglyceryl phthalate ester of coconut oil fatty acids, including fatty acid coco polymers with glyceryl and phthalic anhydride (CAS No. 67746-02-5) and coconut oil polymer with glyceryl and phthalic anhydride (CAS No. 66070-87-9)	None	Surfactants, related adjuvants of surfactants
Poly(oxy-1,2-ethanediyl), $\alpha$ -(carboxymethyl)- $\omega$ -(nonylphenoxy) produced by the condensation of 1 mole of nonylphenol (nonyl group is a propylene trimer isomer) with an average of 4-14 or 30-90 moles of ethylene oxide. The molecular weight (in amu) ranges are 454-894 and 1598-4238		Surfactant
Poly(oxy-1,2-ethanediyl), $\alpha$ -(1-oxoalkyl)- $\omega$ -methoxy-, where the alkyl chain contains a minimum of 6 and a maximum of 18 carbons and the oxyethylene content is 3-13 moles (CAS Reg. No. 53100-65-5, 194289-64-0, 34398-00-0, 9006-27-3, 32761-35-6, 53467-81-5, 518299-31-5, and 34397-99-4)	Not to exceed 25% by weight in pesticide formulation	Stabilizer, solubilizing agent
Poly(oxy-1,2-ethanediyl), $\alpha$ -[tris(1-phenylethyl)phenyl]- $\omega$ -hydroxy-, (CAS Reg. No. 99734-09-5)	For use in post-harvest applications; not to exceed 15% by weight in pesticide formulations	Surfactants
Poly(oxy-1,2-ethanediyl), $\alpha$ -(3-carboxy-1-oxosulfopropyl)- $\omega$ -hydroxy-, C <sub>10-12</sub> -alkyl ethers, disodium salts, the poly(oxyethylene) content averages 5-15 moles (CAS Reg. No. 68954-91-6)	Not to exceed 10% by weight of pesticide formulation	Surfactant
Poly(oxy-1,2-ethanediyl), $\alpha$ -(3-carboxy-1-oxosulfopropyl)- $\omega$ -hydroxy-, C <sub>10-16</sub> -alkyl ethers, disodium salts, the poly(oxyethylene) content averages 5-15 moles (CAS Reg, No. 68815-56-5)	Not to exceed 10% by weight of pesticide formulation	Surfactant
Poly(oxy-1,2-ethanediyl), $\alpha$ -(3-carboxy-1-oxosulfopropyl)- $\omega$ -hydroxy-, C <sub>12-14</sub> -alkyl ethers, disodium salts, the poly(oxyethylene) content averages 5-15 moles (CAS Reg. No. 1024612-24-5)	Not to exceed 10% by weight of pesticide formulation	Surfactant
Poly(oxy-1,2-ethanediyl), $\alpha$ -(3-carboxy-1-oxosulfopropyl)- $\omega$ -(isotridecyloxy)-, sodium salt (1:2), the poly(oxyethylene) content averages 5-15 moles (CAS Reg. No. 1013906-64-3)	Not to exceed 10% by weight of pesticide formulation	Surfactant
Polyoxyethylene (20) sorbitan monostearate		Surfactants, related adjuvants of surfactants
[Poly(oxy(methyl-1,2-ethanediyl)), $\alpha$ -[2-bis(2-hydroxyethyl)amino]propyl]- $\omega$ -hydroxy,-ether with $\alpha$ -hydro- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) (1:2), mono-C <sub>12-16</sub> alkyl ethers, (CAS Reg. No. 176022-82-5)	Not to exceed 15% in the formulated product; only	Surfactant

	for use with glyphosate	
Polysorbate 65, conforming to 21 CFR 172.838		Emulsifier
Potassium aluminum silicate		Solid diluent, carrier
Potassium benzoate (Cas No. 582-25-2)	None	Preservative
Potassium hydroxide		Neutralizer
Potassium phosphate		Buffer
Potassium sulfate		Solid diluent
Propanamide, 2-hydroxy- <i>N</i> , <i>N</i> -dimethyl- (CAS Reg. No. 35123-06-9)	Not to exceed 20% by weight in pesticide formulation	Solvent/co-solvent
Propane		Propellant
1,3-Propanediol (CAS Reg. No. 504-63-2)		Solvent, co-solvent, diluent, or freeze-point depressant
Propanoic acid, 2-methyl-, monoester with 2,2,4-trimethyl-1,3-pentanediol (CAS Reg. No. 25265-77-4)		Solvent, co-solvent
2-Propanol, 1,1',1"-nitrotris- (CAS No. 122-20-3)	Without limitation	Neutralizer
<i>n</i> -Propanol		Solvent, cosolvent
2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and methyl 2-methyl-2-propenoate, ammonium salt (CAS Registration No. 55989-05-4), minimum number average molecular weight (in amu), 18,900.		Encapsulating agent, dispensers, resins, fibers and beads
Propyl gallate		Antioxidant
Propyl <i>p</i> -hydroxybenzoate		Preservative for formulations
Propylene glycol		Solvent, cosolvent
Propylene glycol alginate (as defined in 21 CFR 172.858)		Defoaming agent
Propylene glycol monomethyl ether (CAS No. 107-98-2)	none	solvent
Pyrophyllite		Solid diluent, carrier
<i>Rhizobium</i> inoculants (e.g. <i>Sinorhizobium</i> , <i>Bradyrhizobium</i> & <i>Rhizobium</i> )		All leguminous food commodities
Rosin, partially dimerized (as defined in 21 CFR 172.615)		Surfactants, related adjuvants of surfactants
Rosin, partially hydrogenated (as defined in 21 CFR 172.615)		Do.
Rosin, wood		Do.
Salicylaldehyde (CAS Reg. No. 90-02-8)	Not to exceed 14% by weight of pesticide formulation	Penetration aid
Salts of fatty acids, conforming to 21 CFR 172.863		Binder, emulsifier, anticaking agent
Sand		Solid diluent, carrier
Shellac, bleached; refined, food grade, arsenic and rosin-free		Coating agent
Silver nitrate (Cas Reg. No. 7761-88-8)	For use on potatoes as post-harvest treatment to control sprouting at no more than 0.06% by weight in pesticide formulations	Stabilizer
Soapstone		Solid diluent
Sodium acid pyrophosphate		Surfactant, suspending agent, dispersing agent, buffer
Sodium alkyl naphthalenesulfonates (CAS Reg. Nos. 68909-83-1, 68909-84-2, 68909-82-0, 27213-90-7, 26264-58-4, 27178-87-6, 111163-74-7, 908356-16-1, 25417-20-3, 25638-17-9, 145578-88-7, 1322-93-6, 1323-19-9, 7403-47-6, 68442-09-1, 127646-44-0, 908356-18-3)	Limited to no more than 30% by weight in pesticide end-use products	Surfactants, related adjuvants of surfactants
Sodium aluminum silicate		Solid diluent, carrier
Sodium dioctylsulfosuccinate		Surfactants, related adjuvants of surfactants
Sodium 1,4-dihexyl sulfosuccinate (CAS Reg. No. 3006-15-3)		Surfactants, related adjuvants of surfactants
Sodium 1,4-diisobutyl sulfosuccinate (CAS Reg. No. 127-39-9)		Surfactants, related adjuvants of surfactants
Sodium 1,4-dipentyl sulfosuccinate (CAS Reg. No. 922-80-5)		Surfactants, related adjuvants of surfactants



Sodium DL-lactate (CAS Reg. No. 72-17-3)		Surfactant
Sodium hexametaphosphate		Surfactant, emulsifier, wetting agent, suspending agent, dispersing agent, buffer
Sodium hydroxide		Neutralizer
Sodium L-lactate (CAS Reg. No. 867-56-1)		Surfactant
Sodium metasilicate		Surfactants, emulsifiers, wetting agents, dispersing agents, buffer
Sodium monoalkyl and dialkyl (C6-C16) phenoxy benzenedisulfonates and related acids (CAS Reg. Nos. 147732-59-0, 147732-60-3, 169662-22-0, 70191-75-2, 36445-71-3, 39354-74-0, 70146-13-3, 119345-03-8, 149119-20-0, 149119-19-7, 119345-04-9, 28519-02-0, 25167-32-2, 30260-73-2, 65143-89-7, 70191-76-3)	Not to exceed 20% in pesticide formulations	Surfactants, related adjuvants of surfactants
Sodium $\alpha$ -olefinsulfonate (sodium C <sub>14</sub> -C <sub>16</sub> ) (Olefin sulfonate)		Surfactants, related adjuvants of surfactants
Sodium <i>N</i> -oleoyl- <i>N</i> -methyl taurine (CAS Reg. No. 137-20-2)		Surfactants, related adjuvants of surfactants
Sodium and potassium salts of N-alkyl (C <sub>8</sub> -C <sub>18</sub> )-beta-iminodipropionic acid where the C <sub>8</sub> -C <sub>18</sub> is linear and may be saturated and/or unsaturated (CAS Reg. Nos. 110676-19-2, 3655-00-3, 61791-56-8, 14960-06-6, 26256-79-1, 90170-43-7, 91696-17-2, 97862-48-1)	Concentration in formulated end-use products not to exceed 30% by weight in pesticide formulations	Surfactants, related adjuvants of surfactants
Sodium salt of sulfated oleic acid		Surfactants, related adjuvants of surfactants
Sodium silicate		Surfactant, emulsifier, wetting agent, stabilizer, inhibitor
Sodium starch glycolate (CAS Reg. No. 9063-38-1)	Granular and tableted products only; not to exceed 8% of the formulated product	Disintegrant
Sodium sulfate		Solid diluent, carrier
Sodium tripolyphosphate		Buffer, surfactant, suspending agent, dispersing agent, anticaking agent, conditioning agent
Sorbic acid (CAS Reg. No. 110-44-1)		Preservative for formulations
Sorbitan fatty acid esters (fatty acids limited to C <sub>12</sub> , C <sub>14</sub> , C <sub>16</sub> , and C <sub>18</sub> containing minor amounts of associated fatty acids) and their derivatives; the poly(oxyethylene) content averages 5-20 moles		Surfactants, related adjuvants or surfactants.
Soybean flour	Expires May 24, 2005.	Surfactant
Soybean oil-derived fatty acids		Solvent, cosolvent
Stearic acid		Diluent
$\alpha$ -Stearoyl- $\omega$ -hydroxypoly(oxyethylene), average molecular weight (in amu) of 600		Emulsifier
$\alpha$ -Stearoyl- $\omega$ -hydroxypoly(oxyethylene); the poly(oxyethylene) content averages either 8, 9, or 40 moles; if a blend of products is used, the average number of moles ethylene oxide reacted to produce any product that is a component of the blend shall be either 8, 9, or 40		Surfactants, related adjuvants of surfactants
Sucrose octaacetate		Adhesive
Sulfite liquors and cooking liquors, spent, oxidized (CAS Reg. No. 68514-09-0)		Surfactant, related adjuvants of surfactants
Sulfuric acid (CAS Reg. No.7664-93-9)	Not to exceed 10% of the pesticide formulation; non-aerosol formulations only	pH Control agent
Sweet orange peel tincture (CAS Reg. No. 8028-48-6)	Not to exceed 10% (weight/weight) in pesticide formulation	Surfactant, fragrance, related adjuvants of surfactants
Synthetic paraffin and its succinic derivatives conforming to 21 CFR 172.275		Carrier, binder, and carrying agent
Synthetic petroleum wax, conforming to 21 CFR 172.888		Binder, carrier, and

		coating agent
Talc		Solid diluent, carriers
Tall oil; fatty acids not less than 58%, rosin acids not more than 44%, unsaponifiables not more than 8%		Surfactants, related adjuvants of surfactants
Tall oil fatty acids (CAS Reg. No. 61790-12-3)		Solvent/carrier
Tartrazine		Dye
Terpenes and terpenoids, turpentine oil, alpha-pinene fraction, polymd. (CAS Reg. No. 70750-57-1)		Surfactants, related adjuvants of surfactants
1,1,1,2-Tetrafluoroethane, (CAS Reg. No. 811-97-2)		Aerosol propellant
Trans-1,3,3,3-tetrafluoroprop-1-ene (CAS Reg. No. 29118-24-9)		Propellant
Tetrahydrofurfuryl alcohol (THFA) (CAS Reg. No. 97-99-4)	Expires February 9, 2008	Solvent/cosolvent
N,N,N',N',-tetrakis-(2-hydroxypropyl) ethylenediamine (CAS Reg. No. 102-60-3)	Concentration in formulated end-use products not to exceed 20% by weight in pesticide formulations	Stabilizer for formulation.
$\alpha$ -[p-(1,1,3,3-tetramethylbutyl)phenyl]- $\omega$ -hydroxypoly(oxyethylene) produced by the condensation of 1 mole of p-(1,1,3,3-tetramethylbutyl)phenol with a range of 1-14 or 30-70 moles of ethylene oxide: If a blend of products is used, the average range number of moles of ethylene oxide reacted to produce any product that is a component of the blend shall be in the range of 1-14 or 30-70 (CAS Reg. Nos. 9036-19-5, 9002-93-1)	Not to exceed 7% of pesticide formulation	Surfactants related adjuvants of surfactants
2,4,7,9-Tetramethyl-5-decyn-4, 7-diol	Not more than 2.5% of pesticide formulation	Surfactants, related adjuvants of surfactants
Tetrasodium pyrophosphate		Anticaking agent, conditioning agent
Thiosulfuric acid, disodium salt, anhydrous. (CAS Reg. No. 7772-98-7)		Dechlorinator, reducing agent
Thiosulfuric acid, disodium salt, pentahydrate. (CAS Reg. No. 10102-17-7)		Do.
d-Alpha tocopherol (CAS Reg. No. 9-02-9)	None	Safener
d-Alpha tocopheryl acetate (CAS Reg. No. 58-95-7)	None	Do.
dl-Alpha tocopherol (CAS Reg. No. 10191-41-0)	None	Do.
dl-Alpha tocopheryl acetate (CAS Reg. No. 7695-91-2)	None	Do.
Tricalcium phosphate		Surfactant, suspending agent, dispersing agent, anticaking agent, conditioning agent
Trisodium phosphate		Surfactant, emulsifier, wetting agent
Vermiculite		Solid diluent, carrier.
Vitamin E (CAS Reg. No. 1406-18-4)	None	Safener
Walnut shells		Leaching inhibitor, binder for water-dispersible aggregates, sticker and suspension stabilizer
Waxes and waxy substances, rice bran, oxidized (CAS Reg. No. 1883583-80-9)		Flow aid, surface protectant, film-forming agent, carrier, coating agent, or adjuvant
Wintergreen oil		Attractant
Wood flour	Derived from wood free of chemical preservatives	Solid diluent and carrier
Xanthan gum-modified, produced by the reaction of xanthan gum and glyoxal (maximum 0.3% by weight)	Not more than 0.5% of pesticide formulation	Surfactant
Xylene meeting the specifications listed in 21 CFR 172.884(b)(4)	In pesticide formulations for grain storage only	Solvent, cosolvent
Zeolite (hydrated alkali aluminum silicate)		Solid diluent, carrier
Zinc oxide (CAS Reg. No. 1314-13-2)	Not more than 15% by weight in pesticide formulations when used as stabilizer	Coating agent, stabilizer

Zinc sulfate (basic and monohydrate)		Do.
Zinc sulfate (basic and monohydrate)		Solid diluent, carrier

[69 FR 23117, Apr. 28, 2004]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.910, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.920 Inert ingredients used pre-harvest; exemptions from the requirement of a tolerance.

The following materials are exempted from the requirement of a tolerance when used in accordance with good agricultural practice as inert (or occasionally active) ingredients in pesticide formulations applied to growing crops only:

Inert ingredients	Limits	Uses
Acetophenone		Attractant
Adenosine (CAS Reg. No. 58-61-7)	Maximum of 0.5% of formulation	Synergist
Alder bark		Seed germination stimulator
Alkyl (C <sub>12</sub> -C <sub>16</sub> ) dimethyl ammonio acetate (CAS Reg. Nos. 683-10-3, 2601-33-4 and 693-33-4)	20% by weight in pesticide formulation	Surfactant
α-Alkyl (minimum C <sub>6</sub> linear, branched, saturated and/or unsaturated)-ω-hydroxypolyoxyethylene polymer with or without polyoxypropylene, mixture of di- and monohydrogen phosphate esters and the corresponding ammonium, calcium, magnesium, monoethanolamine, potassium, sodium, and zinc salts of the phosphate esters; minimum oxyethylene content is 2 moles; minimum oxypropylene content is 0 moles (CAS Reg. Nos. 9046-01-9, 37280-82-3, 39464-66-9, 42612-52-2, 50643-20-4, 52019-36-0, 58318-92-6, 60267-55-2, 61837-79-4, 67711-84-6, 68070-99-5, 68071-35-2, 68071-17-0, 68130-47-2, 68186-37-8, 68186-36-7, 68311-02-4, 68425-73-0, 68458-48-0, 68511-37-5, 68610-65-1, 68585-36-4, 68649-29-6, 68815-11-2, 68908-64-5, 68891-13-4, 73038-25-2, 78330-24-2, 108818-88-8, 154518-39-5, 317833-96-8, 873662-29-4, 936100-29-7, 936100-30-0)	Not to exceed 30% of pesticide formulation	Surfactants, related adjuvants of surfactants
N-alkyl(C <sub>8</sub> -C <sub>18</sub> ) dimethylamidopropylamines where the alkyl group is linear and may be saturated and/or unsaturated (CAS Reg. Nos. 109-28-4, 3179-80-4, 7651-02-7, 22890-10-4, 22890-11-5, 39669-97-1, 45267-19-4, 68140-01-2, 1147459-12-8, 146987-98-6)	Not to exceed 20% by weight in herbicide formulations	Surfactants, related adjuvants of surfactants
N-alkyl (C <sub>8</sub> -C <sub>18</sub> ) primary amines and their acetate salts where the alkyl group is linear and may be saturated and/or unsaturated (CAS Reg. Nos. 61790-57-6, 61790-58-7, 61790-59-8, 61790-60-1, 61788-46-3, 61790-33-8, 68155-38-4)	Concentration in formulated end-use products not to exceed 10% by weight in herbicide products, 4% by weight in insecticide products, and 4% by weight in fungicide products	Surfactants, related adjuvants of surfactants
N,N-Bis-α-ethyl-ω-hydroxypoly(oxy-1,2-ethanediyl) C <sub>8</sub> -C <sub>18</sub> saturated and unsaturated alkylamines; the poly(oxy-1,2-ethanediyl) content is 2-60 moles (CAS Reg. Nos. 10213-78-2, 25307-17-9, 26635-92-7, 26635-93-8, 288259-52-9, 58253-49-9, 61790-82-7, 61791-14-8, 61791-24-0, 61791-26-2, 61791-31-9, 61791-44-4, 68155-33-9, 68155-39-5, 68155-40-8, 70955-14-5, 73246-96-5, 1266162-49-5)	Not to exceed 25% in herbicide formulations and 10% in insecticide and fungicide formulations	Surfactants, related adjuvants of surfactants
N,N-Bis-α-ethyl-ω-hydroxypoly(oxy-1,2-ethanediyl/oxy(methyl-1,2-ethanediyl) C <sub>8</sub> -C <sub>18</sub> saturated and unsaturated alkylamines; the poly(oxy-1,2-ethanediyl/oxy(methyl-1,2-ethanediyl) content is 2-60 moles (CAS Reg. Nos. 68213-26-3, 68153-97-9, 75601-76-2)	Not to exceed 25% in herbicide formulations and 10% in insecticide and fungicide formulations	Surfactants, related adjuvants of surfactants
Aluminum sulfate		Safener adjuvant
Ammonium acetate (CAS No. 631-61-8)	15%	Buffering Agent.
Ammonium chloride (CAS Reg. No. 12125-02-9)		Carrier/nutrient
Ammonium formate (CAS Reg. No. 540-69-2)		Complexing or fixing agent
Ammonium nitrate (CAS Reg. No. 6484-52-2)		Adjuvant/ intensifier for herbicides
Ammonium polyphosphate (CAS Reg. No. 68333-79-9)		Sequestrant, buffer, or surfactant
Quaternary ammonium compounds, benzylbis(hydrogenated tallow alkyl)methyl, bis(hydrogenated tallow alkyl)di-methylammonium salts with saponite (CAS Reg. No. 1588523-05-0)	Not to exceed 1.0% by weight of pesticide formulation	Suspending or structuring agent
Quaternary ammonium compounds, benzylbis(hydrogenated tallow alkyl)methyl, bis(hydrogenated tallow alkyl)di-methylammonium salts with sepiolite (CAS Reg. No. 1574487-61-8)	Not to exceed 2.0% by weight of pesticide formulation, asbestos free and containing less than 1% crystalline silica	Suspending or structuring agent
Barium sulfate		Carrier
1,4-Benzenedicarboxylic acid, dimethyl ester, polymer with 1,4-butanediol, adipic acid, and hexamethylene diisocyanate, minimum number average molecular weight (in amu) 30,000 (CAS Reg. No. 55231-08-8)	For use in honeybee hive miticide formulations	Component of controlled release agent
1,2-Benzisothiazolin-3-one	Not more than 0.1% of formulation. Not more than 0.02 lb to be applied per acre	Preservative/stabilizer
Benzyl acetate (CAS Reg. No. 140-11-4)		Solvent
Beta Cyclodextrin, Methyl Ethers (CAS Reg. No. 128446-36-6)	40% by weight	Stabilizer and solvent
Boric acid		Sequestrant
Buffalo gourd root powder ( <i>Cucurbita foetidissima</i> root powder); or, Zucchini juice ( <i>Cucurbita pepo</i> juice) or Hawkesbury melon <i>Citrullus lanatus</i> .	No more than 2.5 lbs/acre/season (3.4 gm/acre/season of Cucurbitacin)	Gustatory stimulant
Butyl stearate		Defoamer
γ-Butyrolactone		Solvent
C.I. Pigment Blue #15 (CAS Reg. No. 147-14-8; containing no more than 50 ppm polychlorinated biphenyls (PCBs))	For seed treatment use only	Dye, coloring agent
C.I. Pigment Green #7 (CAS Reg. No. 1328-53-6; containing no more than 50 ppm polychlorinated	For seed treatment use only	Dye, coloring agent

biphenyls (PCBs)		
C.I. Pigment Red #112 (CAS Reg. No. 6535-46-2)	Seed treatment use only. Limited to 10% w/w of pesticide formulation	Coloring agent
C.I. Pigment Violet #23 (CAS Reg. No. 6358-30-1; containing no more than 20 ppb of polychlorinated dibenzo- <i>p</i> -dioxins and/or polychlorinated dibenzofurans)	For seed treatment use only	Dye, coloring agent
C.I. Pigment Yellow 1 (CAS Reg. No. 2512-29-0)	Not to exceed 10% (weight/weight) in pesticide formulation	Colorant
Calcium formate (CAS Reg. No. 544-17-2)		Carrier
Calcium gluconate (CAS Reg. No. 299-28-5)		Sequestrant
Camphor (CAS Reg. No. 76-22-2)	Not more than 5% weight to weight (w/w) of pesticide formulations	Deodorant, melting point adjustment
Carbon Black (CAS Reg. No. 1333-86-4)	For seed treatment use only	Colorant
Carbonic acid, dipotassium salt (CAS Reg. No. 584-08-7)		Buffering agent
Carbonic acid, dipotassium salt, trihydrate (CAS Reg. No. 18662-52-7)		Buffering agent
Carboxymethyl guar gum sodium salt (CAS Reg. No. 39346-76-4)	Without limitation	Thicker/drift reduction agent
Carboxymethyl-hydroxypropyl guar (CAS Reg. No. 68130-15-4)	Without limitation	Thicker/drift reduction agent
Carous chloride	10 ppm in formulation	Tagging agent
Carrageenan, conforming to 21 CFR 172.260	Not more than 0.15% of pesticide formulation	Thickener and stabilizer for pesticide formulations applied to seeds before planting
Chlorobenzene	Contains not more than 1% impurities. Not for use after edible parts of plant begin to form. Do not graze livestock in treated areas within 48 hours after application	Solvent, cosolvent
5-Chloro-2-methyl-4-isothiazolin-3-one (in combination with 2-methyl-4-isothiazolin-3-one)	Not more than 0.0022% (22.5 ppm) in the formulation; 0.00022% (or 2.25 ppm) in the final solution applied to growing crops	Preservative
Choline chloride (CAS Reg. No. 67-48-1)		As a solvent
Choline hydroxide (CAS Reg. No. 123-41-1)	Without limitation	Neutralizer
Cis-isomer of 1-(3-chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride (CAS Reg. No. 51229-78-8)	Maximum of 0.14% by weight of formulation	Preservative
Coco alkyl dimethyl amines (CAS Reg. No. 61788-93-0)	Not to exceed 0.5% in pesticide formulation	Emulsifier
Copper naphthenate	Not more than 2.5% of formulation; application limited to before edible portions of plants begin to form	Mercaptan scavenger in technical pesticide
Cumene sulfonic acid and its ammonium, calcium, magnesium, potassium, sodium and zinc salts (CAS Reg. Nos. 15763-76-5, 16066-35-6, 164524-02-1, 28085-69-0, 28348-53-0, 28631-63-2, 32073-22-6, 37475-88-0, 37953-05-2, and 90959-88-9)		Surfactant, related adjuvant of surfactant
Cyclohexane		Solvent, cosolvent
Cyclohexanone		Do.
Cysteine (CAS Reg. No. 52-90-4)	Maximum of 0.5% of formulation	Synergist
D&C Green No. 6		Dye
D&C Red No. 17, technical grade		Dye
D&C Red No. 33 (CAS Reg. No. 3567-66-6); meeting the specifications listed in 21 CFR 74.1333		Dye
D&C Violet No. 2, technical grade	Not more than 0.005% of pesticide formulation	Dye
Decanamide, N,N-dimethyl (CAS Reg. No. 14433-76-2)		Emulsifier, solvent, cosolvent
Diammonium phosphate (CAS Reg. No. 7783-28-0)		Buffer, surfactant
dibenzylidene sorbitol (32647-67-9)		Thinning agent
Diethanolamine		Stabilizer, inhibitor for formulations used before crop emerges from soil
Diethanolamine salts of alkyl (C <sub>8</sub> -C <sub>24</sub> ) benzenesulfonic acid (CAS Reg. Nos. 26545-53-9, 67815-95-6, 67889-94-5, 67889-95-6, 68259-34-7, 68478-47-7, 68567-68-0, 68815-34-9, 68815-37-2, 68891-02-1, 68953-97-9, 84989-15-1, 85338-09-6, 90194-39-1, 90194-40-4, 90218-08-9)	Not to exceed 7% of pesticide formulation	Surfactants, related adjuvants of surfactants.
Diethylene glycol		Deactivator, adjuvant for formulations used before crop emerges from soil
Diethylene Glycol (CAS No. 111-46-6)	Without limitation	Solvent, stabilizer and/or antifreeze
Diethylene glycol and diethylene glycol monobutyl, monoethyl, and monomethyl ethers		Deactivator for formulations used before crop emerges from soil, stabilizer
Diethylene glycol mono butyl ether (CAS Reg. No. 112-34-5)	Without limitation	Pesticide inert ingredient as a solvent, stabilizer and/or antifreeze
Diethylene Glycol MonoEthyl Ether (CAS Reg. No. 111-90-0)	Without limitation	Solvent, stabilizer

		and/or antifreeze
Dimethylaminopropylamine, isopropylamine, ethanolamine, and triethanolamine salts of alkyl (C <sub>8</sub> -C <sub>24</sub> ) benzenesulfonic acid (CAS Reg. Nos. 3088-30-0, 12068-12-1, 26264-05-1, 26836-07-7, 27323-41-7, 55470-69-4, 58089-99-9, 61886-59-7, 61931-76-8, 67924-05-4, 68110-32-7, 68259-35-8, 68411-31-4, 68442-72-8, 68567-69-1, 68584-24-7, 68584-25-8, 68648-81-7, 68648-96-4, 68649-00-3, 68815-30-5, 68815-35-0, 68910-32-7, 68953-93-5, 68953-98-0, 70528-84-6, 72391-21-0, 84961-74-0, 85480-55-3, 85480-56-4, 85995-82-0, 90194-42-6, 90194-53-9, 90194-54-0, 90194-55-1, 90218-09-0, 90218-11-4, 90218-35-2, 96687-54-6, 99924-49-9, 121617-08-1, 157966-96-6, 193562-36-6, 319926-68-6, 877677-48-0, 1093628-27-3)		Surfactants, related adjuvants of surfactants.
3,6-Dimethyl-4-octyn-3,6-diol	In pesticide formulations, for soil prior to planting or to plants before edible parts form	Surfactants, related adjuvants of surfactants
Dimethyl sulfoxide		Solvent or cosolvent for formulations used before crop emerges from soil or prior to formation of edible parts of food plants
Dimethyl sulfoxide (CAS No. 67-68-5)	For pesticide formulations used before crop emerges from soil or prior to formation of edible parts of food plants; for pesticide formulations used after crop emerges but before harvest, provided that the potential for increased residues of the formulation's active ingredient(s) in or on food commodities has been assessed	Solvent or co-solvent
Dipotassium hydrogen phosphate		Buffering agent
Dipropylene glycol monomethyl ether		Stabilizer
Douglas-fir bark, ground		Solid diluent, carrier
Dysprosium chloride	10 ppm in formulation	Tagging agent
1,2-ethanediamine, <i>N,N,N',N'</i> -tetramethyl-, polymer with 1,1'-oxybis[2-chloroethane] (CAS Reg. No. 31075-24-8)	For use in pesticide formulations applied to cotton or wheat only	Adjuvant or water conditioner
(S,S)-Ethylenediaminedisuccinic acid (CAS Reg. No. 20846-91-7)		Sequestrant or chelating agent
Ethylene glycol		Antifreeze, deactivator for all pesticides used before crop emerges from soil and in herbicides before or after crop emerges
Ethylene glycol (CAS Reg. No. 107-21-1)	Without limitation	Pesticide inert ingredient as a solvent, stabilizer and/or antifreeze.
Ethylene glycol monobutyl ether		
2-Ethylhexanol		Cosolvent, defoamer, solvent for all pesticides used before crop emerges from soil and in herbicides before or after crop emerges
Europic chloride	10 ppm in formulation	Tagging agent
FD&C Blue No. 1 (CAS Reg. No. 3844-45-9)	For seed treatment use only	Dye, coloring agent
FD&C Blue No. 1, methyl-polyethylene glycol derivative (CAS Reg. No. 9079-34-9)	For seed treatment use only; Number average molecular weight (in amu) is greater than 1,000; Not to exceed 5% of the formulated pesticide product	Dye, coloring agent
FD&C Blue No. 1, polyethylene glycol derivative (CAS Reg. No. 9079-33-8)	For seed treatment use only; Number average molecular weight (in amu) is greater than 1,000; Not to exceed 5% of the formulated pesticide product	Dye, coloring agent
FD&C Red No. 40 (CAS Reg. No. 25956-17-6)	For seed treatment use only. Not to exceed 2% by weight of the pesticide formulation	Dye, coloring agent
Ferric chloride		Not greater than 2% of suspending, dispersing agent, pesticide formulation
Fluoroapatite		Solid diluent, carrier
Folic acid (CAS Reg. No. 59-30-3)	Maximum of 0.5% of formulation	Synergist
Gluconic acid (and sodium salt)		Sequestrant
<i>L</i> -Glutamic acid (C <sub>5</sub> H <sub>9</sub> NO <sub>4</sub> ; CAS Reg. No. 56-86-0)	Seed treatment use only	Plant nutrient
[alpha]-D-glucopyranoside, 2-ethylhexyl 6-O-[alpha]-D glucopyranosyl- (CAS Reg. No. 330980-61-5)		Surfactant
[alpha]-D-glucopyranoside, 2-ethylhexyl (CAS Reg. No. 125590-73-0)		Surfactant
Glutamine (CAS Reg. No. 56-85-9)	Maximum of 0.5% of formulation	Synergist
Glycerol—propylene oxide polymer (CAS Reg. No. 25791-96-2)		Component in water-soluble film

Glyceryl triacetate		Stabilizer
Glyceryl tris-12-hydroxystearate		Flow control agent
Glycine betaine (CAS Reg. No. 107-43-7)		Plant nutrient
Graphite		Treatment aid for seeds
Guar hydroxypropyltrimethylammonium chloride (CAS Reg. No. 71329-50-5)		Thickener/drift reduction agent
Hexamethylenetetramine		Stabilizer for carriers in solid pesticide formulations
2-(2'-hydroxy-3',5'-di-tert-amylphenyl) benzotriazole (CAS Reg. No. 25973-55-1)	Maximum concentration of 0.6% in insecticide formulations applied to adzuki beans, canola, chickpeas, cotton, faba beans, field peas, lentils, linola, linseed, lucerne, lupins, mung beans, navy beans, pigeon peas, safflower, sunflower, and vetch	Ultraviolet (UV) stabilizer
2-Hydroxy-4- <i>n</i> -octoxybenzophenone (CAS Reg. No. 1843-05-6)	Not more than 0.2 pt of pesticide formulation	Light stabilizer
Hydroxypropyl guar gum		Thickener
2-Hydroxypropyl starch (CAS Reg. No. 9049-76-7)		Adjuvant
Isobornyl acetate		Solvent
Isobutyl alcohol		Do.
Isobutylene-butene copolymers	For soil application only	Binder
Isooctadecanol	Not more than 2% of pesticide formulation	Defoaming agent
Konjac glucomannan (CAS Reg. No. 37220-17-0)	Not to exceed 1.0% by weight in pesticide formulation	Thickener
Lanthanum chloride	10 ppm in formulation	Tagging agent.
Magnesium nitrate (in combination with 2-methyl-4-isothiazolin-3-one and 5-chloro-2-methyl-4-isothiazolin-3-one)	None	Preservation
Maleic acid	For pesticide formulations applied to apples with a minimum preharvest interval of 21 days	Stabilizer
Maleic anhydride (CAS Reg. No. 108-31-6)	Not to exceed 3.5% in pesticide formulations; or for pesticide formulations applied to apples with a minimum preharvest interval of 21 days	Stabilizer
Manganese carbonate		Plant nutrient
D-mannose (CAS Reg. No. 3458-28-4)		Sequestrant, binder, filler
Mesityl oxide	Not for use after edible parts of plant begin to form. Do not graze livestock in treated areas within 48 hours after application	Solvent, cosolvent
Methionine (CAS Reg. No. 59-51-8)	Maximum of 0.5% of formulation	Synergist
Methyl alcohol		Do.
Methyl ethyl ketone		Surfactant
Methyl <i>p</i> -hydroxybenzoate		Preservative for formulations
Methyl isobutyl ketone		Solvent, cosolvent
2-Methyl-4-isothiazolin-3-one (in combination with 5-chloro-2-methyl-4-isothiazolin-3-one)	Not more than 0.0022% (22.5 ppm) in the formulation; 0.00022% (or 2.25 ppm) in the final solution applied to growing crops	Preservative
Mono-, di-, and trimethylnaphthalenesulfonic acids and naphthalenesulfonic acids formaldehyde condensates, ammonium and sodium salts (CAS Reg. Nos. 9008-63-3, 9069-80-1, 9084-06-4, 36290-04-7, 91078-68-1, 141959-43-5, 68425-94-5)		Surfactants, related adjuvants of surfactants
Methyl oleate		Surfactant
2-Methyl-2,4-pentanediol		Solvent for formulations used before crop emerges from soil
Methyl poly(oxyethylene) <sub>C<sub>8</sub>-C<sub>18</sub></sub> alkylammonium chlorides where the poly(oxyethylene) content is n = 2-15 and where C <sub>8</sub> -C <sub>18</sub> alkyl is linear and may be saturated or unsaturated (CAS Reg. Nos. 3010-24-0, 18448-65-2, 70750-47-9, 22340-01-8, 67784-77-4, 64755-05-1, 61791-10-4, 28724-32-5, 28880-55-9, 68187-69-9, 68607-27-2, 60687-90-3)	Concentration in formulated end use products not to exceed 10% by weight in herbicide products and 5% by weight in all other pesticide products	Surfactants, related adjuvants of surfactants
<i>N</i> -Methylpyrrolidone (CAS Reg. No. 872-504)		Solvent, cosolvent
Mixed phytosterols (consisting of campesterol, sitosterol and stigmasterol, with minor amounts of associated plant sterols) derived from edible vegetable oils		Surfactant
Mono- and bis-(1 <i>H</i> , 1 <i>H</i> , 2 <i>H</i> , 2 <i>H</i> -perfluoroalkyl) phosphates where the alkyl group is even numbered and in the C <sub>6</sub> -C <sub>12</sub> range	Not more than 0.5% of pesticide formulation. Expires February 9, 2008	Surfactant, related adjuvants of surfactants
Mono- and dialkyl (C <sub>8</sub> -C <sub>18</sub> ) methylated ammonium chloride compounds, where the alkyl group(s) (C <sub>8</sub> -C <sub>18</sub> ) are derived from coconut, cottonseed, soya, tallow, or hogfat fatty acids		Surfactants, related adjuvants of surfactants
Morpholine 4-C <sub>6-12</sub> Acyl Derivatives (CAS Reg. No. 887947-29-7)		As a solvent
Nicotinamide (CAS Reg. No. 98-92-0)	Not to exceed 0.5% by weight of	Synergist, corrosion

	pesticide formulation as synergist; not to exceed 5% by weight of pesticide formulation as corrosion inhibitor	inhibitor
$\alpha$ -(p-Nonylphenyl)- $\omega$ -hydroxypoly(oxyethylene); produced by the condensation of 1 mole of nonylphenol (nonyl group is a propylene trimer isomer) with an average of 4-14 or 30-100 moles of ethylene oxide; if a blend of products is used, the average number of moles of ethylene oxide reacted to produce any product that is a component of the blend shall be in the range 4-14 or 30-100		Surfactant
Octanamide, N,N-dimethyl (CAS Reg. No. 1118-92-9)		Emulsifier, solvent, cosolvent
$\alpha$ -Oleoyl- $\omega$ -(oleoyloxy) poly(oxyethylene) derived from $\alpha$ -hydro- $\omega$ -hydroxypoly(oxyethylene) (molecular weight 600 amu)		Component of defoamers
Oxo-decyl acetate (CAS reg. No. 108419-33-6)		Solvent
Oxo-heptyl acetate (CAS Reg. No. 90438-79-2)		Solvent
Oxo-hexyl acetate (CAS Reg. No. 88230-35-7)		Solvent
Oxo-nonyl acetate (CAS Reg. No. 108419-34-7)		Solvent
Oxo-octyl acetate (CAS Reg. No. 108419-32-5)		Solvent
Oxo-tridecyl acetate (CAS Reg. No. 108419-35-8)		Solvent
Phenol		Solvent, cosolvent
Phenol, 2-(2H-benzotriazol-2-yl)-6-dodecyl-4-methyl-, (CAS Reg. No. 23328-53-2)	Not more than 10% by weight of pesticide formulations	UV stabilizer.
Phenolsulfonic acid—formaldehyde—urea condensate and its sodium salt (Phthalocyaninato (2)) copper; (C.I. pigment blue No. 15)	Applied to growing plants only	Dispersant surfactant
Pigment red 48	When used as a colorant in low-density plastic films	Coloring agent, pigment
$\alpha$ -Pinene	For seed treatment use only	Dye
	Not more than 2% of formulation by weight	Stabilizer
Poly(oxy-1,2-ethanediyl), $\alpha$ -isotridecyl- $\omega$ -methoxy (CAS Reg. No. 345642-79-7)	At a maximum of 10% in formulation	Surfactant
Poly(oxy-1,2-ethanediyl), $\alpha$ -(3-carboxy-1-oxosulfo)propyl- $\omega$ -hydroxy-, (C <sub>10</sub> -C <sub>12</sub> )-alkyl ethers, disodium salts, polyoxyethylene content averages 4-5 moles (CAS Reg. No. 68815-56-5)	Not to exceed 0.125% for seed treatment use only	Surfactant.
Poly(oxy-1,2-ethanediyl), $\alpha$ -(3-carboxy-1-oxosulfo)propyl- $\omega$ -hydroxy-, (C <sub>10</sub> -C <sub>16</sub> )-alkyl ethers, disodium salts, polyoxyethylene content averages 5 moles (CAS Reg. No. 68954-91-6)	Not to exceed 0.125% for seed treatment use only	Surfactant
Poly(oxyethylene) adducts of mixed phytosterols (such sterols to consist of campesterol, stigmasterol and sitosterol with minor amounts of associated plant sterols) derived from edible vegetable oils; polyoxyethylene content averaging 5-26 moles		Surfactant, related adjuvants
Polyoxyethylene polyoxypropylene mono(di-sec-butylphenyl) ether (CAS Reg. No. 69029-39-6)	Limited to herbicide formulations only, and to no more than 30% by weight in herbicide formulations intended for application to turf	Surfactants, related adjuvants of surfactants
Poly(oxyethylene) (5) sorbitan monooleate		Surfactants, related adjuvants of surfactants
Polysorbate 60, conforming to 21 CFR 172.836		Surfactant
Potassium dihydrogen phosphate		Buffering agent
2-Propanamine, compound with $\alpha$ -phosphono- $\omega$ -butoxypoly (oxy-1,2-ethanediyl) (2:1) (CAS Reg. No. 431040-31-2)	Not more than 15% in the formulated product	Surfactant
2-Propanamine, compounds with polyethylene glycol dihydrogen phosphate C <sub>8-10</sub> - alkyl ether (2:1) (CAS Reg. No. 431062-72-5)	Not more than 15% in the formulated product	Surfactant
1,2-Propanediol, 3-[3-[1, 3, 3-tetramethyl-1-[(trimethylsilyl)oxy]-1-disiloxyanyl] propoxy]- (CAS Reg. No. 70280-68-1)	Not to exceed 5% by weight of pesticide formulation	Antifoaming agent
Propylene glycol monomethyl ether		Solvent
Pyridoxine (CAS Reg. No. 65-23-6)	Maximum of 0.5% of formulation	Synergist
2-Pyrrolidinone, 1-butyl- (CAS Reg. No. 3470-98-2)	Not to exceed 30% by weight of pesticide formulation	Solvent/cosolvent
Rosin, dark wood (as defined in 21 CFR 178.3870(a)(1)(v))		Surfactants, related adjuvants of surfactants
Rosin, gum		Do.
Rosin, tall oil		Do.
Scandium chloride	10 ppm in formulation	Tagging agent
Sodium bisulfate (CAS Reg. No. 7681-38-1)		Acidifying/buffering agent
Sodium 1,4-dicyclohexyl sulfosuccinate		Surfactants, related adjuvants of surfactants
Sodium 1,4-dihexyl sulfosuccinate (CAS Reg. No. 3006-15-3)		Surfactants, related adjuvants of surfactants
Sodium dihydrogen phosphate (CAS Reg. No. 7558-80-7) conforming to 21 CFR 182.6778		Buffering agent
Sodium 1,4-diisobutyl sulfosuccinate (CAS Reg. No. 127-39-9)		Surfactants, related adjuvants of surfactants
Sodium 1,4-dipentyl sulfosuccinate (CAS Reg. No. 922-80-5)		Surfactants, related adjuvants of surfactants
Sodium metaborate		Sequestrant
Sodium molybdate		Plant nutrient
Sodium nitrate		Solid diluent
Sodium nitrite	Not more than 3% of pesticide	Stabilizer, inhibitor.

	formulation	
Sodium <i>o</i> -phenylphenate	Not more than 0.1% of pesticide formulation	Preservative for formulation
Sodium salt of the insoluble fraction of rosin		Surfactants, related adjuvants of surfactants
Sodium salts of N-alkyl (C8-C18)-beta-aminodipropionic acid where the C8-C18 is linear and may be saturated and/or unsaturated (CAS Reg. Nos. 3655-00-3, 61791-56-8, 14960-06-6, 26256-79-1, 90170-43-7, 91696-17-2, 97862-48-1)	Concentration in formulated end-use products not to exceed 30% by weight in pesticide formulations	Surfactants, related adjuvants of surfactants
Sodium tetraborate	Not more than 2% of pesticide formulation	Buffering agent; corrosion inhibitor
Sulfonic acids, C <sub>13-17</sub> -sec-alkane, sodium salts (CAS Reg. No. 85711-69-9)	Not to exceed 40% by weight in non-residential use pesticide formulation only	Surfactant
Sulfonic acids, C <sub>14-17</sub> -sec-alkane, sodium salts (CAS Reg. No. 97489-15-1)	Not to exceed 40% by weight in non-residential pesticide formulation only	Surfactant
Tallowamine, ethoxylated, mixture of dihydrogen phosphate and monohydrogen phosphate esters and the corresponding ammonium, calcium, potassium, and sodium salts of the phosphate esters, where the poly(oxyethylene) content averages 2-20 moles (CAS Reg. No. 68308-48-5)	Not to exceed 20% of pesticide formulation	Surfactants, related adjuvants of surfactants
Tannin		Dispersing agent
Tertiary butylhydroquinone		Antioxidant
1-Tetradecanamine, <i>N,N</i> -dimethyl-, <i>N</i> -oxide (CAS Reg. No. 3332-27-2)		Component in water-soluble film
Tetraethylene glycol (CAS Reg. No. 112-60-7)		Solvent
<i>N,N,N',N'</i> -Tetrakis-(2-hydroxypropyl) ethylenediamine (CAS Reg. No. 102-60-3)	Concentration in formulated end-use products not to exceed 20% by weight in pesticide formulations	Stabilizer for formulations
2,4,7,9-Tetramethyl-5-decyne 4,7-diol	In pesticide formulations, for application to soil prior to planting or to plants before edible parts form	Surfactants, related adjuvants of surfactants
Tetrapotassium pyrophosphate (CAS Reg. No. 7320-345)	Not to exceed 10% of formulation	Sequestrant, anticaking agent, conditioning agent
Tin oxide (CAS Reg. No. 18282-10-5)	Not to exceed 40% by weight for use in seed treatment pesticide formulations only	Colorant
Titanium dioxide (CAS Reg. No. 13463-67-7)		Pigment, colorant, carrier
Toluenesulfonic acid and its ammonium, calcium, magnesium, potassium, sodium, and zinc salts		Solvent, cosolvent
Triethanolamine		Stabilizer, inhibitor for formulations used before crop emerges from soil
Triethanolamine (CAS Reg. No. 102-71-6)		Stabilizer, inhibitor
Triethylene glycol		Deactivator
Triethyl phosphate		Stabilizer for formulations used before crop emerges from soil
Trimethylolpropane (CAS Reg. No. 77-99-6)	Not to exceed 15% by weight of the film	Component in water-soluble film
α-[2,4,6-Tris[1-(phenyl)ethyl]phenyl]-ω-hydroxy poly(oxyethylene), the poly(oxyethylene) content averages 4-150 moles)	Not more than 15% of the formulation	Surfactant.
α-[2,4,6-Tris[1-(phenyl)ethyl]phenyl]-ω-hydroxy poly(oxyethylene); mixture of monohydrogen and dihydrogen phosphate esters and the corresponding ammonium, calcium, magnesium, potassium, sodium, and zinc salts, the poly(oxyethylene) content averages 4-150 moles)	Not more than 15% of the formulation	Do.
α-[2,4,6-Tris[1-(phenyl)ethyl]phenyl]-ω-hydroxy poly(oxyethylene) sulfate, and the corresponding ammonium, calcium, magnesium, potassium, sodium, and zinc salts, the poly(oxyethylene) content averages 4-150 moles	Not more than 15% of the pesticide formulation	Do.
Tryptophan (CAS Reg. No. 73-22-3)	Maximum of 0.5% of formulation	Synergist
Valeric acid, normal	Not more than 2% in pesticide formulations	Stenching agent or odorant
Xylene		Solvent, cosolvent
Xylenesulfonic acid its ammonium calcium, magnesium, potassium, sodium, and zinc salts		Surfactants, related adjuvants of surfactants
Yucca extract from <i>Yucca schidigera</i>		Wetting agent
Ytterbium chloride	10 ppm in formulation	Tagging agent
Yttrium chloride	10 ppm in formulation	Tagging agent
Zinc orthophosphate		Plant nutrient and safener
Zinc stearate, conforming to 21 CFR 182.5994 and 582.5994		Flow control agent

[69 FR 23124, Apr. 28, 2004]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.920, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)



**§180.930 Inert ingredients applied to animals; exemptions from the requirement of a tolerance.**

The following materials are exempted from the requirement of a tolerance when used in accordance with good agricultural practice as inert (or occasionally active) ingredients in pesticide formulations applied to animals:

Inert ingredients	Limits	Uses
Acetic acid (CAS Reg. No. 64-19-7)	Not more than 0.5% of pesticide formulation	Catalyst
Acetic anhydride		Solvent, cosolvent, stabilizer
Acetone (Cas Reg. No. 67-64-1)		Solvent or cosolvent
Alcohols, C <sub>2-33</sub> , manuf. of, by-products from, overheads (CAS Reg. No. 876065-86-0)		Solvent
Alkanoic and alkenoic acids, mono- and diesters of α-hydro-ω-hydroxypoly(oxyethylene) with molecular weight (in amu) range of 200 to 6,000		Emulsifiers
Alkyl (C <sub>8</sub> -C <sub>24</sub> ) benzenesulfonic acid and its ammonium, calcium, magnesium, potassium, sodium, and zinc salts		Surfactants, emulsifier, related adjuvants of surfactants
Alkyl (C <sub>12</sub> -C <sub>16</sub> ) dimethyl ammonio acetate (CAS Reg. Nos. 683-10-3, 2601-33-4 and 693-33-4)	20% by weight in pesticide formulation	Surfactant
α-alkyl(C <sub>6</sub> -C <sub>15</sub> )-ω-hydroxypoly(oxyethylene)sulfate, and its ammonium, calcium, magnesium, potassium, sodium, and zinc salts, poly(oxyethylene) content averages 2-4 moles (CAS Reg. Nos.: 3088-31-1, 3694-74-4, 9004-82-4, 9004-84-6, 9021-91-4, 9086-52-6, 13150-00-0, 15826-16-1, 25446-78-0, 26183-44-8, 27140-00-7, 27731-61-9, 27731-61-9, 27731-62-0, 32612-48-9, 34431-25-9, 35015-74-8, 50602-06-7, 52286-18-7, 52286-19-8, 54116-08-4, 55901-67-2, 61702-79-2, 61894-66-4, 62755-21-9, 63428-85-3, 63428-86-4, 63428-87-5, 65086-57-9, 65086-79-5, 65104-74-7, 65122-38-5, 67674-66-2, 67762-19-0, 67762-21-4, 67845-82-3, 67845-83-4, 67923-90-4, 68037-05-8, 68037-06-9, 68171-41-5, 68424-50-0, 68511-39-7, 68585-34-2, 68610-66-2, 68611-29-0, 68611-55-2, 68649-53-6, 68890-88-0, 68891-29-2, 68891-30-5, 68891-38-3, 69011-37-6, 73665-22-2, 75422-21-8, 78330-16-2, 78330-17-3, 78330-25-3, 78330-26-4, 78330-27-5, 78330-28-6, 78330-29-7, 78330-30-0, 96130-61-9, 106597-03-9, 110392-50-2, 119432-41-6, 125301-88-4, 125301-89-5, 125301-92-0, 125736-54-1, 157707-85-2, 160104-51-8, 160901-27-9, 160901-28-0, 160901-29-1, 160901-30-4, 161025-28-1, 161074-79-9, 162063-19-6, 219756-63-5)	Not to exceed 30% of formulation	Surfactants, related adjuvants of surfactants.
α-alkyl (C <sub>12</sub> -C <sub>15</sub> )-ω-hydroxypoly (oxypropylene)poly (oxyethylene)copolymers (where the poly(oxypropylene) content is 3-60 moles and the poly(oxyethylene) content is 5-80 moles), the resulting ethoxylated propoxylated (C <sub>12</sub> -C <sub>15</sub> ) alcohols having a minimum molecular weight (in amu) of 1,500, CAS Reg. No. 68551-13-3	Not to exceed 20% of pesticide formulations	Surfactant
α-Alkyl-ω-hydroxypoly (oxypropylene) and/or poly (oxyethylene) polymers where the alkyl chain contains a minimum of six carbons (CAS Reg. Nos.: 9002-92-0; 9004-95-9; 9004-98-2; 9005-00-9; 9035-85-2; 9038-29-3; 9038-43-1; 9040-05-5; 9043-30-5; 9087-53-0; 25190-05-0; 24938-91-8; 25231-21-4; 251553-55-6; 26183-52-8; 26468-86-0; 26636-39-5; 27252-75-1; 27306-79-2; 31726-34-8; 34398-01-1; 34398-05-5; 37251-67-5; 37311-00-5; 37311-01-6; 37311-02-7; 37311-04-9; 39587-22-9; 50861-66-0; 52232-09-4; 52292-17-8; 52609-19-5; 57679-21-7; 59112-62-8; 60828-78-6; 61702-78-1; 61723-78-2; 61725-89-1; 61791-13-6; 61791-20-6; 61791-28-4; 61804-34-0; 61827-42-7; 61827-84-7; 62648-50-4; 63303-01-5; 63658-45-7; 63793-60-2; 64366-70-7; 64415-24-3; 64415-25-4; 64425-86-1; 65104-72-5; 65150-81-4; 66455-14-9; 66455-15-0; 67254-71-1; 67763-08-0; 68002-96-0; 68002-97-1; 68131-39-5; 68131-40-8; 68154-96-1; 68154-97-2; 68154-98-3; 68155-01-1; 68213-23-0; 68213-24-1; 68238-81-3; 68238-82-4; 68409-58-5; 68409-59-6; 68439-30-5; 68439-45-2; 68439-46-3; 68439-48-5; 68439-49-6; 68439-50-9; 68439-51-0; 68439-53-2; 68439-54-3; 68458-88-8; 68526-94-3; 68526-95-4; 68551-12-2; 68551-13-3; 68551-14-4; 68603-20-3; 68603-25-8; 68920-66-1; 68920-69-4; 68937-66-6; 68951-67-7; 68954-94-9; 68987-81-5; 68991-48-0; 69011-36-5; 69013-18-9; 69013-19-0; 69227-20-9; 69227-21-0; 69227-22-1; 69364-63-2; 70750-27-5; 70879-83-3; 70955-07-6; 71011-10-4; 71060-57-6; 71243-46-4; 72066-65-0; 72108-90-8; 72484-69-6; 72854-13-8; 72905-87-4; 73018-31-2; 73049-34-0; 74432-13-6; 74499-34-6; 78330-19-5; 78330-20-8; 78330-21-9; 78330-23-1; 79771-03-2; 84133-50-6; 85422-93-1; 97043-91-9; 97953-22-5; 102782-43-4; 103331-86-8; 103657-84-7; 103657-85-8; 103818-93-5; 103819-03-0; 106232-83-1; 111905-54-5; 116810-31-2; 116810-32-3; 116810-33-4; 120313-48-6; 120944-68-5; 121617-09-2; 126646-02-4; 126950-62-7; 127036-24-2; 139626-71-4; 152231-44-2; 154518-36-2; 157627-86-6; 157627-88-8; 157707-41-0; 157707-43-2; 159653-49-3; 160875-66-1; 160901-20-2; 160901-09-7; 160901-19-9; 161025-21-4; 161025-22-5; 166736-08-9; 169107-21-5; 172588-43-1; 176022-76-7; 196823-11-7; 287935-46-0; 288260-45-7; 303176-75-2; 954108-36-2; 2222805-23-2)		Surfactants, related adjuvants of surfactants
α-alkyl (minimum C <sub>6</sub> linear, branched, saturated and/or unsaturated)-ω-hydroxypolyoxyethylene polymer with or without polyoxypropylene, mixture of di- and monohydrogen phosphate esters and the corresponding ammonium, calcium, magnesium, monoethanolamine, potassium, sodium, and zinc salts of the phosphate esters; minimum oxyethylene content is 2 moles; minimum oxypropylene content is 0 moles, (CAS Reg. Nos.: 9004-80-2, 9046-01-9, 26982-05-8, 31800-89-2, 37280-82-3, 37281-86-0, 39341-09-8, 39341-65-6, 39464-66-9, 39464-69-2, 42612-52-2, 50643-20-4, 50668-50-3, 51325-10-1, 51884-64-1, 52019-36-0, 52019-38-2, 52019-38-2, 57486-09-6, 58206-38-5, 58318-92-6, 58857-49-1, 59112-71-9, 60267-55-2, 61837-79-4, 62362-49-6, 62482-61-5, 63747-86-4, 63887-54-7, 63887-55-8, 66020-37-9, 66272-25-1, 66281-20-7, 67711-84-6, 67786-06-5, 67989-06-4, 68070-99-5, 68071-17-0, 68071-35-2, 68071-37-4, 68130-44-9, 68130-45-0, 68130-46-1, 68130-47-2, 68186-29-8, 68186-34-5, 68186-36-7, 68186-37-8, 68238-84-6, 68311-02-4, 68311-04-6, 68332-75-2, 68389-72-0, 68400-75-9, 68413-78-5, 68425-73-0, 68425-75-2, 68439-39-4, 68458-48-0, 68511-15-9, 68511-36-4, 68511-37-5, 68551-05-3, 68585-15-9, 68585-16-0, 68585-17-1, 68585-36-4, 68585-39-7, 68603-24-7, 68607-14-7, 68610-64-0, 68610-65-1, 68649-29-6, 68649-30-9, 68650-84-0, 68815-11-2, 68855-46-9, 68856-03-1, 68890-90-4, 68890-91-5, 68891-12-3, 68891-13-4, 68891-26-9, 68908-64-5, 68909-65-9, 68909-67-1, 68909-69-3, 68921-24-4, 68921-60-8, 68954-87-0, 68954-88-1, 68954-92-7, 68987-35-9, 69029-43-2, 69980-69-4, 70247-99-3, 70248-14-5, 70844-96-1, 70903-63-8, 71965-23-6, 71965-24-7, 72480-27-4, 72623-67-7, 72623-68-8, 72828-56-9, 72828-57-0, 73018-34-5, 73038-25-2, 73050-08-5, 73050-09-6, 73361-29-2, 73378-71-9, 73378-72-0, 73559-42-9, 73559-43-0, 73559-44-1, 73559-45-2, 74499-76-6, 76930-25-1, 78041-18-6, 78330-22-0, 78330-24-2, 82465-25-6, 84843-37-8, 91254-26-1, 93925-54-3, 95014-34-9, 96416-89-6, 99924-51-3, 103170-31-6, 103170-32-7, 106233-09-4, 106233-10-7, 108818-88-8, 110392-49-9, 111798-26-6, 111905-50-1, 116671-23-9, 117584-36-8, 119415-05-3, 120913-45-3, 121158-61-0, 121158-63-2, 123339-53-7, 125139-13-1, 125301-86-2, 125301-87-3, 126646-03-5, 129208-04-4, 129870-77-5, 129870-80-0, 130354-37-9, 136504-88-6, 143372-50-3, 143372-51-4, 144336-75-4, 146815-57-8, 151688-56-1, 154518-39-5, 154518-40-8, 155240-11-2, 159704-69-5, 160498-49-7, 160611-24-5, 171543-66-1, 172027-16-6, 172274-69-0, 176707-42-9, 181963-82-6, 188741-55-1, 191940-53-1, 210493-60-0, 210993-53-6, 246159-55-7, 251298-11-0, 261627-68-3, 290348-69-5, 290348-70-8, 317833-96-8, 340681-28-9, 422563-19-7, 422563-26-6, 522613-09-8, 717140-06-2, 717140-09-5, 717827-29-7, 762245-80-7, 762245-81-8, 866538-89-8, 866538-90-1, 873662-29-4, 913068-96-9, 936100-29-7, 936100-30-0, 1072943-56-6, 1087209-87-7, 1174313-54-2, 1187742-89-7, 1187743-35-6, 1205632-03-6, 1233235-49-8, 1451002-50-8, 1456802-88-2, 1456802-89-3, 1456803-12-5)	Not to exceed 30% of formulation	Surfactants, related adjuvants of surfactants.
N-alkyl (C <sub>8</sub> -C <sub>18</sub> ) primary amines and their acetate salts where the alkyl group is linear and may be saturated and/or unsaturated (CAS Reg. Nos. 61790-57-6, 61790-58-7, 61790-59-8, 61790-60-1, 61788-46-3, 61790-33-8, 68155-38-4)	Concentration in formulated	Surfactants, related adjuvants of

	end-use products not to exceed 10% by weight in herbicide products, 4% by weight in insecticide products, and 4% by weight in fungicide products	surfactants
Alkyl (C <sub>8</sub> -C <sub>18</sub> ) sulfate and its ammonium, calcium, magnesium, potassium, sodium, and zinc salts		Surfactant
N,N-Bis- $\alpha$ -ethyl- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) C <sub>8</sub> -C <sub>18</sub> saturated and unsaturated alkylamines; the poly(oxy-1,2-ethanediyl) content is 2-60 moles (CAS Reg. Nos. 10213-78-2, 25307-17-9, 26635-92-7, 26635-93-8, 288259-52-9, 58253-49-9, 61790-82-7, 61791-14-8, 61791-24-0, 61791-26-2, 61791-31-9, 61791-44-4, 68155-33-9, 68155-39-5, 68155-40-8, 70955-14-5, 73246-96-5, 1266162-49-5)	Not to exceed 25% in herbicide formulations and 10% in insecticide and fungicide formulations	Surfactants, related adjuvants of surfactants
N,N-Bis- $\alpha$ -ethyl- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl/oxy(methyl-1,2-ethanediyl) C <sub>8</sub> -C <sub>18</sub> saturated and unsaturated alkylamines; the poly(oxy-1,2-ethanediyl/oxy(methyl-1,2-ethanediyl) content is 2-60 moles (CAS Reg. Nos. 68213-26-3, 68153-97-9, 75601-76-2)	Not to exceed 25% in herbicide formulations and 10% in insecticide and fungicide formulations	Surfactants, related adjuvants of surfactants
Ascorbyl palmitate		Preservative
Attapulgate-type clay		Solid diluent, carrier
Barium sulfate (CAS Reg. No. 7727-43-7)		Carrier, density control agent
Benzoic acid		Preservative for formulations
2-Bromo-2-nitro-1,3-propanediol (CAS Reg. No. 52-51-7)	0.04% or less by weight of the total pesticide formulation	In-can preservative
Butane		Propellant
n-Butanol (CAS Reg. No. 71-36-3)		Solvent for blended emulsifiers
n-Butyl benzoate (CAS RN 136-60-7)		Solvent
n-Butyl-3-hydroxybutyrate (CAS Reg. No. 53605-94-0)		Solvent
Butylated hydroxyanisole		Antioxidant
Butylated hydroxytoluene		Do.
Calcium carbonate		Solid diluent, carrier
Calcium chloride		Stabilizer
Calcium silicate, hydrated calcium silicate		Anticaking agent, solid diluent, carrier
C <sub>9</sub> rich aromatic hydrocarbons (CAS Reg. No. 64742-95-6)		Solvent
C <sub>10-11</sub> rich aromatic hydrocarbons (CAS Reg. No. 64742-94-5)		Solvent
C <sub>11-12</sub> rich aromatic hydrocarbons (CAS Reg. No. 64742-94-5)		Solvent
Calcium stearate (CAS Reg. No. 1592-23-0)		Stabilizer, component of plastic animal tag
Calcium sulfate		Solid diluent, carrier
Carbon black (CAS Reg. No. 1333-86-4)		Colorant/pigment in animal tag
Carbon Dioxide (CAS Reg. No. 124-38-9)	None	Propellant
Carrageenan, conforming to 21 CFR 172.620	Minimum molecular weight (in amu): 100,000	Thickener
Cumene sulfonic acid and its ammonium, calcium, magnesium, potassium, sodium and zinc salts (CAS Reg. Nos. 15763-76-5, 16066-35-6, 164524-02-1, 28085-69-0, 28348-53-0, 28631-63-2, 32073-22-6, 37475-88-0, 37953-05-2, and 90959-88-9)		Surfactant, related adjuvant of surfactant
Cyclohexanone		Solvent, cosolvent
D&C Green No. 6		Dye, coloring agent
D&C Red No. 17		Do.
D&C Violet No. 2		Do.
Dialkyl (C <sub>8</sub> -C <sub>18</sub> ) dimethylammonium chloride	Not more than 0.2% in silica hydrated silica	Flocculating agent in the manufacture of silica hydrated silica for use as a solid diluent, carrier
Diatomite (diatomaceous earth)		Solid diluent, carrier
Diethanolamine salts of alkyl (C <sub>8</sub> -C <sub>24</sub> ) benzenesulfonic acid (CAS Reg. Nos. 26545-53-9, 67815-95-6, 67889-94-5, 67889-95-6, 68259-34-7, 68478-47-7, 68567-68-0, 68815-34-9, 68815-37-2, 68891-02-1, 68953-97-9, 84989-15-1, 85338-09-6, 90194-39-1,	Not to exceed 7% of	Surfactants, related adjuvants of

90194-40-4, 90218-08-9)	pesticide formulation	surfactants.
Diethylaminoethanol, ethoxylated, propoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-75-4)		Surfactant
Diethylaminoethanol, ethoxylated, propoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-83-4)		Surfactant
Diethylaminoethanol, ethoxylated, reaction products with acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-81-2)		Surfactant
Diethylaminoethanol, ethoxylated, reaction product with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-72-1)		Surfactant
Diethylphthalate		Solvent, cosolvent
1,1-Difluoroethane (CAS Reg. No. 75-37-6)	In pesticide formulations used for insect control in food- and feed-handling establishments and animals; in bird repellent pesticide formulations	Aerosol propellant
Dimethyl ether (CAS Reg. No. 115-10-6)		Propellant
Dimethylaminoethanol, ethoxylated, propoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-42-5)		Surfactant
Dimethylaminoethanol, ethoxylated, propoxylated reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-67-4)		Surfactant
Dimethylaminoethanol, ethoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-38-9)		Surfactant
Dimethylaminoethanol, ethoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-49-2)		Surfactant
Dimethylaminopropylamine, isopropylamine, ethanolamine, and triethanolamine salts of alkyl (C <sub>8</sub> -C <sub>24</sub> ) benzenesulfonic acid (CAS Reg. Nos. 3088-30-0, 12068-12-1, 26264-05-1, 26836-07-7, 27323-41-7, 55470-69-4, 58089-99-9, 61886-59-7, 61931-76-8, 67924-05-4, 68110-32-7, 68259-35-8, 68411-31-4, 68442-72-8, 68567-69-1, 68584-24-7, 68584-25-8, 68648-81-7, 68648-96-4, 68649-00-3, 68815-30-5, 68815-35-0, 68910-32-7, 68953-93-5, 68953-98-0, 70528-84-6, 72391-21-0, 84961-74-0, 85480-55-3, 85480-56-4, 85995-82-0, 90194-42-6, 90194-53-9, 90194-54-0, 90194-55-1, 90218-09-0, 90218-11-4, 90218-35-2, 96687-54-6, 99924-49-9, 121617-08-1, 157966-96-6, 193562-36-6, 319926-68-6, 877677-48-0, 1093628-27-3).		Surfactants, related adjuvants of surfactants.
3,6-Dimethyl-4-octyne-3,6-diol	Not more than 2.5% of pesticide formulation	Surfactants, related adjuvants of surfactants
Dimethylpolysiloxane (CAS Reg. No. 9016-00-6)		Defoaming agent
Di-n-butyl carbonate (CAS Reg. No. 542-52-9)		Solvent
Dipropylene glycol monomethyl ether		Surfactants, related adjuvants of surfactants
Distillates (petroleum), solvent-dewaxed heavy paraffinic (CAS Reg. No. 64742-65-0)		Carrier
Epoxidized soybean oil (CAS Reg. No. 8013-07-8)		Stabilizer, plasticizer, component animal tag
Ethanesulfonic acid, 2-hydroxy- (CAS Reg. No. 107-36-8)		Chelator, sequestrant, or conditioning agent.
Ethanesulfonic acid, 2-hydroxy-, ammonium salts (CAS Reg. No. 57267-78-4)		Do.
Ethanesulfonic acid, 2-hydroxy-, calcium salts (CAS Reg. No. 10550-47-7)		Do.
Ethanesulfonic acid, 2-hydroxy-, magnesium salts (CAS Reg. No. 17345-56-1)		Do.
Ethanesulfonic acid, 2-hydroxy-, potassium salts (CAS Reg. No. 1561-99-5)		Do.
Ethanesulfonic acid, 2-hydroxy-, sodium salts (CAS Reg. No. 1562-00-1)		Do.
Ethanesulfonic acid, 2-hydroxy-, zinc salts (CAS Reg. No. 129756-32-7)		Do.
Ethyl alcohol		Solvent, cosolvent
Ethyl maltol (CAS Reg. No. 4940-11-8)	Not more than 0.2 % of the pesticide formulation	Odor masking agent
Ethylene oxide adducts of 2,4,7,9-tetramethyl-5-decynediol, the ethylene oxide content averages 3.5, 10 or 30 moles (CAS Reg. No. 9014-85-1)		Surfactants, related adjuvants of surfactants
2-Ethyl-1-hexanol (CAS Reg. No. 104-76-7)	Not more than 10% of pesticide	Solvent, adjuvant of surfactants
FD&C Blue No. 1		Dye, coloring agent
FD&C Yellow No. 6 Aluminum Lake (CAS Reg. No. 15790-07-5)	Not more than 2% by weight of pesticide formulation	Pigment in animal tag and similar slow-release devices
D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-methyl- (CAS Reg. No. 5306-85-4); D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-ethyl- (CAS Reg. No. 30915-81-2); D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-propyl) (CAS Reg. No. 107644-13-3); D-glucitol, 1,4:3,6-dianhydro-2,5-bis-O-(1-methylethyl)-, (iso-propyl diether) (CAS Reg. No. 103594-41-8); D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-butyl- (CAS Reg.		solvent, co-solvent, viscosity modifier, and adjuvant

No. 103594-42-9); D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-(1-methylpropyl)-, (CAS Reg. No. not assigned); and D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-(2-methylpropyl)-, (CAS Reg. No. not assigned)		
D-glucopyranose, oligomeric, C <sub>10-16</sub> -alkyl glycosides (CAS Reg. No. 110615-47-9)		Surfactant
Glycerol monooleate		Surfactants, related adjuvants of surfactants
Glyceryl monostearate		Emulsifier
Glyceryl tris-12-hydroxystearate		Flow control agent
Graphite		Solid diluent, carrier
<i>n</i> -Hexyl alcohol (CAS Reg. No. 111-27-3)		Solvent, cosolvent
Hydroxyethylmorpholine, ethoxylated, propoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-06-4)		Surfactant
Hydroxyethylmorpholine, ethoxylated, propoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173188-67-4)		Surfactant
Hydroxyethylmorpholine, ethoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-00-8)		Surfactant
Hydroxyethylmorpholine, ethoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-09-7)		Surfactant
Hydroxyethylpiperidine, ethoxylated, propoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-22-4)		Surfactant
Hydroxyethylpiperidine, ethoxylated, propoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-28-0)		Surfactant
Hydroxyethylpiperidine, ethoxylated, reaction products with fatty acid dimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-20-2)		Surfactant
Hydroxyethylpiperidine, ethoxylated, reaction products with fatty acid trimers, minimum number average molecular weight (in amu), 1,200 (CAS Reg. No. 1173189-25-7)		Surfactant
2-(2'-Hydroxy-5'-methylphenyl)benzotriazole (CAS Reg. No. 2440-22-4)	Not more than 0.5% by weight of pesticide formulation	Ultraviolet light absorber/stabilizer in animal tag and similar slow-release devices
Iron oxide (CAS Reg. No. 1309-37-1)		Colorant in pesticide formulations for animal tags
Isobutane (CAS Reg. No. 75-28-5)	None	Propellant
Isopropyl-3-hydroxybutyrate (CAS Reg. No. 54074-94-1)		Solvent
Isopropyl myristate, CAS Reg. No. 110-27-0		Solvent
Kaolinite-type clay		Solid diluent, carrier
Kerosene, U.S.P. reagent		Solvent, cosolvent
Lactic acid		Solvent
Lactic acid, 2-ethylhexyl ester (CAS Reg. No. 6283-86-9)		Solvent
Lactic acid, 2-ethylhexyl ester, (2S)- (CAS Reg. No. 186817-80-1)		Solvent
Lactic acid, <i>n</i> -propyl ester, (S); (CAS Reg. No. 53651-69-7)		Solvent
Lignin (CAS Reg. No. 9005-53-2)		Surfactant, related adjuvants of surfactants
Lignin, alkali (CAS Reg. No. 8068-05-1)		Do.
Lignin, alkali, oxidized, sodium salt (CAS Reg. No. 68201-23-0)		Do.
Lignin alkali reaction products with disodium sulfite and formaldehyde (CAS Reg. No. 105859-97-0)		Do.
Lignin alkali reaction products with formaldehyde and sodium bisulfite (CAS Reg. No. 68512-35-6)		Do.
Lignosulfonic acid (CAS Reg. No. 8062-15-5)		Do.
Lignosulfonic acid, ammonium calcium salt (CAS Reg. No. 12710-04-2)		Do.
Lignosulfonic acid, ammonium magnesium salt (CAS Reg. No. 123175-37-1)		Do.
Lignosulfonic acid, ammonium salt (CAS Reg. No. 8061-53-8)		Do.
Lignosulfonic acid, ammonium sodium salt (CAS Reg. No. 166798-73-8)		Do.
Lignosulfonic acid, calcium magnesium salt (CAS Reg. No. 55598-86-2)		Do.
Lignosulfonic acid, calcium salt (CAS Reg. No. 8061-52-7)		Do.
Lignosulfonic acid, calcium sodium salt (CAS Reg. No. 37325-33-0)		Do.
Lignosulfonic acid, ethoxylated, sodium salt (CAS Reg. No. 68611-14-3)		Do.
Lignosulfonic acid, magnesium salt (CAS Reg. No. 8061-54-9)		Do.
Lignosulfonic acid, potassium salt (CAS Reg. No. 37314-65-1)		Do.
Lignosulfonic acid, sodium salt (CAS Reg. No. 8061-51-6)		Do.
Lignosulfonic acid, sodium salt, oxidized (CAS Reg. No. 68855-41-4)		Do.
Lignosulfonic acid, sodium salt, polymer with formaldehyde and phenol (CAS Reg. No. 37207-89-9)		Do.
Lignosulfonic acid, sodium salt, sulfomethylated (CAS Reg. No. 68512-34-5)		Do.
Lignosulfonic acid, zinc salt (CAS Reg. No. 57866-49-6)		Do.
<i>d</i> -Limonene (CAS Reg. No. 5989-27-5)		Solvent, fragrance
Magnesium carbonate		Solid diluent, carrier
Magnesium silicate, hydrated magnesium silicate		Do.
Methane sulfonic acid (CAS Reg. No. 75-75-2)	Not to exceed 3.0% by weight in pesticide formulation	Acidifying agent
Methyl alcohol		Solvent, cosolvent
Methyl <i>n</i> -amyl ketone (CAS Reg. No. 110-43-0)		Solvent, cosolvent
Methyl esters of higher fatty acids conforming to 21 CFR 573.640		Antidusting agent

Methyl- <i>p</i> -hydroxybenzoate (Methyl paraben)	Meets specifications of Food Chemicals Codex; not to exceed 0.1% in formulations	Preservative
Methyl isobutyl ketone		Solvent, cosolvent
2-methyl-2,4-pentanediol (CAS Reg. No.-107-41-5)	Without limitation	Growing crops and food animals
2-methyl-1,3-propanediol (CAS Reg. No. 2163-42-0)		Solvent, surfactant
Mineral oil, U.S.P., or conforming to 21 CFR 172.878 or 178.3620(a), (b)		Solvent, diluent
Montmorillonite-type clay		Solid diluent, carrier
Nonyl, decyl, and undecyl glycoside mixture with a mixture of nonyl, decyl, and undecyl oligosaccharides and related reaction products (primarily decanol and undecanol) produced as an aqueous-based liquid (50 to 65% solids) from the reaction of primary alcohols (containing 15 to 20% secondary alcohol isomers) in a ratio of 20% C <sub>9</sub> , 40% C <sub>10</sub> , and 40% C <sub>11</sub> with carbohydrates (average glucose to alkyl chain ratio 1.3 to 1.8)		Surfactant
α-( <i>p</i> -Nonylphenol)-ω-hydroxypoly(oxyethylene) mixture of dihydrogen phosphate and monohydrogen phosphate esters and the corresponding ammonium, calcium, magnesium, potassium, sodium, and zinc salts of the phosphate esters; the nonyl group is a propylene trimer isomer and the poly(oxyethylene) content averages 4-14 or 30 moles (CAS Reg. Nos. 51811-79-1, 59139-23-0, 67922-57-0, 68412-53-3, 68553-97-9, 68954-84-7, 99821-14-4, 152143-22-1, 51609-41-7, 37340-60-6, 106151-63-7, 68584-47-4, 52503-15-8, 68458-49-1)	Not to exceed 7% of pesticide formulation	Surfactants, related adjuvants of surfactants
α-( <i>p</i> -Nonylphenol)-ω-hydroxypoly(oxyethylene) sulfate, ammonium, calcium, magnesium, potassium, sodium, and zinc salts the nonyl group is propylene trimer isomer and the poly(oxyethylene) content averages 4 moles (CAS Reg. Nos. 9014-90-8, 9051-57-4, 9081-17-8, 68649-55-8, 68891-33-8)	Not to exceed 7% of pesticide formulation	Surfactants, related adjuvants of surfactants
α-( <i>p</i> -Nonylphenyl)-ω-hydroxypoly(oxyethylene) produced by the condensation of 1 mole of nonylphenol (nonyl group is a propylene trimer isomer) with an average of 4-15 or 30-90 moles of ethylene oxide; if a blend of products is used, the average number of moles of ethylene oxide reacted to produce any product that is a component of the blend shall be in the range of 4-15 or 30-90 moles		Surfactants, emulsifier, related adjuvants of surfactants.
Octadecyl 3,5-di- <i>tert</i> -butyl-4-hydroxyhydro cinnamate (CAS Reg. No. 2082-79-3)	Not more than 0.5% by weight of pesticide formulation	Thermal stabilizer/antioxidant in animal tag and similar slow-release devices
1-Octanal (CAS Reg. No. 124-13-0)	Not more than 0.2% of the pesticide formulation	Odor masking agent
Octyl and decyl glucosides mixture with a mixture of octyl and decyl oligosaccharides and related reaction products (primarily <i>n</i> -decanol) produced as an aqueous-based liquid (68-72% solids) from the reaction of straight chain alcohols (C <sub>8</sub> (45%), C <sub>10</sub> ) with anhydrous glucose		Thermal stabilizer/antioxidant in animal tag and similar slow-release devices
Octyl epoxytallate (CAS Reg. No. 61788-72-5)		Plasticizer, component animal tag
Oleic acid, conforming to 21 CFR 172.862 (CAS Reg. No. 112-80-1)		Defoaming agent
α-Oleoyl-ω-hydroxypoly(oxyethylene), average molecular weight (in amu) of 600		Emulsifier
α-Oleoyl-ω-(oleoyloxy)poly(oxyethylene) derived from α-hydro-ω-hydroxypoly(oxyethylene), molecular weight (in amu) 600		Emulsifier, defoaming agent
Pentaerythritol tetrakis (3-(3,5-di- <i>tert</i> -butyl-4-hydroxyphenyl)propionate) (CAS Reg. No. 6683-19-8)	Not to exceed 3% by weight of the pesticide formulation	Antioxidant, stabilizer.
Petroleum hydrocarbons, light, odorless, conforming to 21 CFR 172.884 or 178.3650		Solvent, diluent
Petroleum hydrocarbons, synthetic isoparaffinic, conforming to 21 CFR 172.882 or 178.3530		Do.
Phenol		Solvent, cosolvent
α-Pinene	Not more than 2% of formulation by weight	Stabilizer
Polyethylene (CAS Reg. No. 9002-88-4) conforming to 21 CFR 172.615		Component of plastic slow release tag
Polyethylene glycol [α-hydro-ω-hydroxypoly(oxyethylene)]; mean molecular weight (in amu) 194 to 9,500 conforms to 21 CFR 178.3750		Surfactants, related adjuvants of surfactants
Poly(oxy-1,2-ethanediyl), α-(3-(1,3,3,3-tetramethyl-1-(trimethylsilyl)oxy)disiloxanyl)propyl)-ω-hydroxy- (CAS Reg. No. 67674-67-3)		Surfactant
Potassium benzoate (Cas No. 582-25-2)	None	Preservative
Potassium hydroxide	Meeting Food Chemicals, Codex specifications	Neutralizer
Propanamide, 2-hydroxy- <i>N</i> , <i>N</i> -dimethyl- (CAS Reg. No. 35123-06-9)	Not to exceed 20% by weight in pesticide formulation	Solvent/co-solvent
Propane		Propellant

1,2,3-Propanetriol, homopolymer diisooctadecanoate (CAS Reg. No. 63705-03-3)		Emulsifier
<i>n</i> -Propanol		Solvent, for blended emulsifiers
2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and methyl 2-methyl-2-propenoate, ammonium salt (CAS Registration No. 55989-05-4), minimum number average molecular weight (in amu), 18,900.		Encapsulating agent, dispensers, resins, fibers and beads
Propylene glycol		Solvent, cosolvent
Propylene glycol monomethyl ether		Deactivator, emollient
Propyl gallate		Antioxidant
Propyl <i>p</i> -hydroxybenzoate (Propyl paraben)	Meets specifications of Food Chemicals Codex; not to exceed 0.1% in formulations	Preservative
Pyrophyllite		Solid diluent, carrier
Silica, hydrated silica		Anticaking agent, solid diluent, carrier
Silica aerogel (finely powdered microcellular silica foam having a minimum silica content of 89.5%)		Component of antifoaming agent
Soapstone		Solid diluent
Sodium alkyl naphthalenesulfonates (CAS Reg. Nos. 68909-83-1, 68909-84-2, 68909-82-0, 27213-90-7, 26264-58-4, 27178-87-6, 111163-74-7, 908356-16-1, 25417-20-3, 25638-17-9, 145578-88-7, 1322-93-6, 1323-19-9, 7403-47-6, 68442-09-1, 127646-44-0, 908356-18-3)	Limited to no more than 30% by weight in pesticide end-use products	Surfactants, related adjuvants of surfactants
Sodium 1,4-dihexyl sulfosuccinate (CAS Reg. No. 3006-15-3)		Surfactants, related adjuvants of surfactants
Sodium 1,4-diisobutyl sulfosuccinate (CAS Reg. No. 127-39-9)		Surfactants, related adjuvants of surfactants
Sodium dioctylsulfosuccinate		Surfactants, related adjuvants of surfactants
Sodium 1,4-dipentyl sulfosuccinate (CAS Reg. No. 922-80-5)		Surfactants, related adjuvants of surfactants
Sodium hydroxide		Neutralizer
Sodium monoalkyl and dialkyl (C <sub>6</sub> -C <sub>16</sub> ) phenoxy benzenedisulfonates and related acids (CAS Reg. Nos. 147732-59-0, 147732-60-3, 169662-22-0, 70191-75-2, 36445-71-3, 39354-74-0, 70146-13-3, 119345-03-8, 149119-20-0, 149119-19-7, 119345-04-9, 28519-02-0, 25167-32-2, 30260-73-2, 65143-89-7, 70191-76-3)	Not to exceed 20% in pesticide formulations	Surfactants, related adjuvants of surfactants
Sodium <i>N</i> -oleoyl- <i>N</i> -methyl taurine (CAS Reg. No. 137-20-2)		Surfactants, related adjuvants of surfactants
Sodium and potassium salts of <i>N</i> -alkyl (C <sub>8</sub> -C <sub>18</sub> )-beta-iminodipropionic acid where the C <sub>8</sub> -C <sub>18</sub> is linear and may be saturated and/or unsaturated (CAS Reg. Nos. 110676-19-2, 3655-00-3, 61791-56-8, 14960-06-6, 26256-79-1, 90170-43-7, 91696-17-2, 97862-48-1)	Concentration in formulated end-use products not to exceed 30% by weight in pesticide formulations	Surfactants, related adjuvants of surfactants
Sodium starch glycolate (CAS Reg. No. 9063-38-1)	Granular and tableted products only; not to exceed 8% of the formulated product	Disintegrant
Sodium sulfate		Solid diluent, carrier
Sorbitan fatty acid esters (fatty acids limited to C <sub>12</sub> , C <sub>14</sub> , C <sub>16</sub> , and C <sub>18</sub> containing minor amounts of associated fatty acids) and poly(oxyethylene) derivatives of sorbitan fatty acid esters; the poly(oxyethylene) content averages 16-20 moles		Buffering agent; corrosion inhibition
Sorbitol		Antidusting agent.
Stearic acid (CAS Reg. No. 57-11-4)		Lubricant, component animal tag
$\alpha$ -Stearoyl- $\omega$ -hydroxypoly(oxyethylene), average molecular weight (in amu) of 600		Emulsifier
$\alpha$ -Stearoyl- $\omega$ -hydroxypoly(oxyethylene); the poly(oxyethylene) content averages 8, 9, or 40 moles; if a blend of products is used, the average number of moles of ethylene oxide reacted to produce any product that is a component of the blend shall be 8, 9, or 40		Surfactants; related adjuvants of surfactants
Sulfite liquors and cooking liquors, spent, oxidized (CAS Reg. No. 68514-09-0)		Surfactant, related adjuvants of surfactants
Sulfur (CAS Reg. No. 7704-34-9)		Stabilizer
Talc		Do.

Tall oil; fatty acids not less than 58%, rosin acids not more than 44%, unsaponifiables not more than 8%		Surfactants, related adjuvants of surfactants
Tall oil fatty acids (CAS Reg. No. 61790-12-3)		Solvent/carrier
Tartrazine		Dye, coloring agent
N,N,N',N''-tetrakis-(2-hydroxypropyl) ethylenediamine (CAS Reg. No. 102-60-3)	Concentration in formulated end-use products not to exceed 20% by weight in pesticide formulations	Stabilizer for formulation.
Trans-1,3,3,3-tetrafluoroprop-1-ene (CAS Reg. No. 29118-24-9)		Propellant.
2,4,7,9-Tetramethyl-5-decyne-4,7-diol	Not more than 2.5% of pesticide formulation	Surfactants, related adjuvants of surfactants
Titanium dioxide (CAS Reg. No. 13463-67-7)		Pigment/colorant in pesticide formulations for animal tag
Toluenesulfonic acid and its ammonium, calcium, magnesium, potassium, sodium, and zinc salts		Do.
Triacetin (glyceryl triacetate)		Solvent, cosolvent
Trisodium phosphate		Precipitant, buffer, filler
Waxes and waxy substances, rice bran, oxidized (CAS Reg. No. 1883583-80-9)		Flow aid, surface protectant, film-forming agent, carrier, coating agent, or adjuvant
Xylene		Solvent, cosolvent
Xylenesulfonic acid and its ammonium, calcium, magnesium, potassium, sodium, and zinc salts		Surfactants, related adjuvants of surfactants
Zinc oxide		Solid diluent, carrier
Zinc stearate, conforming to 21 CFR 182.5994 and 582.5994		Water repellent, desiccant, and coating agent.
Zinc stearate (CAS Reg. No. 557-05-1)		Water repellent, desiccant, and coating agent; stabilizer, component of plastic animal tag
Zinc sulfate (basic and monohydrate)		Water repellent, desiccant, and coating agent

[69 FR 23130, Apr. 28, 2004]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.930, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

#### §180.940 Tolerance exemptions for active and inert ingredients for use in antimicrobial formulations (Food-contact surface sanitizing solutions).

Residues of the following chemical substances are exempted from the requirement of a tolerance when used in accordance with good manufacturing practice as ingredients in an antimicrobial pesticide formulation, provided that the substance is applied on a semi-permanent or permanent food-contact surface (other than being applied on food packaging) with adequate draining before contact with food.

(a) The following chemical substances when used as ingredients in an antimicrobial pesticide formulation may be applied to: Food-contact surfaces in public eating places, dairy-processing equipment, and food-processing equipment and utensils.

Pesticide Chemical	CAS Reg. No.	Limits
Acetic acid	64-19-7	When ready for use, the end-use concentration is not to exceed 100 ppm
Alkylbenzene sulfonates (branched and linear) of chain lengths C <sub>10</sub> -C <sub>16</sub> , including benzenesulfonic acid, dodecyl and	27176-87-0 25155-30-0	When ready for use, the end-use concentration is not to exceed 700 ppm

benzenesulfonic acid, dodecyl-, sodium salt		
Allyl cyclohexylpropionate	2705-87-5	When ready for use, the end-use concentration is not to exceed 100 ppm
$\alpha$ -Alkyl- $\omega$ -hydroxypoly (oxypropylene) and/or poly (oxyethylene) polymers where the alkyl chain contains a minimum of six carbons	9002-92-0; 9004-95-9; 9004-98-2; 9005-00-9; 9035-85-2; 9038-29-3; 9038-43-1; 9040-05-5; 9043-30-5; 9087-53-0; 25190-05-0; 24938-91-8; 25231-21-4; 251553-55-6; 26183-52-8; 26468-86-0; 26636-39-5; 27252-75-1; 27306-79-2; 31726-34-8; 34398-01-1; 34398-05-5; 37251-67-5; 37311-00-5; 37311-01-6; 37311-02-7; 37311-04-9; 39587-22-9; 50861-66-0; 52232-09-4; 52292-17-8; 52609-19-5; 57679-21-7; 59112-62-8; 60828-78-6; 61702-78-1; 61723-78-2; 61725-89-1; 61791-13-7; 61791-20-6; 61791-28-4; 61804-34-0; 61827-42-7; 61827-84-7; 62648-50-4; 63303-01-5; 63658-45-7; 63793-60-2; 64366-70-7; 64415-24-3; 64415-25-4; 64425-86-1; 65104-72-5; 65150-81-4; 66455-14-9; 66455-15-0; 67254-71-1; 67763-08-0; 68002-96-0; 68002-97-1; 68131-39-5; 68131-40-8; 68154-96-1; 68154-97-2; 68154-98-3; 68155-01-1; 68213-23-0; 68213-24-1; 68238-81-3; 68238-82-4; 68409-58-5; 68409-59-6; 68439-30-5; 68439-45-2; 68439-46-3; 68439-48-5; 68439-49-6; 68439-50-9; 68439-51-0; 68439-53-2; 68439-54-3; 68458-88-8; 68526-94-3; 68526-95-4; 68551-12-2; 68551-13-3; 68551-14-4; 68603-20-3; 68603-25-8; 68920-66-1; 68920-69-4; 68937-66-6; 68951-67-7; 68954-94-9; 68987-81-5; 68991-48-0; 69011-36-5; 69013-18-9; 69013-19-0; 69227-20-9; 69227-21-0; 69227-22-1; 69364-63-2; 70750-27-5; 70879-83-3; 70955-07-6; 71011-10-4; 71060-57-6; 71243-46-4; 72066-65-0; 72108-90-8; 72484-69-6; 72854-13-8; 72905-87-4; 73018-31-2; 73049-34-0; 74432-13-6; 74499-34-6; 78330-19-5; 78330-20-8; 78330-21-9; 78330-23-1; 79771-03-2; 84133-50-6; 85422-93-1; 97043-91-9; 97953-22-5; 102782-43-4; 103331-86-8; 103657-84-7; 103657-85-8; 103818-93-5; 103819-03-0; 106232-83-1; 111905-54-5; 116810-31-2; 116810-32-3; 116810-33-4; 120313-48-6; 120944-68-5; 121617-09-2; 126646-02-4; 126950-62-7; 127036-24-2; 139626-71-4; 152231-44-2; 154518-36-2; 157627-86-6; 157627-88-8; 157707-41-0; 157707-43-2; 159653-49-3; 160875-66-1; 160901-20-2; 160901-09-7; 160901-19-9; 161025-21-4; 161025-22-5; 166736-08-9; 169107-21-5; 172588-43-1; 176022-76-7; 196823-11-7; 287935-46-0; 288260-45-7; 303176-75-2; 954108-36-2; 2222805-23-2	None
Aluminum sulfate	10043-01-3	When ready for use, the end-use concentration is not to exceed 50 ppm
2-propen-1-aminium, <i>N,N</i> -dimethyl- <i>N</i> -propenyl-, chloride, homopolymer	26062-79-3	When ready for use, the end-use concentration is not to exceed 0.6%
Ammonium chloride	12125-02-9	When ready for use, the end-use concentration is not to exceed 48 ppm
Amylopectin, acid-hydrolyzed, 1-oxtenylbutanedioate	113894-85-2	None
Amylopectin, hydrogen 1-octadecenylbutanedioate	125109-81-1	None
Aspartic acid, <i>N</i> -(1,2-dicarboxyethyl)-, tetrasodium salt	144538-83-0	When ready for use, the end-use concentration is not to exceed 5000 ppm
Butyric acid	107-92-6	When ready for use, the end-use concentration is not to exceed 100 ppm
Butyl alcohol	71-36-3	When ready for use, the end-use concentration is not to exceed 100 ppm
<i>n</i> -Butyl benzoate	136-60-7	When ready for use, the end-use concentration is not to exceed 15,000 ppm
<i>n</i> -Butyl-3-hydroxybutyrate	53605-94-0	Solvent
Citral	5392-40-5	When ready for use, the end-use concentration is not to exceed 100 ppm
Citronellol	106-22-9	When ready for use, the end-use concentration is not to exceed 100 ppm
Citronellyl acetate	150-84-5	When ready for use, the end-use concentration is not to exceed 100 ppm
Copper sulfate pentahydrate	7758-99-8	When ready for use, the end-use



		concentration is not to exceed 80 ppm
$\beta$ -Damascone, (Z)-	23726-92-3	When ready for use, the end-use concentration is not to exceed 100 ppm
Decanal	112-31-2	When ready for use, the end-use concentration is not to exceed 100 ppm
Decanoic acid	334-48-5	When ready for use, the end-use concentration is not to exceed 100 ppm
1-Decanol	112-30-1	When ready for use, the end-use concentration is not to exceed 100 ppm
(E)-4-Decenal	65405-70-1	When ready for use, the end-use concentration is not to exceed 100 ppm
D-Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	None
1,3-dibromo-5,5-dimethylhydantoin	77-48-5	None
2,6-Dimethyl-5-heptanal	106-72-9	When ready for use, the end-use concentration is not to exceed 100 ppm
Di-n-butyl carbonate	542-52-9	When ready for use, the end-use concentration is not to exceed 15,000 ppm
2-Dodecanol, (2E)-	20407-84-5	When ready for use, the end-use concentration is not to exceed 100 ppm
Ethanol	64-17-5	None
Ethyl 2-methylbutyrate	452-79-1	When ready for use, the end-use concentration is not to exceed 100 ppm
Ethylenediaminetetraacetic acid (EDTA), tetrasodium salt	64-02-8	None
FD&C Green No. 3	CAS Reg. No. 2353-45-9	None
FD&C Red No. 40	25956-17-6	When ready for use, the end-use concentration is not to exceed 20 ppm.
FD&C Yellow No. 5	1934-21-0	When ready for use, the end-use concentration is not to exceed 1000 ppm
(E)-Geraniol	106-24-1	When ready for use, the end-use concentration is not to exceed 100 ppm
(E)-Geraniol acetate	105-87-3	When ready for use, the end-use concentration is not to exceed 100 ppm
C <sub>1</sub> -C <sub>4</sub> linear and branched chain alkyl d-glucitol dianhydro alkyl ethers cluster	5306-85-4; 30915-81-2; 107644-13-3; 103594-41-8; 103594-42-9	When ready for use, the end-use concentration is not to exceed 500 ppm.

D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-(1-methylpropyl)-,	None	
D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-(2-methylpropyl)-, (CAS Reg. No. not assigned)	None	
D-glucurono-6-deoxy-L-manno-D-glucan, acetate, calcium magnesium potassium sodium salt (diutan gum)	(CAS No. 595585-15-2)	None
Heptanal	111-71-7	When ready for use, the end-use concentration is not to exceed 100 ppm
Heptanoic acid	111-14-8	When ready for use, the end-use concentration is not to exceed 100 ppm
Heptyl alcohol	111-70-6	When ready for use, the end-use concentration is not to exceed 100 ppm
Hexanal	66-25-1	When ready for use, the end-use concentration is not to exceed 100 ppm
Hexanoic acid	142-62-1	When ready for use, the end-use concentration is not to exceed 100 ppm
n-Hexanol	111-27-3	When ready for use, the end-use concentration is not to exceed 100 ppm
(Z)-3-Hexenol	928-96-1	When ready for use, the end-use concentration is not to exceed 100 ppm
(Z)-3-Hexenol acetate	3681-71-8	When ready for use, the end-use concentration is not to exceed 100 ppm
Hexyl acetate	142-92-7	When ready for use, the end-use concentration is not to exceed 100 ppm
Hydrogen peroxide	7722-84-1	When ready for use, the end-use concentration is not to exceed 91 ppm
Hypochlorous acid, sodium salt	7681-52-9	When ready for use, the end-use concentration of all hypochlorous acid chemicals in the solution is not to exceed 200 ppm determined as total available chlorine
Iodine	7553-56-2	When ready for use, the total end-use concentration of all iodide-producing chemicals in the solution is not to exceed 25 ppm of titratable iodine
Isopropyl-3-hydroxybutyrate	54074-94-1	Solvent
Lactic acid	50-21-5	When ready for use, the end-use

		concentration is not to exceed 10,000 ppm in antimicrobial formulations applied to food-contact surfaces in public eating places
Lauric acid	143-07-7	When ready for use, the end-use concentration is not to exceed 100 ppm
Lauric aldehyde	112-54-9	When ready for use, the end-use concentration is not to exceed 100 ppm
Lauryl alcohol	112-53-8	When ready for use, the end-use concentration is not to exceed 100 ppm
d-Limonene	5989-27-5	When ready for use, the end-use concentration is not to exceed 100 ppm
Lipase, triacylglycerol	9001-62-1	When ready for use, the end-use concentration is not to exceed 500 ppm
Magnesium oxide	1309-48-4	None
Methane sulfonic acid	75-75-2	When ready for use, the end use concentration is not to exceed 5,000 ppm
Methylene blue	61-73-4	When ready for use, the end-use concentration is not to exceed 0.4 ppm
Methyl- $\alpha$ -ionone	127-42-4	When ready for use, the end-use concentration is not to exceed 100 ppm
3-Methyl-2-butenyl acetate	1191-16-8	When ready for use, the end-use concentration is not to exceed 100 ppm
2-Methylundecanal	110-41-8	When ready for use, the end-use concentration is not to exceed 100 ppm
2-Methyl-1,3-propanediol	2163-42-0	None
Myristaldehyde	124-25-4	When ready for use, the end-use concentration is not to exceed 100 ppm
Myristic acid	544-63-8	When ready for use, the end-use concentration is not to exceed 100 ppm
Neryl acetate	141-12-8	When ready for use, the end-use concentration is not to exceed 100 ppm
Nitric acid	7697-37-2	When ready for use, the end-use concentration is not to exceed 1,000 ppm
Nonanal	124-19-6	When ready for use, the end-use concentration is

		not to exceed 100 ppm
Nonanoic acid	112-05-0	When ready for use, the end-use concentration is not to exceed 100 ppm
Nonyl alcohol	143-08-8	When ready for use, the end-use concentration is not to exceed 100 ppm
$\alpha$ -(p-Nonylphenyl)- $\omega$ -hydroxypoly (oxyethylene) average poly(oxyethylene) content 11 moles)	None	None
Octadecanoic acid, calcium salt	1592-23-0	None
9-Octadecenoic acid (9Z)-, sulfonated, oxidized	1315321-93-7	When ready for use, the end-use concentration is not to exceed 250 ppm.
9-Octadecenoic acid (9Z)-, sulfonated, oxidized, potassium salts	1315321-94-8	When ready for use, the end-use concentration is not to exceed 250 ppm.
9-Octadecenoic acid (9Z)-, sulfonated, oxidized, sodium salts	1315321-95-9	When ready for use, the end-use concentration is not to exceed 250 ppm.
Octanal	124-13-0	When ready for use, the end-use concentration is not to exceed 100 ppm
1-Octanesulfonic acid, sodium salt	5324-84-5	When ready for use, the end-use concentration is not to exceed 46 ppm
Octanoic acid	124-07-2	When ready for use, the end-use concentration is not to exceed 52 ppm
Octanoic acid	124-07-2	When ready for use, the end-use concentration is not to exceed 100 ppm
1-Octanol	111-87-5	When ready for use, the end-use concentration is not to exceed 100 ppm
Oxirane, methyl-, polymer with oxirane, minimum molecular weight (in amu), 1900	9003-11-6	None
Palmitic acid	57-10-3	When ready for use, the end-use concentration is not to exceed 100 ppm
Peroxyacetic acid	79-21-0	When ready for use, the end-use concentration is not to exceed 58 ppm
Peroxyoctanoic acid	33734-57-5	When ready for use, the end-use concentration is not to exceed 52 ppm
Phosphonic acid, (1-hydroxyethylidene)bis-	2809-21-4	When ready for use, the end-use concentration is not to exceed 14 ppm
Phosphoric acid, trisodium salt	7601-54-9	When ready for use, the end-use

		concentration is not to exceed 5916 ppm
Potassium bromide	7758-02-3	When ready for use, the end-use concentration is not to exceed 46 ppm total available halogen
Potassium iodide	7681-11-0	When ready for use, the total end-use concentration of all iodide-producing chemicals in the solution is not to exceed 25 ppm of titratable iodine
1,3-Propanediol	504-63-2	None
Propionic acid	79-09-4	When ready for use, the end-use concentration is not to exceed 100 ppm
Propylene glycol	57-55-6	None
Quaternary ammonium compounds, alkyl (C <sub>12</sub> -C <sub>18</sub> ) benzyl dimethyl, chlorides	8001-54-5	When ready for use, the end-use concentration of all quaternary chemicals in the solution is not to exceed 200 ppm of active quaternary compound
Quaternary ammonium compounds: n-alkyl (C <sub>12-18</sub> ) dimethyl benzyl ammonium chloride	68424-85-1	When ready for use, the end-use concentration of all quaternary chemicals in solution is not to exceed 400 ppm of active quaternary compound
Quaternary Ammonium Compounds: n-alkyl (C <sub>12-14</sub> ) dimethyl ethylbenzyl ammonium chloride, average molecular weight (in amu), 377 to 384	85409-23-0	When ready for use, the end-use concentration of all quaternary chemicals in solution is not to exceed 400 ppm of active quaternary compound.
Quaternary ammonium compounds n-alkyl (C <sub>12</sub> -C <sub>18</sub> ) dimethyl ethylbenzyl ammonium chloride average molecular weight (in amu) 384	None	When ready for use, the end-use concentration of all quaternary chemicals in the solution is not to exceed 200 ppm of active quaternary compound
Quaternary ammonium compounds, Di-n-Alkyl (C <sub>8-10</sub> ) dimethyl ammonium chloride, average molecular weight (in amu) 332 to 361	None	When ready for use, the end-use concentration of these specific in quaternary ammonium compounds is not to exceed 240 ppm of active quaternary ammonium compound; the end-use concentration of all quaternary chemicals in the solution is not to exceed 400 ppm of active quaternary compound
Quaternary ammonium compounds, didecyl dimethyl ammonium	148788-55-0/148812-654-1	When ready for use, the end-use concentration of these specific

carbonate/didecyl dimethyl ammonium bicarbonate		ammonium compounds is not to exceed 400 ppm of active quaternary ammonium compound
Silver ions resulting from the use of electrolytically-generated silver ions stabilized in citric acid as silver dihydrogen citrate (does not include metallic silver)	14701-21-4	When ready for use, the end-use concentration of silver ions is not to exceed 50 ppm of active silver
Sodium bisulfate	7681-38-1	When ready for use, the end-use concentration is not to exceed 2,000 ppm.
Sorbitan, mono-9-octadecenoate, poly(oxy-1,2-ethanediy) derivs., (Z)-	9005-65-6	None
Stearic acid.	57-11-4	When ready for use, the end-use concentration is not to exceed 100 ppm
Sulfuric acid	7664-93-9	Food-contact surfaces in public eating places, dairy-processing equipment, and food-processing equipment and utensils in antimicrobial formulations. Not to exceed 600 ppm.
Sulfuric acid monododecyl ester, sodium salt (sodium lauryl sulfate)	151-21-3	When ready for use, the end-use concentration is not to exceed 350 ppm
Tall oil fatty acid (CAS Reg. No. 61790-12-3)		Solvent/carrier
Trans-1,3,3,3-tetrafluoroprop-1-ene	29118-24-9	None
1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt	2893-78-9	When ready for use, the end-use concentration of all di- or trichloroisocyanuric acid chemicals in the solution is not to exceed 100 ppm determined as total available chlorine
2-Tridecanal	7774-82-5	When ready for use, the end-use concentration is not to exceed 100 ppm
3,5,5-Trimethylhexanal	5435-64-3	When ready for use, the end-use concentration is not to exceed 100 ppm
Undecanal	112-44-7	When ready for use, the end-use concentration is not to exceed 100 ppm
Undecyl alcohol	112-42-5	When ready for use, the end-use concentration is not to exceed 100 ppm
Valeraldehyde	110-62-3	When ready for use, the end-use concentration is not to exceed 100 ppm
Valeric acid	109-52-4	When ready for

		use, the end-use concentration is not to exceed 100 ppm
Waxes and waxy substances, rice bran, oxidized	1883583-80-9	None
Xylenesulfonic acid, sodium salt	1300-72-7	When ready for use, the end-use concentration is not to exceed 500 ppm

(b) The following chemical substances when used as ingredients in an antimicrobial pesticide formulation may be applied to: Dairy processing equipment, and food-processing equipment and utensils.

Pesticide Chemical	CAS Reg. No.	Limits
Acetic acid	64-19-7	When ready for use, the end-use concentration is not to exceed 1200 ppm
Acetic acid, chloro-, sodium salt, reaction products with 4,5-dihydro-2-undecyl-1H-imidazole-1-ethanol and sodium hydroxide	68608-66-2	When ready for use, the end-use concentration is not to exceed 42 ppm chloroacetic acid
Butanedioic acid, octenyl-	28805-58-5	When ready for use, the end-use concentration is not to exceed 156 ppm
Butoxy monoether of mixed (ethylene-propylene) polyalkylene glycol, minimum average molecular weight (in amu), 2400	None	None
Calcium chloride	10043-52-4	When ready for use, the end-use concentration is not to exceed 17 ppm
n-Carboxylic acids (C <sub>6</sub> -C <sub>12</sub> ), consisting of a mixture of not less than 56% octanoic acid and not less than 40% decanoic acid	None	When ready for use, the end-use concentration is not to exceed 39 ppm
Decanoic acid	334-48-5	When ready for use, the end-use concentration is not to exceed 90 ppm
Ethanesulfonic acid, 2-[cyclohexyl (1-oxohexadecyl) amino]-, sodium salt	132-43-4	When ready for use, the end-use concentration is not to exceed 237 ppm
Ethylenediaminetetraacetic acid (EDTA), disodium salt	139-33-3	When ready for use, the end-use concentration is not to exceed 1400 ppm
FD&C Yellow No. 5 (Tartrazine) (conforming to 21 CFR 74.705)	1934-21-0	None
C <sub>1</sub> -C <sub>4</sub> linear and branched chain alkyl d-glucitol dianhydro alkyl ethers cluster	5306-85-4; 30915-81-2; 107644-13-3; 103594-41-8; 103594-42-9	When ready for use, the end-use concentration is not to exceed 1,000 ppm.
D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-(1-methylpropyl)-,	None	
D-glucitol, 1,4:3,6-dianhydro-2,5-di-O-(2-methylpropyl)-, (CAS Reg. No. not assigned)	None	
D-Gluconic acid, monosodium salt	527-07-1	When ready for use, the end-use concentration is not to exceed 760 ppm
Hydriodic acid	10034-85-2	When ready for use, the total end-use concentration of all iodide-producing chemicals is not to exceed 25 ppm of titratable iodine
Hydrogen peroxide	7722-84-1	When ready for use, the end-use concentration is not to exceed 465 ppm
Hypochlorous acid	7790-92-3	When ready for use, the end-use concentration of all hypochlorous acid chemicals in the solution is not to exceed 200 ppm determined as total available chlorine
Iodine	7553-56-2	When ready for use, the total end-use concentration of all iodide-producing chemicals in the solution is not to exceed 25 ppm of titratable iodine
Lactic acid	50-21-5	When ready for use, the end-use concentration is not to exceed 138 ppm
Nonanoic acid	112-05-0	When ready for use, the end-use concentration is not to exceed 90 ppm
1-Octanamine, N,N-dimethyl-	7378-99-6	When ready for use, the end-use concentration is not to exceed 113 ppm
1,2-Octanedisulfonic acid	113669-58-2	When ready for use, the end-use concentration is not to exceed 102 ppm
1-Octanesulfonic acid	3944-72-7	When ready for use, the end-use concentration is not to exceed 172 ppm
1-Octanesulfonic acid, sodium salt	5324-84-5	When ready for use, the end-use concentration is not to exceed 297 ppm
1-Octanesulfonic acid, 2-sulfino-	113652-56-5	When ready for use, the end-use concentration is not to exceed 102 ppm
Octanoic acid	124-07-2	When ready for use, the end-use concentration is not to exceed 176 ppm
Oxychloro species (including chlorine dioxide) generated by acidification of an aqueous solution of sodium chlorite	None	When ready for use, the end-use concentration is not to exceed 200 ppm of chlorine dioxide as determined by the method titled, Iodometric Method for the Determination of Available Chlorine Dioxide (50-250 ppm available chlorine dioxide)
Peroxyacetic acid	79-21-0	When ready for use, the end-use concentration is not to exceed 315 ppm
Peroxyoctanoic acid	33734-57-5	When ready for use, the end-use concentration is not to exceed 122 ppm
Phosphonic acid, (1-hydroxyethylidene)bis-	2809-21-4	When ready for use, the end-use concentration is not to exceed 34 ppm
Phosphoric acid	7664-38-2	None
Phosphoric acid, monosodium salt	7558-80-7	When ready for use, the end-use concentration is not to exceed 350 ppm
Potassium iodide	7681-11-0	When ready for use, the total end-use concentration of all iodide-producing chemicals in the solution is not to exceed 25 ppm of titratable iodine
Propanoic acid	79-09-4	When ready for use, the end-use concentration is not to exceed 297 ppm
2,6-Pyridinedicarboxylic acid	499-83-2	When ready for use, the end-use concentration is not to exceed 1.2 ppm
Sulfuric acid monododecyl ester, sodium salt (sodium lauryl sulfate)	151-21-3	When ready for use, the end-use concentration is not to exceed 350 ppm

(c) The following chemical substances when used as ingredients in an antimicrobial pesticide formulation may be applied to: Food-processing equipment and utensils.

Pesticide Chemical	CAS Reg. No.	Limits
Acetic acid	64-19-7	When ready for use, the end-use concentration is not to exceed 1,200 ppm
Acetic acid, chloro-, sodium salt, reaction products with 4,5-dihydro-2-undecyl-1H-imidazole-1-ethanol and sodium hydroxide	68608-66-2	When ready for use, the end-use concentration is not to exceed 42 ppm chloroacetic acid
Ammonium chloride	12125-02-9	When ready for use, the end-use concentration is not to exceed 48 ppm
[1,1'-Biphenyl]-2-ol	90-43-7	When ready for use, the end-use concentration is not to exceed 400 ppm
Boric acid, sodium salt	7775-19-1	None
Butanedioic acid, octenyl-	28805-58-5	When ready for use, the end-use concentration is not to exceed 156 ppm
Butanedioic acid, sulfo-, 1,4-dioctyl ester, sodium salt	1639-66-3	None
Butoxy monoether of mixed (ethylene-propylene) polyalkylene glycol, cloudpoint of 90 - 100°C in 0.5 aqueous solution, average molecular weight (in amu), 3300	None	None
Butoxy monoether of mixed (ethylene-propylene) polyalkylene glycol, minimum average molecular weight (in amu), 2400	None	None
Calcium chloride	10043-52-4	When ready for use, the end-use concentration is not to exceed 17 ppm
n-Carboxylic acids (C <sub>6</sub> -C <sub>12</sub> ), consisting of a mixture of not less than 56% octanoic acid and not less than 40% decanoic acid	None	When ready for use, the end-use concentration is not to exceed 39 ppm
3-Cyclohexene-1-methanol,α,α,4-trimethyl-	98-55-5	None
1-Decanaminiium, N-decyl-N, N-dimethyl-, chloride	7173-51-5	When ready for use, the end-use concentration is not to exceed 200 ppm of active quaternary compound
Decanoic acid	3347-48-5	When ready for use, the end-use concentration is not to exceed 234 ppm
Ethanesulfonic acid, 2-[cyclohexyl (1-oxohexadecyl) amino]-, sodium salt	132-43-4	When ready for use, the end-use concentration is not to exceed 237 ppm
Ethanol	64-17-5	None
Ethanol, 2 butoxy-	111-76-2	None
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	None
Ethylenediaminetetraacetic acid (EDTA), disodium salt	139-33-3	When ready for use, the end-use concentration is not to exceed 1400 ppm
Ethylenediaminetetraacetic acid (EDTA), tetrasodium salt	64-02-8	None
Fatty acids, coco, potassium salts	61789-30-8	None
Fatty acids, tall-oil, sulfonated, sodium salts	68309-27-3	When ready for use, the end-use concentration is not to exceed 66 ppm
FD&C Yellow No. 5 (Tartrazine) (conforming to 21 CFR 74.705)	1934-21-0	None
D-Gluconic acid, monosodium salt	527-07-1	When ready for use, the end-use concentration is not to exceed 760 ppm
Hydriodic acid	10034-85-2	When ready for use, the total end-use concentration of all iodide-producing chemicals in the solution is not to exceed 25 ppm of titratable iodine
Hydrogen peroxide	7722-84-1	When ready for use, the end-use concentration is not to exceed 1100 ppm
Hypochlorous acid	7790-92-3	When ready for use, the end-use concentration of all hypochlorous acid chemicals in the solution is not to exceed 200 ppm determined as total available chlorine
Hypochlorous acid, calcium salt	7778-54-3	When ready for use, the end-use concentration of all hypochlorous acid chemicals in the solution is not to exceed 200 ppm determined as total available chlorine
Hypochlorous acid, lithium salt	13840-33-0	When ready for use, the end-use concentration of all hypochlorous acid chemicals in the solution is not to exceed 200 ppm determined as total available chlorine and 30 ppm lithium
Hypochlorous acid, potassium salt	7778-66-7	When ready for use, the end-use concentration of all hypochlorous acid chemicals in the solution is not to exceed 200 ppm determined as total available chlorine
Hypochlorous acid, sodium salt	7681-52-9	When ready for use, the end-use concentration of all hypochlorous acid chemicals in the solution is not to exceed 200 ppm determined as total available chlorine
Iodine	7553-56-2	When ready for use, the total end-use concentration of all iodide-producing chemicals in the solution is not to exceed 25 ppm of titratable iodine
Magnesium oxide	1309-48-4	None
Methylene blue	61-73-4	When ready for use, the end-use concentration is not to exceed 0.4 ppm
Neodecanoic acid	26896-20-8	When ready for use, the end-use concentration is not to exceed 174 ppm
Nonanoic acid	112-05-0	When ready for use, the end-use concentration is not to exceed 90 ppm



$\alpha$ -(p-Nonylphenyl)- $\omega$ -hydroxypoly (oxyethylene) maximum average molecular weight (in amu), 748	None	None
$\alpha$ -(p-Nonylphenol)- $\omega$ -hydroxypoly (oxyethylene) average poly(oxyethylene) content 11 moles	None	None
$\alpha$ -(p-Nonylphenyl)- $\omega$ -hydroxypoly (oxyethylene) produced by the condensation of 1 mole p-nonylphenol with 9 to 12 moles ethylene oxide	None	None
$\alpha$ -(p-Nonylphenyl)- $\omega$ -hydroxypoly (oxyethylene), 9 to 13 moles ethylene oxide	None	None
Octadecanoic acid, calcium salt	1592-23-0	None
9-Octadecenoic acid (9Z)-, sulfonated	68988-76-1	When ready for use, the end-use concentration is not to exceed 312 ppm
9-Octadecenoic acid (9Z)-sulfonated, sodium salts	68443-05-0	When ready for use, the end-use concentration is not to exceed 200 ppm
1-Octanamine, N,N-dimethyl-	7378-99-6	When ready for use, the end-use concentration is not to exceed 113 ppm
1,2-Octanedisulfonic acid	113669-58-2	When ready for use, the end-use concentration is not to exceed 102 ppm
1-Octanesulfonic acid	3944-72-7	When ready for use, the end-use concentration is not to exceed 172 ppm
1-Octanesulfonic acid, sodium salt	5324-84-5	When ready for use, the end-use concentration is not to exceed 312 ppm
1-Octanesulfonic acid, 2-sulfino-	113652-56-5	When ready for use, the end-use concentration is not to exceed 102 ppm
Octanoic acid	124-07-2	When ready for use, the end-use concentration is not to exceed 234 ppm
Oxirane, methyl-, polymer with oxirane, minimum molecular weight (in amu), 1900	9003-11-6	None
Oxirane, methyl-, polymer with oxirane, block, average molecular weight (in amu), 1900	106392-12-5	None
Oxirane, methyl-, polymer with oxirane, block, minimum average molecular weight (in amu), 2000	None	None
Oxirane, methyl-, polymer with oxirane, block, 27 to 31 moles of polyoxypropylene, average molecular weight (in amu) 2000	None	None
Oxychloro species (predominantly chlorite, chlorate and chlorine dioxide in an equilibrium mixture) generated either (i) by directly metering a concentrated chlorine dioxide solution prepared just prior to use, into potable water, or (ii) by acidification of an aqueous alkaline solution of oxychloro species (predominately chlorite and chlorate) followed by dilution with potable water	None	When ready for use, the end-use concentration is not to exceed 200 ppm of chlorine dioxide as determined by the method titled, "Iodometric Method for the Determination of Available Chlorine Dioxide (50-250 ppm available chlorine dioxide)"
Oxychloro species (including chlorine dioxide) generated by acidification of an aqueous solution of sodium chlorite	None	When ready for use, the end-use concentration is not to exceed 200 ppm of chlorine dioxide as determined by the method titled, "Iodometric Method for the Determination of Available Chlorine Dioxide (50-250 ppm available chlorine dioxide)"
2,4-Pentanediol, 2-methyl-	107-41-5	None
Peroxyacetic acid	79-21-0	When ready for use, the end-use concentration is not to exceed 315 ppm
Peroxyoctanoic acid	33734-57-5	When ready for use, the end-use concentration is not to exceed 122 ppm
Phenol, 4-chloro-2-(phenylmethyl)-	120-32-1	When ready for use, the end-use concentration is not to exceed 320 ppm
Phenol, 4-(1,1-dimethylpropyl)-	80-46-6	When ready for use, the end-use concentration is not to exceed 80 ppm
Phosphonic acid, (1-hydroxyethylidene)bis-	2809-21-4	When ready for use, the end-use concentration is not to exceed 34 ppm
Phosphoric acid	7664-38-2	None
Phosphoric acid, monosodium salt	7558-80-7	When ready for use, the end-use concentration is not to exceed 350 ppm
Phosphoric acid, trisodium salt	7601-54-9	When ready for use, the end-use concentration is not to exceed 5916 ppm
Poly(oxy-1,2-ethanediyl), $\alpha$ -[(1,1,3,3-tetramethylbutyl) phenyl]- $\omega$ -hydroxy-, produced with one mole of the phenol and 4 to 14 moles ethylene oxide	None	None
Potassium bromide	7758-02-3	When ready for use, the end-use concentration of all bromide-producing chemicals in the solution is not to exceed 200 ppm total available halogen
Potassium iodide	7681-11-0	When ready for use, the total end-use concentration of all iodide-producing chemicals in the solution is not to exceed 25 ppm of titratable iodine
Propanoic acid	79-09-4	When ready for use, the end-use concentration is not to exceed 297 ppm
2,6-Pyridinedicarboxylic acid	499-83-2	When ready for use, the end-use concentration is not to exceed 1.2 ppm
Quaternary ammonium compounds, alkyl (C <sub>12</sub> -C <sub>18</sub> ) benzyl dimethyl, chlorides	8001-54-5	When ready for use, the end-use concentration of this specific quaternary compound is not to exceed 200 ppm within the end-use total concentration that is not to exceed 400 ppm active quaternary compound
Quaternary ammonium compounds, n-alkyl (C <sub>12</sub> -C <sub>14</sub> ) dimethyl ethylbenzyl ammonium chloride, average molecular weight (in amu), 377 to 384	None	When ready for use, the end-use concentration of this specific quaternary compound is not to exceed 200 ppm within the end-use total concentration that is not to exceed 400 ppm active quaternary compound
Quaternary ammonium compounds, n-alkyl (C <sub>12</sub> -C <sub>18</sub> ) dimethyl ethylbenzyl ammonium chloride	None	When ready for use, the end-use concentration of this

average molecular weight (in amu) 384		specific quaternary compound is not to exceed 200 ppm within the end-use total concentration that is not to exceed 400 ppm active quaternary compound
Quaternary ammonium compounds, di-n-Alkyl (C <sub>8</sub> -C <sub>10</sub> ) dimethyl ammonium chloride, average molecular weight (in amu), 332 to 361	None	When ready for use, the end-use concentration of this specific quaternary compound is not to exceed 240 ppm within the end-use total concentration that is not to exceed 400 ppm active quaternary compound
Sodium- $\alpha$ -alkyl(C <sub>12</sub> -C <sub>15</sub> )- $\omega$ -hydroxypoly (oxyethylene) sulfate with the poly(oxyethylene) content averaging one mole	None	None
Sodium bromide	7647-15-6	When ready for use, the end-use concentration of all bromide-producing chemicals in the solution is not to exceed 200 ppm total available halogen
Sodium iodide	7681-82-5	When ready for use, the total end-use concentration of all iodide-producing chemicals in the solution is not to exceed 25 ppm of titratable iodine
Sulfuric acid monododecyl ester, sodium salt (sodium lauryl sulfate)	151-21-3	None
1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-	2782-57-2	When ready for use, the end-use concentration of all di- or trichloroisocyanuric acid chemicals in the solution is not to exceed 100 ppm determined as total available chlorine
1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, potassium salt	2244-21-5	When ready for use, the end-use concentration of all di- or trichloroisocyanuric acid chemicals in the solution is not to exceed 100 ppm determined as total available chlorine
1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt	2893-78-9	When ready for use, the end-use concentration of all di- or trichloroisocyanuric acid chemicals in the solution is not to exceed 100 ppm determined as total available chlorine
1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-trichloro-	87-90-1	When ready for use, the end-use concentration of all di- or trichloroisocyanuric acid chemicals in the solution is not to exceed 100 ppm determined as total available chlorine
1,3,5-Triazine, N,N',N"-trichloro-2,4,6-triamino-	7673-09-8	When ready for use, the end-use concentration of all di- or trichloroisocyanuric acid chemicals in the solution is not to exceed 200 ppm determined as total available chlorine

[69 FR 23136, Apr. 28, 2004]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.940, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.950 Tolerance exemptions for minimal risk active and inert ingredients.

Unless specifically excluded, residues resulting from the use of the following substances as either an inert or an active ingredient in a pesticide chemical formulation, including antimicrobial pesticide chemicals, are exempted from the requirement of a tolerance under FFDC section 408, if such use is in accordance with good agricultural or manufacturing practices.

(a) *Commonly consumed food commodities.* Commonly consumed food commodities means foods that are commonly consumed for their nutrient properties. The term commonly consumed food commodities shall only apply to food commodities (whether a raw agricultural commodity or a processed commodity) in the form the commodity is sold or distributed to the public for consumption.

(1) Included within the term commonly consumed food commodities are:

- (i) Sugars such as sucrose, lactose, dextrose and fructose, and invert sugar and syrup.
- (ii) Spices such as cinnamon, cloves, and red pepper.
- (iii) Herbs such as basil, anise, or fenugreek.

(2) Excluded from the term commonly consumed food commodities are:

- (i) Any food commodity that is adulterated under 21 U.S.C. 342.
- (ii) Both the raw and processed forms of peanuts, tree nuts, milk, soybeans, eggs, fish, crustacea, and wheat.
- (iii) Alcoholic beverages.
- (iv) Dietary supplements.

(b) *Animal feed items.* Animal feed items means meat meal and all items derived from field crops that are fed to livestock excluding both the raw and processed forms of peanuts, tree nuts, milk, soybeans, eggs, fish, crustacea, and wheat. Meat meal is an animal feed composed of dried animal fat and protein that has been sterilized. Other than meat meal, the term animal feed item does not extend to any item designed to be fed to animals that contains, to any extent, components of animals. Included within the term animal feed items are:

- (1) The hulls and shells of the commodities specified in paragraph (a)(2)(ii) of this section, and cocoa bean.
- (2) Bird feed such as canary seed.
- (3) Any feed component of a medicated feed meeting the definition of an animal feed item.

(c) *Edible fats and oils.* Edible fats and oils means all edible (food or feed) fats and oils, derived from either plants or animals, whether or not commonly consumed, including products derived from hydrogenating (food or feed) oils, or liquefying (food or feed) fats.

(1) Included within the term edible fats and oils are oils (such as soybean oil) that are derived from the commodities specified in paragraph (a)(2)(ii) of this section when such oils are highly refined via a solvent extraction procedure.

(2) Excluded from the term edible fats and oils are plant oils used in the pesticide chemical formulation specifically to impart their characteristic fragrance and/or flavoring.

(d) [Reserved]

(e) *Specific chemical substances.* Residues resulting from the use of the following substances as either an inert or an active ingredient in a pesticide chemical formulation, including antimicrobial pesticide chemicals, are exempted from the requirement of a tolerance under FDCA section 408, if such use is in accordance with good agricultural or manufacturing practices.

Chemical	CAS No.
Acetic acid, sodium salt	127-09-3
Alpha-cyclodextrin	10016-20-3
Amylopectin, acid-hydrolyzed, 1-octenylbutanedioate	113894-85-2
Amylopectin, hydrogen 1-octadecenylbutanedioate	125109-81-1
Animal glue	None
Ascorbic acid (vitamin C)	50-81-7
Beeswax	8012-89-3
Benzoic acid, sodium salt	532-32-1
Beta-cyclodextrin	7585-39-9
Carbonic acid, monopotassium salt	298-14-6
Carbonic acid, monosodium salt (sodium bicarbonate)	144-55-8
Carnauba wax	8015-86-9
Carob gum (locust bean gum)	9000-40-2
Castor oil	8001-79-4
Castor oil, hydrogenated	8001-78-3
Cellulose	9004-34-6
Cellulose acetate	9004-35-7
Cellulose, carboxy methyl ether, sodium salt	9004-32-4
Cellulose, 2-hydroxyethyl ether	9004-62-0
Cellulose, 2-hydroxypropyl ether	9004-64-2
Cellulose, 2-hydroxypropyl methyl ether	9004-65-3
Cellulose, methyl ether	9004-67-5
Cellulose, mixture with cellulose carboxymethyl ether, sodium salt	51395-75-6
Cellulose, pulp	65996-61-4
Cellulose, regenerated	68442-85-3
Citric acid	77-92-9
Citric acid, 2-(acetyloxy)-, tributyl ester	77-90-7
Citric acid, calcium salt	7693-13-2
Citric acid, calcium salt (2:3)	813-94-5
Citric acid, dipotassium salt	3609-96-9
Citric acid, disodium salt	144-33-2
Citric acid, monohydrate	5949-29-1
Citric acid, monopotassium salt	866-83-1
Citric acid, monosodium salt	18996-35-5
Citric acid, potassium salt	7778-49-6
Citric acid, triethyl ester	77-93-0
Citric acid, tripotassium salt	866-84-2
Citric acid, tripotassium salt, monohydrate	6100-05-6
Citric acid, sodium salt	994-36-5
Citric acid, trisodium salt	68-04-2

Citric acid, trisodium salt, dihydrate	6132-04-3
Citric acid, trisodium salt, pentahydrate	6858-44-2
Coffee grounds	68916-18-7
Dextrins	9004-53-9
1,3-Dioxolan-2-one, 4-methyl-(propylene carbonate)	108-32-7
Fumaric acid	110-17-8
Gamma-cyclodextrin	17465-86-0
Gellan gum	71010-52-1
D-Glucitol (sorbitol)	50-70-4
Glycerol (glycerin) (1,2,3-propanetriol)	56-81-5
Guar gum	9000-30-0
Humic acid	1413-93-6
Humic acid, potassium salt	68514-28-3
Humic acid, sodium salt	68131-04-4
Lactic acid, n-butyl ester	138-22-7
Lactic acid, n-butyl ester, (S)	34451-19-9
Lactic acid, ethyl ester	97-64-3
Lactic acid, ethyl ester,(S)	687-47-8
Lanolin	8006-54-0
Lecithins	8002-43-5
Lecithins, soya	8030-76-0
Licorice Extract	68916-91-6
Maltodextrin	9050-36-6
Paper	None
Potassium chloride	7447-40-7
2-Propanol (isopropyl alcohol)	67-63-0
Red cabbage color, expressed from edible red cabbage heads via a pressing process using only acidified water	None
Silica, amorphous, fumed (crystalline free)	112945-52-5
Silica, amorphous, precipitated and gel	7699-41-4
Silica gel	63231-67-4
Silica gel, precipitated, crystalline-free	112926-00-8
Silica, hydrate	10279-57-9
Silica, vitreous	60676-86-0
Soap (The water soluble sodium or potassium salts of fatty acids produced by either the saponification of fats and oils, or the neutralization of fatty acid)	None
Sorbic acid, potassium salt	24634-61-5
Soapbark (Quillaja saponin)	1393-03-9
Sodium alginate	9005-38-3
Sodium chloride	7647-14-5
Syrups, hydrolyzed starch, hydrogenated	68425-17-2
Ultramarine blue (C.I. Pigment Blue 29)	57455-37-5
Urea	57-13-6
Vanillin	121-33-5
Xanthan gum	11138-66-2

[67 FR 36537, May 24, 2002]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.960, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

### §180.960 Polymers; exemptions from the requirement of a tolerance.

Residues resulting from the use of the following substances, that meet the definition of a polymer and the criteria specified for defining a low-risk polymer in 40 CFR 723.250, as an inert ingredient in a pesticide chemical formulation, including antimicrobial pesticide chemical formulations, are exempted from the requirement of a tolerance under FFDCA section 408, if such use is in accordance with good agricultural or manufacturing practices.

Polymer	CAS No.
Acetic acid ethenyl ester, polymer with ethane, ethenyltriethoxysilane and sodium ethenesulfonate (1:1); minimum number average molecular weight (in amu), 16,200	913187-38-9
Acetic acid ethenyl ester, polymer with ethene and ethenol, minimum number average molecular weight (in amu), 20,000	26221-27-2
Acetic acid ethenyl ester, polymer with ethenol and (α)-2-propenyl-(ω)-hydroxypoly (oxy-1,2-ethanedyl) minimum number average molecular weight (in amu), 15,000	137091-12-4
Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone	25086-89-9
Acetic acid ethenyl ester, polymer with oxirane, minimum number average molecular weight (in	25820-49-9

amu), 17,000	
Acetic acid ethenyl ester, polymer with sodium 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonate (1:1), hydrolyzed, minimum number average molecular weight (in amu), 61,000	924892-37-5
Acrylamide-Sodium Acrylamidomethylpropanesulfonate Copolymer, minimum number average molecular weight (amu), 1,000,000 daltons.	38193-60-1
Acrylic acid-benzyl methacrylate-1-propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, minimum number average molecular weight (in amu), 1500	1152297-42-1
Acrylic acid-butyl acrylate-styrene copolymer, minimum number average molecular weight (in amu), 5,200	25586-20-3
Acrylic acid, polymerized, and its ethyl and methyl esters	None
Acrylic acid-sodium acrylate-sodium-2-methylpropanesulfonate copolymer, minimum average molecular weight (in amu), 4,500	97953-25-8
Acrylic acid-stearyl methacrylate copolymer, minimum number average molecular weight (in amu), 2,500	27756-15-6
Acrylic acid, styrene, $\alpha$ -methyl styrene copolymer, ammonium salt, minimum number average molecular weight (in amu), 1,250	89678-90-0
Acrylic acid terpolymer, partial sodium salt, minimum number average molecular weight (in amu), 2,400	151006-66-5
Acrylic polymers composed of one or more of the following monomers: Acrylic acid, butyl acrylate, butyl methacrylate, carboxyethyl acrylate, ethyl acrylate, ethyl methacrylate, hydroxybutyl acrylate, hydroxybutyl methacrylate, hydroxyethyl acrylate, hydroxyethyl methacrylate, hydroxypropyl acrylate, hydroxypropyl methacrylate, isobutyl methacrylate, lauryl methacrylate, methacrylic acid, methyl acrylate, lauryl acrylate, methyl methacrylate and stearyl methacrylate; with none and/or one or more of the following monomers: Acrylamide, diethyl maleate, dioctyl maleate, maleic acid, maleic anhydride, monoethyl maleate, monoethyl maleate, N-methyl acrylamide, N,N-dimethyl acrylamide, N-octylacrylamide, and acrylamidopropyl methyl sulfonic acid; and their corresponding ammonium, isopropylamine, monoethanolamine, potassium, sodium triethylamine, and/or triethanolamine salts; the resulting polymer having a minimum number average molecular weight (in amu), 1,200	None
Acrylonitrile-butadiene copolymer conforming to 21 CFR 180.22, minimum average molecular weight (in amu), 1,000	9003-18-3
Acrylonitrile-styrene-hydroxypropyl methacrylate copolymer, minimum number average molecular weight (in amu), 447,000	None
> $\alpha$ -Alkyl- $\omega$ -hydroxypoly (oxypropylene) and/or poly (oxyethylene) polymers where the alkyl chain contains a minimum of six carbons and a minimum number average molecular weight (in amu) 1,100	9002-92-0; 9004-95-9; 9004-98-2; 9005-00-9; 9035-85-2; 9038-29-3; 9038-43-1; 9040-05-5; 9043-30-5; 9087-53-0; 25190-05-0; 24938-91-8; 25231-21-4; 251553-55-6; 26183-52-8; 26468-86-0; 26636-39-5; 27252-75-1; 27306-79-2; 31726-34-8; 34398-01-1; 34398-05-5; 37251-67-5; 37311-00-5; 37311-01-6; 37311-02-7; 37311-04-9; 39587-22-9; 50861-66-0; 52232-09-4; 52292-17-8; 52609-19-5; 57679-21-7; 59112-62-8; 60828-78-6; 61702-78-1; 61723-78-2; 61725-89-1; 61791-13-7; 61791-20-6; 61791-28-4; 61804-34-0; 61827-42-7; 61827-84-7; 62648-50-4; 63303-01-5; 63658-45-7; 63793-60-2; 64366-70-7; 64415-24-3; 64415-25-4; 64425-86-1; 65104-72-5; 65150-81-4; 66455-14-9; 66455-15-0; 67254-71-1; 67763-08-0; 68002-96-0; 68002-97-1; 68131-39-5; 68131-40-8; 68154-96-1; 68154-97-2; 68154-98-3; 68155-01-1; 68213-23-0; 68213-24-1; 68238-81-3; 68238-82-4; 68409-58-5; 68409-59-6; 68439-30-5; 68439-45-2; 68439-46-3; 68439-48-5; 68439-49-6; 68439-50-9; 68439-51-0; 68439-53-2; 68439-54-3; 68458-88-8; 68526-94-3; 68526-95-4; 68551-12-2; 68551-13-3; 68551-14-4; 68603-20-3; 68603-25-8; 68920-66-1; 68920-69-4; 68937-66-6; 68951-67-7; 68954-94-9; 68987-81-5; 68991-48-0; 69011-36-5; 69013-18-9; 69013-19-0; 69227-20-9; 69227-21-0; 69227-22-1; 69364-63-2; 70750-27-5; 70879-83-3; 70955-07-6; 71011-10-4; 71060-57-6; 71243-46-4; 72066-65-0; 72108-90-8; 72484-69-6; 72854-13-8; 72905-87-4; 73018-31-2; 73049-34-0; 74432-13-6; 74499-34-6; 78330-19-5; 78330-20-8; 78330-21-9; 78330-23-1; 79771-03-2; 84133-50-6; 85422-93-1; 97043-91-9; 97953-22-5; 102782-43-4; 103331-86-8; 103657-84-7; 103657-85-8; 103818-93-5; 103819-03-0; 106232-83-1; 111905-54-5; 116810-31-2; 116810-32-3; 116810-33-4; 120313-48-6; 120944-68-5; 121617-09-2; 126646-02-4; 126950-62-7; 127036-24-2; 139626-71-4; 152231-44-2; 154518-36-2; 157627-86-6; 157627-88-8; 157707-41-0; 157707-43-2; 159653-49-3; 160875-66-1; 160901-20-2; 160901-09-7; 160901-19-9; 161025-21-4; 161025-22-5; 166736-08-9; 169107-21-5; 172588-43-1; 176022-76-7; 196823-11-7; 287935-46-0; 288260-45-7; 303176-75-2; 954108-36-2; 2222805-23-2
Amines, coco alkyl, ethoxylated, compounds with acrylic acid-Bu acrylate-methylstyrene-styrene	1186094-73-4

polymer, ammonium salts; minimum number average molecular weight (in amu), 2700	
2H-Azepin-2-one, 1-ethenylhexahydro-, homopolymer	25189-83-7
1,3 Benzene dicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester, sodium salt, polymer with 1,3-benzene dicarboxylic acid, 1,4-benzene dicarboxylic acid, dimethyl 1,4-benzene dicarboxylate and 1,2-ethanediol, minimum number average molecular weight (in amu), 2,580	212842-88-1
3,5-Bis(6-isocyanatohexyl)-2H-1,3,5-oxadiazine-2,4,6-(3H,5H)-trione, polymer with diethylenetriamine, minimum number average molecular weight (in amu), 1,000,000	87823-33-4
Polymer of one or more diglycidyl ethers of bisphenol A, resorcinol, glycerol, cyclohexanedimethanol, neopentyl glycol, and polyethylene glycol with one or more of the following: Polyoxypropylene diamine, polyoxypropylene triamine, N-aminoethyl-piperazine, trimethyl-1,6-hexanediamine isophorone diamine, N,N-dimethyl-1,3-diaminopropane, nadic methyl anhydride, 1,2-cyclohexane-dicarboxylic anhydride and 1,2,3,6-tetrahydrophthalic anhydride, minimum number average molecular weight (in amu), 400,000	None
Butadiene-styrene copolymer	None
Butanedioic acid, 2-methylene-, homopolymer, sodium salt, minimum number average molecular weight (in amu), 3936	26099-89-8
Butanedioic acid, 2-methylene-, polymer with 1,3-butadiene, ethenylbenzene and 2-hydroxyethyl 2-propenoate, minimum number average molecular weight (in amu), 10,000	36089-06-2
Butanedioic acid, 2-methylene-, polymer with 2,5-furandione, sodium and ammonium salts, hydrogen peroxide-initiated, minimum number average molecular weight (in amu), 2,500-3,000	556055-76-6 701908-99-8
Butanedioic acid, 2-methylene-, telomer with sodium phosphinate (1:1), acidified, potassium salt minimum number average molecular weight (in amu), 3800	1663489-14-2
1,4-Butanediol-methylenebis(4-phenylisocyanate)-poly(tetramethylene glycol) copolymer, minimum molecular weight (in amu) 158,000	9018-04-6
Butene, homopolymer	9003-29-6
2-butenedioic acid (2Z)-, monobutyl ester, polymer with methoxyethene, sodium salt, minimum number average molecular weight (in amu), 18,200	205193-99-3
2-Butenedioic acid (Z)-, polymer with ethenol and ethenyl acetate, sodium salt, minimum number average molecular weight (in amu), 75,000	139871-83-3
Butyl acrylate-vinyl acetate-acrylic acid copolymer, minimum number average molecular weight (in amu), 18,000	65405-40-5
Carbonic acid, diethyl ester, polymer with $\alpha$ -hydro- $\omega$ -hydroxypoly[oxy(methyl-1,2-ethanediyl)] ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), ester with $\alpha$ -[[[5-(carboxyamino)-1,3,3-trimethylcyclohexyl]methyl]amino]carbonyl]- $\omega$ -methoxypoly(oxy-1,2-ethanediyl), minimum number average molecular weight (in amu), 1,900	1147260-65-8
Castor oil, ethoxylated, dioleate, minimum number average molecular weight (in amu), 1260.	110531-96-9
Castor oil, ethoxylated, oleate, minimum number average molecular weight (in amu), 1,600	220037-02-5
Castor oil, polymer with adipic acid, linoleic acid, oleic acid and ricinoleic acid, minimum number average molecular weight (in amu), 3,500	1357486-09-9
Castor oil, polyoxyethylated; the poly(oxyethylene) content averages 5-54 moles	None
Cellulose carboxymethyl ether, potassium salt, minimum number average molecular weight 9587 Daltons	54848-04-3
Chlorinated polyethylene	64754-90-1
Cross-linked nylon-type polymer formed by the reaction of a mixture of sebacoyl chloride and	None

polymethylene polyphenylisocyanate with a mixture of ethylenediamine and diethylenetriamine	
Cross-linked polyurea-type encapsulating polymer	None
D-Glucitol, polymer with decanedioic acid, docosanoate, minimum number average molecular weight (in amu) 1,100	943440-33-3
D-Glucitol, polymer with decanedioic acid, docosanoate, minimum number average molecular weight (in amu) 1,100	1681043-28-6
D-Glucitol, polymer with decanedioic acid, octadecanoate, minimum number average molecular weight (in amu) 1,100	68562-93-6
D-Glucitol, polymer with decanedioic acid and 1,3-propanediol, minimum number average molecular weight (in amu) 1,100	1681043-31-1
D-Glucitol, polymer with decanedioic acid and 1,3-propanediol, octadecanoate, minimum number average molecular weight (in amu) 1,100	1681043-33-3
Dimethylpolysiloxane minimum number average molecular weight (in amu), 6,800	63148-62-9
Dimethyl silicone polymer with silica, minimum number average molecular weight (in amu), 1,100,000	67762-90-7
$\alpha$ -(o,p-Dinonylphenyl)- $\omega$ -hydroxypoly(oxyethylene) produced by condensation of 1 mole of dinonylphenol (nonyl group is a propylene trimer isomer) with an average of 140-160 moles of ethylene oxide	9014-93-1
Docosyl methacrylate-acrylic acid copolymer, or docosyl methacrylate-octadecyl methacrylate-acrylic acid copolymer, minimum number average molecular weight (in amu), 3,000	None
1,12-Dodecanediol dimethacrylate polymer, minimum molecular weight (in amu), 100,000	None
$\alpha$ -(p-Dodecylphenyl)- $\omega$ -hydroxypoly(oxyethylene) produced by the condensation of 1 mole of dodecylphenol (dodecyl group is a propylene tetramer isomer) with an average of 30-70 moles of ethylene oxide	9014-92-0 26401-47-8
1,2-Ethanediamine, N1-(2-aminoethyl)-, polymer with 2,4-diisocyanato-1-methylbenzene, minimum number average molecular weight (in amu), one million	35297-61-1
1, 2-Ethanediamine, polymer with methyl oxirane and oxirane, minimum number average molecular weight (in amu), 1,100	26316-40-5
Ethylene glycol dimethacrylate-lauryl methacrylate copolymer, minimum molecular weight (in amu), 100,000	None
Ethylene glycol dimethacrylate polymer, minimum molecular weight (in amu), 100,000	None
Fatty acids, montan-wax, ethoxylated, minimum number average molecular weight (in amu), 1800	68476-04-0
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with docosanoic acid and sorbitol, minimum number average molecular weight (in amu) 1,100	1685270-83-0
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with docosenoic acid and sorbitol, minimum number average molecular weight (in amu) 1,100	1685271-02-6
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with docosenoic acid, 1,3-propanediol and sorbitol, minimum number average molecular weight (in amu) 1,100	1685271-04-8
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with docosanoic acid, 1,3-propanediol and stearic acid, minimum number average molecular weight (in amu) 1,100	1685270-84-1
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with 1,3-propanediol, sorbitol and stearic acid	1685271-01-5
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with sorbitol and stearic acid, minimum number average molecular weight (in amu) 1,100	1685270-99-8
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with ethylenediamine and stearyl alcohol, minimum number average molecular weight (in amu) 1,400	363162-42-9
Fatty acids, C <sub>18</sub> -unsatd., dimers, hydrogenated, polymers with ethylenediamine, neopentyl glycol and stearyl alcohol, minimum number average molecular weight (in amu) 1,400	678991-29-2

Fatty acids, C <sub>18</sub> -unsatd., dimers, hydrogenated, polymers with ethylenediamine and stearyl alcohol, minimum number average molecular weight (in amu) 1,400	951153-32-5
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with 1-docosanol and ethylenediamine, minimum number average molecular weight (in amu) 1,400	1699751-19-3
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with cetyl alcohol, neopentyl glycol and trimethylenediamine, minimum number average molecular weight (in amu) 1,400	1699751-23-9
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with hexamethylenediamine and stearyl alcohol, minimum number average molecular weight (in amu) 1,400	1699751-24-0
Fatty acids, C <sub>18</sub> -unsatd., dimers, hydrogenated, polymers with cetyl alcohol and ethylenediamine, minimum number average molecular weight (in amu) 1,400	1699751-25-1
Fatty acids, C <sub>18</sub> -unsatd., dimers, hydrogenated, polymers with neopentyl glycol, stearyl alcohol and trimethylenediamine, minimum number average molecular weight (in amu) 1,400	1699751-28-4
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with 1-docosanol and trimethylenediamine, minimum number average molecular weight (in amu) 1,400	1699751-29-5
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with 1-docosanol, hexamethylenediamine and neopentyl glycol, minimum number average molecular weight (in amu) 1,400	1699751-31-9
Fatty acids, C <sub>18</sub> -unsatd., dimers, polymers with docosanoic acid, 1,3-propanediol and sorbitol, minimum number average molecular weight (in amu) 1,400	1685271-04-8
Fatty acids, rape-oil, triesters with polyethylene glycol ether with glycerol (3:1); minimum number average molecular weight (in amu), 1800	688045-21-8
Fatty acids, tall-oil, ethoxylated propoxylated, minimum number average molecular weight (in amu), 2,009	67784-86-5
Formaldehyde, polymer with $\alpha$ -[bis(1-phenylethyl)phenyl]- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl), number average molecular weight (in amu), 1,803	157291-93-5
Formaldehyde, polymer with 1,3-benzenediol, ethers with polyethylene glycol mono-Me ether, minimum number average molecular weight (in amu) 1,000,000	1998118-32-3
Formaldehyde, polymer with 1,3-benzenediol, 2-methyloxirane and oxirane, ethers with polyethylene glycol mono-Me ether, minimum number average molecular weight (in amu) 1,000,000	1998118-31-2
Formaldehyde, polymer with 2-methyloxirane and 4-nonylphenol, minimum number average molecular weight (in amu), 4,000	37523-33-4
Formaldehyde, reaction products with melamine, minimum number average molecular weight (in amu), 10000	94645-56-4
Formaldehyde, reaction products with melamine and methanol, minimum number average molecular weight (in amu), 10000	94645-53-1
Fumaric acid-isophthalic acid-styrene-ethylene/propylene glycol copolymer, minimum average molecular weight (in amu), $1 \times 10^{18}$	None
2,5-Furandione, polymer with ethenylbenzene, hydrolyzed, 3-(dimethylamino)propyl imide, imide with polyethylene-polypropylene glycol 2-aminopropyl me ether, 2,2'-(1,2-diazenediyl)bis[2-methylbutanenitrile]-initiated, minimum number average molecular weight (in amu), 5,816	1062609-13-5
2,5-Furandione, polymer with ethenylbenzene, reaction products with polyethylene-polypropylene glycol 2-aminopropyl Me ether; minimum number average molecular weight (in amu), 14,000	162568-32-3
2,5-Furandione, polymer with methoxyethene, butyl ethyl ester, sodium salt, minimum number average molecular weight (in amu), 18,200	1471342-08-1
Hexadecyl acrylate-acrylic acid copolymer, hexadecyl acrylate-butyl acrylate-acrylic acid	None



copolymer, or hexadecyl acrylate-dodecyl acrylate-acrylic acid copolymer, minimum number average molecular weight (in amu), 3,000	
Hexamethyl disilazane, reaction product with silica, minimum number average molecular weight (in amu), 645,000	68909-20-6
1,6-Hexanediol dimethacrylate polymer, minimum molecular weight (in amu), 100,000	None
$\alpha$ -Hydro- $\omega$ -hydroxy-poly(oxyethylene) C8 alkyl ether citrates, poly(oxyethylene) content is 4-12 moles, minimum number average molecular weight (in amu) 1,300	330977-00-9
$\alpha$ -Hydro- $\omega$ -hydroxy-poly(oxyethylene) C10-C16-alkyl ether citrates, poly(oxyethylene) content is 4-12 moles, minimum number average molecular weight (in amu) 1,100	330985-58-5
$\alpha$ -Hydro- $\omega$ -hydroxy-poly(oxyethylene) C16-C18-alkyl ether citrates, poly(oxyethylene) content is 4-12 moles, minimum number average molecular weight (in amu) 1,300	330985-61-0
$\alpha$ -Hydro- $\omega$ -hydroxypoly(oxyethylene), minimum number average molecular weight (in amu), 17,000	25322-68-3
$\alpha$ -Hydro- $\omega$ -hydroxypoly(oxyethylene)poly(oxypropylene) poly(oxyethylene) block copolymer; the minimum poly(oxypropylene) content is 27 moles and the minimum molecular weight (in amu) is 1,900	None
$\alpha$ -Hydro- $\omega$ -hydroxypoly(oxypropylene); minimum molecular weight (in amu) 2,000	None
12-Hydroxystearic acid-polyethylene glycol copolymer, minimum number average molecular weight (in amu), 3,690	70142-34-6
Isodecyl alcohol ethoxylated (2-8 moles) polymer with chloromethyl oxirane, minimum number average molecular weight (in amu) 2,500	None
Lauryl methacrylate-1,6-hexanediol dimethacrylate copolymer, minimum molecular weight (in amu), 100,000	None
Lignosulfonic acid, calcium, comp. with 1,6 hexanediamine polymer with guanidine hydrochloride (1:1), minimum number average molecular weight (in amu); 4,500 daltons	1905409-74-6
Maleic acid-butadiene copolymer	None
Maleic acid monobutyl ester-vinyl methyl ether copolymer, minimum average molecular weight (in amu), 52,000	25119-68-0
Maleic acid monoethyl ester-vinyl methyl ether copolymer, minimum average molecular weight (in amu), 46,000	25087-06-3
Maleic acid monoisopropyl ester-vinyl methyl ether copolymer, minimum average molecular weight (in amu), 49,000	31307-95-6
Maleic anhydride-diisobutylene copolymer, sodium salt, minimum number average molecular weight (in amu) 5,0007-18,000	37199-81-8
Maleic anhydride-methylstyrene copolymer sodium salt, minimum number average molecular weight (in amu), 15,000	60092-15-1
Maleic anhydride-methyl vinyl ether, copolymer, average molecular weight (in amu), 250,000	None
Maltodextrin-vinyl pyrrolidinone copolymer, minimum number average molecular weight (in amu), 21,000	1323833-56-2
Methacrylic acid-methyl methacrylate-polyethylene glycol methyl ether methacrylate copolymer, minimum number average molecular weight (in amu), 3,700	100934-04-1
Methacrylic acid-methyl methacrylate-polyethylene glycol monomethyl ether methacrylate graft copolymer, minimum number average molecular weight (in amu), 1,800	111740-36-4
Methacrylic copolymer, minimum number average molecular weight (in amu), 15,000	63150-03-8
Methyl methacrylate-methacrylic acid-monomethoxypolyethylene glycol methacrylate copolymer, minimum number average molecular weight (in amu), 2,730	119724-54-8
Methyl methacrylate-2-sulfoethyl methacrylate-dimethylaminoethylmethacrylate-glycidyl methacrylate-styrene-2-ethylhexyl acrylate graft	None

copolymer, minimum average molecular weight (in amu), 9,600	
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt polymer with 2-propenoic acid, 2-methyl-, C12-16 alkyl esters, minimum number average molecular weight (in amu), 10,000	2115702-24-2
Methyl vinyl ether-maleic acid copolymer, minimum number average molecular weight (in amu), 75,000	25153-40-6
Methyl vinyl ether-maleic acid copolymer, calcium sodium salt, minimum number average molecular weight (in amu), 900,000	62386-95-2
Monophosphate ester of the block copolymer $\alpha$ -hydro- $\omega$ -hydroxypoly(oxyethylene) poly(oxypropylene) poly(oxyethylene); the poly(oxypropylene) content averages 37-41 moles, average molecular weight (in amu), 8,000	None
$\alpha$ -( <i>p</i> -Nonylphenyl)- $\omega$ -hydroxypoly(oxyethylene) mixture of dihydrogen phosphate and monohydrogen phosphate esters and the corresponding ammonium, calcium, magnesium, monoethanolamine, potassium, sodium, and zinc salts of the phosphate esters; the nonyl group is a propylene trimer isomer and the poly(oxyethylene) content averages 30 moles	None
$\alpha$ -( <i>p</i> -Nonylphenyl)- $\omega$ -hydroxypoly(oxyethylene) sulfate, and its ammonium, calcium, magnesium, monoethanolamine, potassium, sodium, and zinc salts; the nonyl group is a propylene trimer isomer and the poly(oxyethylene) content averages 30-90 moles of ethylene oxide	None
$\alpha$ -( <i>p</i> -Nonylphenyl)- $\omega$ -hydroxypoly(oxypropylene) block polymer with poly(oxyethylene); polyoxypropylene content of 10-60 moles; polyoxyethylene content of 10-80 moles; molecular weight (in amu), 1,200-7,100.	None
$\alpha$ -( <i>p</i> -Nonylphenyl)poly(oxypropylene) block polymer with poly(oxyethylene); poly oxyethylene content 30 to 90 moles; minimum number average molecular weight (in amu), 1,889	37251-69-7
Octadecanoic acid, 12-hydroxy-, homopolymer, ester with $\alpha$ , $\alpha'$ , $\alpha''$ -1,2,3-propanetriyltris( $\omega$ -hydroxypoly(oxy-1,2-ethanediyl)), minimum number average molecular weight (in amu), 5,000	1939051-18-9
Octadecanoic acid, 12-Hydroxy-, Homopolymer Ester with 2-Methylloxirane Polymer with Oxirane monobutyl Ether, minimum number average molecular weight (in amu), 4,500	1373125-59-7
Octadecanoic acid, 12-hydroxy-, homopolymer, octadecanoate minimum number average molecular weight (in amu), 1,370	58128-22-6)
$\alpha$ -cis-9-Octadecenyl- $\omega$ -hydroxypoly(oxyethylene); the octadecenyl group is derived from oleyl alcohol and the poly(oxyethylene) content averages 20 moles	None
Octadecyl acrylate-acrylic acid copolymer, octadecyl acrylate-dodecyl acrylate-acrylic acid copolymer, octadecyl methacrylate-butyl acrylate-acrylic acid copolymer, octadecyl methacrylate-hexyl acrylate-acrylic acid copolymer, octadecyl methacrylate-dodecyl acrylate-acrylic acid copolymer, or octadecyl methacrylate-dodecyl methacrylate-acrylic acid copolymer, minimum number average molecular weight (in amu) 3,000	None
Oleic acid diester of $\alpha$ -hydro- $\omega$ -hydroxypoly(oxyethylene); the poly(oxyethylene), average molecular weight (in amu), 2,300	None
2-oxepanone, homopolymer, minimum number average molecular weight (in amu) 52,000	24980-41-4
Oxirane, decyl-, reaction products with polyethylene-polypropylene glycol ether with trimethylolpropane (3:1)	903890-89-1
Oxirane, hexadecyl-, reaction products with polyethylene-polypropylene glycol ether with trimethylolpropane (3:1)	893427-80-0
Oxirane, 2-methyl-, polymer with oxirane, dimethyl ether, minimum number average molecular weight (in amu), 2,800	61419-46-3
Oxirane, methyl-, polymer with oxirane, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1), reaction products with tetradecyloxirane	903890-90-4

Oxirane, methyl-, polymer with oxirane, mono[2-(2-butoxyethoxy) ethyl] ether, minimum number average molecular weight (in amu), 2,500	85637-75-8
Oxirane, methyl-, polymer with Oxirane, Monobutyl Ether	9038-95-3
Oxirane, 2-methyl-, polymer with oxirane, mono[2-[2-(2-methoxymethylethoxy) methylethoxy]methylether] ether, minimum number average molecular weight (in amu), 1400 daltons	CAS Reg. No. 2112825-11-1.
Oxirane, 2-methyl-, polymer with oxirane, minimum number average molecular weight (in amu), 1,100	9003-11-6
Oxirane, 2-methyl-, polymer with oxirane, mono [2-[2-(2-butoxymethylethoxy)methylethoxy]methylethyl] ether, minimum number average molecular weight (in amu), 3,000	926031-36-9
Oxirane, 2-methyl, polymer with oxirane, hydrogen sulfate, ammonium salt; average molecular weight (in amu), 1800	57608-14-7
Oxirane, 2-methyl, polymer with oxirane, hydrogen sulfate, potassium salt; average molecular weight (in amu), 2100	1838191-48-2
Oxirane, phenyl, polymer with oxirane, monoethyl ether, minimum average molecular weight (in amu) 1,200	83653-00-3
Polyamide polymer derived from sebacic acid, vegetable oil acids with or without dimerization, terephthalic acid and/or ethylenediamine	None
Polyethylene glycol-polyisobutenyl anhydride-tall oil fatty acid copolymer, minimum number average molecular weight (in amu), 2,960	68650-28-2
Polyethylene, oxidized, minimum number average molecular weight (in amu), 1,200	None
Polyglycerol polyricinoleate; minimum number average molecular weight (in amu), 2,500	29894-35-7
Polymers produced by the reaction of either 1,6-hexanediisocyanate; 2,4,4-trimethyl-1,6-hexanediisocyanate; 5-isocyanato-1-(isocyanatomethyl)-fxsp0; 1,3,3-trimethylcyclohexane (isophoronediiisocyanate); 4,4'-methylene-bis-1,1'-cyclohexanediisocyanate; 4,4'-methylene-bis-1,1' benzyldiisocyanate; or 1,3-bis-(2-isocyanatopropan-2-yl)benzene with polyethylene glycol and end-capped with one or a mixture of more than one of octanol, decanol, dodecanol, tetradecanol, hexadecanol, octadecanol, and octadec-9-enol or polyethyleneglycol ethers of octanol, decanol, dodecanol, tetradecanol, hexadecanol, octadecanol, and octadec-9-enol, minimum number average molecular weight (in amu), 20,000	1161844-26-3, 1161844-30-9, 1161844-43-4, 1161844-51-4, 1161844-53-6, 693252-31-2, 162993-60-4, 630102-86-2
Polymethylene polyphenylisocyanate, polymer with ethylene diamine, diethylene triamine and sebacoyl chloride, cross-linked; minimum number average molecular weight (in amu), 100,000	None
Polyoxyalkylated glycerol fatty acid esters; the mono-, di-, or triglyceride mixtures of C <sub>8</sub> through C <sub>22</sub> , primarily C <sub>8</sub> through C <sub>18</sub> saturated and unsaturated, fatty acids containing up to 15% water by weight reacted with a minimum of three moles of either ethylene oxide or propylene oxide; the resulting polyoxyalkylated glycerol ester polymer minimum number average molecular weight (in amu), 1,500	61791-23-9, 68201-46-7, 68440-49-3, 68458-88-8, 68606-12-2, 68648-38-4, 70377-91-2, 70914-02-2, 72245-12-6, 72698-41-3, 180254-52-8, 248273-72-5, 308063-50-5, 952722-33-7
Polyoxyalkylated sorbitan fatty acid esters with C <sub>6</sub> through C <sub>22</sub> aliphatic alkanic and/or alkenic fatty acids, branched or linear, the resulting polyoxyalkylene sorbitan esters minimum number average molecular weight (in amu), 1,300	81776-11-6, 87090-31-1, 88895-72-1, 103171-31-9, 161026-53-5, 1472644-80-6, 1472644-81-7, 1472644-84-0, 1472644-85-1, 1472644-87-3, 1472644-88-4, 1472654-83-3, 1472655-32-5, 1472661-05-4, 1472661-17-8, 1472663-59-4, 1472663-64-1, 1472663-66-3, 1472663-92-5, 1472668-03-3
Polyoxyalkylated trimethylpropanes with 20 to 80 moles of ethylene and/or propylene oxide, fatty acid esters with C <sub>8</sub> through C <sub>22</sub> aliphatic alkanic and/or alkenic fatty acids, branched or linear; minimum number average molecular weight (in amu), 3,000	25765-36-0; 29860-47-7; 37339-03-0; 52624-57-4; 58090-24-7; 63964-38-5; 72939-62-9; 74521-14-5; 75300-70-8; 75300-90-2; 84271-03-4; 84271-04-5; 86850-92-2; 107120-02-5; 133331-01-8; 137587-60-1; 149797-40-0; 149797-41-1; 150695-97-9; 152130-24-0; 163349-94-8; 163349-95-9; 163349-96-0; 163349-97-1; 163349-98-2; 165467-70-9; 183619-46-7; 183619-50-3; 185260-01-9; 202606-04-0; 210420-84-1; 233660-70-3; 263011-96-7; 283602-94-8; 701980-40-7; 872038-58-9; 875709-44-7; 875709-45-8; 875709-46-9; 875709-47-0; 879898-63-2; 910038-01-6; 1190748-04-9; 1225384-02-0; 1428944-41-5; 1446498-15-2.
Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy-, polymer with 1, 1'-methylene-bis-[4-isocyanatocyclohexane], minimum number average molecular weight (in amu), 1800	39444-87-6

Polyoxyethylated primary amine (C <sub>14</sub> -C <sub>18</sub> ); the fatty amine is derived from an animal source and contains 3% water; the poly(oxyethylene) content averages 20 moles	None
Polyoxyethylated sorbitol fatty acid esters; the polyoxyethylated sorbitol solution containing 15% water is reacted with fatty acids limited to C <sub>12</sub> , C <sub>14</sub> , C <sub>16</sub> , and C <sub>18</sub> , containing minor amounts of associated fatty acids; the poly(oxyethylene) content averages 30 moles.	None
Polyoxyethylated sorbitol fatty acid esters; the sorbitol solution containing up to 15% water is reacted with 20-50 moles of ethylene oxide and aliphatic alkanolic and/or alkenolic fatty acids C <sub>8</sub> through C <sub>22</sub> with minor amounts of associated fatty acids; the resulting polyoxyethylene sorbitol ester having a minimum molecular weight (in amu), 1,300	None
Poly(oxyethylene/oxypropylene) monoalkyl (C <sub>6</sub> -C <sub>10</sub> ) ether sodium fumarate adduct, minimum number average molecular weight (in amu), 1,900	102900-02-7
Poly[oxy(methyl-1,2-ethanediy)]-, α-[(9Z)-1-oxo-9-octadecen-1-yl]-ω-[[[(9Z)-1-oxo-9-octadecen-1-yl]oxy]-], minimum number average molecular weight (in amu) 2,300	26571-49-3
Polyoxymethylene copolymer, minimum number average molecular weight (in amu), 15,000	None
Poly(oxypropylene) block polymer with poly(oxyethylene), molecular weight (in amu), 1,800-16,000	None
Poly(phenylhexylurea), cross-linked, minimum average molecular weight (in amu), 36,000	None
Polypropylene	9003-07-0
Polystyrene, minimum number average molecular weight (in amu), 50,000	9003-53-6
Polytetrafluoroethylene	9002-84-0
Polyvinyl acetate, copolymer with maleic anhydride, partially hydrolyzed, sodium salt, minimum number average molecular weight (in amu), 53,000	None
Polyvinyl acetate, minimum molecular weight (in amu), 2,000	None
Polyvinyl acetate—polyvinyl alcohol copolymer, minimum number average molecular weight (in amu), 50,000	25213-24-5
Polyvinyl acetate—polyvinyl alcohol copolymer, minimum number average molecular weight (in amu), 14,000	25213-24-5
Polyvinyl alcohol	9002-89-5
Polyvinyl chloride	None
Polyvinyl chloride, minimum number average molecular weight (in amu), 29,000	9002-86-2
Polyvinylpyrrolidone butylated polymer, minimum number average molecular weight (in amu), 9,500	26160-96-3
Poly(vinylpyrrolidone), minimum number average molecular weight (in amu), 4,000	9003-39-8
Poly(vinylpyrrolidone-1-eicosene), minimum average molecular weight (in amu), 3,000	28211-18-9
Poly(vinylpyrrolidone-1-hexadecene), minimum average molecular weight (in amu), 4,700	63231-81-2
Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-, homopolymer, sodium salt, minimum number average molecular weight (in amu) 14,000	55141-01-0
1-propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with ethenol and ethenyl acetate, minimum number average molecular weight (in amu) 50,000	107568-12-7
1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-, sodium salt (1:1), homopolymer, minimum number average molecular weight (in amu) 14,000	35641-59-9
2-Propene-1-sulfonic acid sodium salt, polymer with ethenol and ethenyl acetate, number average molecular weight (in amu) 6,000-12,000	None
2-Propenoic acid, butyl ester, polymer with 1,6-diisocyanatohexane, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile,	1469998-09-1

minimum number average molecular weight (in amu), 100,000	
2-Propenoic acid, butyl ester, polymer with ethenyl acetate and sodium ethenesulfonate, minimum number average molecular weight (in amu), 20,500	66573-43-1
2-propenoic acid, butyl ester, polymer with ethenylbenzene, methyl 2-methyl-2-propenoate and 2-propenoic acid (in amu), 1900.	27306-39-4
2-Propenoic acid, butyl ester, polymer with ethyl 2-propenoate and N-(hydroxymethyl)-2-propenamide, minimum number average molecular weight (in amu), 30,000	33438-19-6
2-Propenoic acid, 2-ethylhexyl ester, polymer with ethenylbenzene 14,000 daltons	25153-46-2
2-Propenoic acid, 2-ethylhexyl ester, polymer with ethenylbenzene and 2-methylpropyl 2-methyl-2-propenoate, minimum number average molecular weight (in amu), 18,000	68240-06-2
2-propenoic acid, homopolymer, ester with $\alpha$ -[2,4,6-tris(1-phenylethyl)phenyl]- $\omega$ -hydroxypoly(oxy-1,2-ethanediy), compd. with 2,2',2''-nitrotris[ethanol], minimum number average molecular weight (in amu), 10,000	1477613-46-9
2-Propenoic acid, 2-hydroxyethyl ester, polymer with $\alpha$ -[4-(ethenylloxy)butyl]- $\omega$ -hydroxypoly (oxy-1,2-ethanediy), minimum number average molecular weight (in amu), 17,000	1007234-89-0
[2-propenoic acid, 2-methyl-, C12-16-alkyl esters, telomers with 1-dodecanethiol, polyethylene-polypropylene glycol ether with propylene glycol monomethacrylate (1:1), and styrene 2,2'-(1,2-diazenediy)bis[2-methylbutanenitrile]-initiated, minimum number average molecular weight (in amu), 4,000	950207-35-9
2-propenoic acid, 2-methyl-, dodecyl ester, polymer with 1-ethenyl-2-pyrrolidinone and $\alpha$ -(2-methyl-1-oxo-2-propen-1-yl)- $\omega$ -methoxypoly(oxy-1,2-ethanediy), minimum number average molecular weight (in amu), 20,600	193743-10-1
2-Propenoic acid, methyl ester, polymer with ethene and 2,5-furandione, minimum number average molecular weight (in amu), 10,500	88450-35-5
2-Propenoic acid, methyl ester, polymer with ethenyl acetate, hydrolyzed, sodium salts	886993-11-9
2-Propenoic acid, 2-methyl-, 2-ethylhexyl ester, telomer with 1-dodecanethiol, ethenylbenzene and 2-methyloxirane polymer with oxirane monoether with 1,2-propanediol mono(2-methyl-2-propenoate), hydrogen 2-sulfobutanedioate, sodium salt, 2, 2'-(1,2-diazenediy)bis[2-methylpropanenitrile]-initiated, minimum number average molecular weight (in amu), 1,200	1283712-50-4
2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, homopolymer, minimum number average molecular weight (in amu), 55,000	9011-15-8
2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate, ethenylbenzene and 2-ethylhexyl 2-propenoate, minimum number average molecular weight (in amu), 3,600	58499-26-6
2-propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with ethene, ethenyl acetate, ethenyltrimethoxysilane and sodium ethenesulfonate (1:1), minimum number average molecular weight (in amu), 20,000	518057-54-0
2-Propenoic acid, 2-methyl-, phenylmethyl ester, polymer with 2-propenoic acid, peroxydisulfuric acid (([HO)S(O)2]2O2) sodium salt (1:2)-initiated, compounds with diethanolamine, minimum number average molecular weight (in amu), 2,000	1574486-33-1
2-Propenoic acid, 2-methyl-, phenylmethyl ester, polymer with 2-propenoic acid and sodium 2-methyl-2-[(1-oxo-2-propen-1-yl)amino]-1-propanesulfonate (1:1), peroxydisulfuric acid ([HO)S(O)2]2O2) sodium salt (1:2)-initiated minimum number average molecular weight >1,000 Daltons; maximum number average molecular weight 10,000 Daltons	CASRN 1246766-57-3
2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-ethylhexyl 2-propenoate and	481053-27-4

methyl 2-methyl-2-propenoate, minimum number average molecular weight (in amu), 7,300		
2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and ethenylbenzene, minimum number average molecular weight (in amu), 17,000	25036-16-2	
2-Propenoic acid, 2-Methyl-, Polymer with Butyl 2-Propenoate, Methyl 2-Methyl-2-Propenoate, Methyl 2-Propenoate and 2-Propenoic Acid, graft, Compound with 2-Amino-2-Methyl-1-Propanol	153163-36-1	
2-Propenoic Acid, 2-Methyl-, Polymer with Ethenylbenzene, 2-Ethylhexyl 2-Propenoate, 2-Hydroxyethyl 2-Propenoate, N-(Hydroxymethyl)-2-Methyl-2-Propenamide and Methyl 2-Methyl-2-Propenoate, Ammonium Salt	146753-99-3	
2-Propenoic acid, 2-methyl-, polymers with Bu acrylate, Et acrylate, Me methacrylate and polyethylene glycol methacrylate C <sub>16-18</sub> -alkyl ethers, minimum number average molecular weight (in amu), 13,000	890051-63-5	
2-propenoic acid, 2-methyl-, polymers with tert-Bu acrylate, Me methacrylate, polyethylene glycol methacrylate C <sub>16</sub> -C <sub>18</sub> -alkyl ethers and vinylpyrrolidone, tert-Bu 2-ethylhexaneperoxoate-initiated, compounds with 2-amino-2-methyl-1-propanol, minimum number average molecular weight (in amu), 2,600	1515872-09-9	
2-Propenoic acid, 2-methyl-, telomer with 2-ethylhexyl 2-propenoate, 2-propanol and sodium 2-methyl-2-[(1-oxo-2-propen-1-yl) amino]-1-propanesulfonate (1:1), sodium salt, minimum number average molecular weight (in amu): 2,900	1260001-65-7	
2-Propenoic acid, monoester with 1,2-propanediol, polymer with α-[4-(ethenoxy) butyl]-ω-hydroxypoly (oxy-1,2-ethanediyl) and 2,5-furandione, minimum number average molecular weight (in amu), 25,000	955015-23-3	
2-propenoic acid polymer, with 1,3-butadiene and ethenylbenzene, minimum number average molecular weight (in amu), 9400	25085-39-6	
2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene and (1-methylethenyl) benzene, ammonium salt, minimum number average molecular weight (in amu), 2,300	360564-31-4	
2-Propenoic acid, polymer with ethenyl acetate, ethenylbenzene, 2-ethylhexyl 2-propenoate and ethyl 2-propenoate, minimum number average molecular weight (50,149 Daltons)	85075-52-1	
2-Propenoic acid, polymer with ethenylbenzene and (1-methylethenyl)benzene, minimum number average molecular weight (in amu), 2,000		52831-04-6
2-Propenoic acid, polymer with ethenylbenzene and (1-methylethenyl) benzene, sodium salt, minimum number average molecular weight (in amu), 2,800	129811-24-1	
2-Propenoic acid, polymer with α-[4-(ethenoxy) butyl]-ω-hydroxypoly (oxy-1,2-ethanediyl) and 2,5-furandione, sodium salt, minimum number average molecular weight (in amu), 25,000	251479-97-7	
2-Propenoic acid, polymer with α-[4-(ethenoxy) butyl]-ω-hydroxypoly (oxy-1,2-ethanediyl) and 1,2-propanediol mono-2-propenoate, potassium sodium salt, minimum number average molecular weight (in amu), 16,000	518026-64-7	
2-Propenoic acid, polymer with α-[4-(ethenoxy) butyl]-ω-hydroxypoly (oxy-1, 2-ethanediyl), sodium salt, minimum number average molecular weight (in amu), 24,000	250591-84-5	
2-Propenoic acid, polymer with 2-propenamide, sodium salt, minimum number average molecular weight (in amu), 18,000	25085-02-3	
2-Propenoic acid, sodium salt, polymer with 2-propenamide, minimum number average molecular weight (in amu), 18,000	25987-30-8	
2-Propenoic, 2-methyl-, polymers with ethyl acrylate and polyethylene glycol methylacrylate C <sub>18-22</sub> alkyl ethers	888969-14-0	
2-Pyrrolidone, 1-ethenyl-, polymer with ethenol, minimum number average molecular weight (in amu), 23,000	26008-54-8	
Silane, dichloromethyl- reaction product with	68611-44-9	

silica minimum number average molecular weight (in amu), 3,340,000	
Silane, trimethoxy[3-(oxiranylmethoxy)propyl]-, hydrolysis products with silica, minimum number average molecular weight (in amu), 640,000	68584-82-7
Silicic acid, sodium salt, reaction products with chlorotrimethylsilane and iso-propyl alcohol, reaction with poly(oxypropylene)-poly(oxyethylene) glycol, minimum number average molecular weight (in amu), 75,000	None
Sodium polyflavinoidsulfonate, consisting chiefly of the copolymer of catechin and leucocyanidin	None
Soybean oil, ethoxylated; the poly(oxyethylene) content averages 10 moles or greater	61791-23-9
Starch, oxidized, polymers with Bu acrylate, tert-Bu acrylate and styrene, minimum number average molecular weight (in amu), 10,000	204142-80-3
Stearyl methacrylate-1,6-hexanediol dimethacrylate copolymer, minimum molecular weight (in amu), 100,000	None
Styrene, copolymers with acrylic acid and/or methacrylic acid, with none and/or one or more of the following monomers: Acrylamidopropyl methyl sulfonic acid, methallyl sulfonic acid, 3-sulfopropyl acrylate, 3-sulfopropyl methacrylate, hydroxypropyl methacrylate, hydroxypropyl acrylate, hydroxyethyl methacrylate, hydroxyethyl acrylate, and/or lauryl methacrylate; and its sodium, potassium, ammonium, monoethanolamine, and triethanolamine salts; the resulting polymer having a minimum number average molecular weight (in amu), 1200	None
Styrene-ethylene-propylene block copolymer, minimum number average molecular weight (in amu), 125,000	108388-87-0
Styrene, 2-ethylhexyl acrylate, butyl acrylate copolymer, minimum number average molecular weight (in amu), 4,200	30795-23-4
Styrene-2-ethylhexyl acrylate-glycidyl methacrylate-2-acrylamido-2-methylpropanesulfonic acid graft copolymer, minimum number average molecular weight (in amu), 12,500	None
Styrene-maleic anhydride copolymer	None
Styrene-maleic anhydride copolymer, ester derivative	None
Tall oil, polymer with polyethylene glycol and succinic anhydride monopolyisobutylene derivs., minimum number average molecular weight (in amu), 1,200	1398573-80-2
Tamarind seed gum, 2-hydroxypropyl ether polymer, minimum number average molecular weight (in amu), 10,000	68551-04-2
Tetradecyl acrylate-acrylic acid copolymer, minimum number average molecular weight (in amu), 3,000	None
Tetraethoxysilane, polymer with hexamethyldisiloxane, minimum number average molecular weight (in amu), 2,500	104133-09-7
Tetraethoxysilane, polymer with hexamethyldisiloxane, minimum number average molecular weight (in amu), 6,500	104133-09-7
$\alpha$ -[p-(1,1,3,3-Tetramethylbutyl)phenyl]- $\omega$ -hydroxypoly(oxyethylene) produced by the condensation of 1 mole of p-(1,1,3,3-tetramethylbutyl)phenol with a range of 30-70 moles of ethylene oxide	9036-19-5 9002-93-1
$\alpha$ -[p-(1,1,3,3-Tetramethylbutyl)phenyl] poly(oxypropylene) block polymer with poly(oxyethylene); the poly(oxypropylene) content averages 25 moles, the poly(oxyethylene) content averages 40 moles, the molecular weight (in amu) averages 3,400	None
1,3,5-triazine-2,4,6-triamine, polymer with formaldehyde, methylated, minimum number average molecular weight (in amu), 10000	68002-20-0
1,3,5-triazine-2,4,6-triamine, polymer with formaldehyde, minimum number average molecular weight (in amu), 10000	9003-08-1
$\alpha$ -[2,4,6-Tris[1-(phenyl)ethyl]phenyl]- $\omega$ -hydroxy poly(oxyethylene) poly(oxypropylene) copolymer, the poly(oxypropylene) content averages 2-8 moles, the poly(oxyethylene) content averages	None

16-30moles, average molecular weight (in amu), 1,500	
Alpha-[2,4,6-Tris[1-(phenyl)ethyl]phenyl]-Omega-hydroxy poly(oxyethylene) poly(oxypropylene) copolymer, the poly(oxypropylene) content averages 2-8 moles, the poly(oxyethylene) content averages 16-60 moles. Minimum number-average molecular weight (in amu) of 1,500	70880-56-7
Urea-formaldehyde copolymer, minimum average molecular weight (in amu), 30,000	9011-05-6
Vinyl acetate-allyl acetate-monomethyl maleate copolymer, minimum average molecular weight (in amu), 20,000	None
Vinyl acetate-ethylene copolymer, minimum number average molecular weight (in amu), 69,000	24937-78-8
Vinyl acetate polymer with none and/or one or more of the following monomers: Ethylene, propylene, N-methyl acrylamide, acrylamide, monoethyl maleate, diethyl maleate, monoethyl maleate, dioctyl maleate, maleic anhydride, maleic acid, octyl acrylate, butyl acrylate, ethyl acrylate, methyl acrylate, acrylic acid, octyl methacrylate, butyl methacrylate, ethyl methacrylate, methyl methacrylate, methacrylic acid, carboxyethyl acrylate, and diallyl phthalate; and their corresponding sodium, potassium, ammonium, isopropylamine, triethylamine, monoethanolamine and/or triethanolamine salts; the resulting polymer having a minimum number average molecular weight (in amu), 1,200	None
Vinyl acetate-vinyl alcohol-alkyl lactone copolymer, minimum number average molecular weight (in amu), 40,000; minimum viscosity of 18 centipoise	None
Vinyl alcohol-disodium itaconate copolymer, minimum average molecular weight (in amu), 50,290	None
Vinyl alcohol-vinyl acetate copolymer, benzaldehyde-o-sodium sulfonate condensate, minimum number average molecular weight (in amu), 20,000	None
Vinyl alcohol-vinyl acetate-monomethyl maleate, sodium salt-maleic acid, disodium salt-γ-butyrolactone acetic acid, sodium salt copolymer, minimum number average molecular weight (in amu), 20,000	None
Vinyl chloride-vinyl acetate copolymers	None
Vinyl pyrrolidone-acrylic acid copolymer, minimum number average molecular weight (in amu), 6,000	28062-44-4
Vinyl pyrrolidone-dimethylaminoethylmethacrylate copolymer, minimum number average molecular weight (in amu), 20,000	30581-59-0
Vinyl pyrrolidone-styrene copolymer	25086-29-7

[67 FR 36528, May 24, 2002]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §180.960, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

[↑ Back to Top](#)

#### §180.1011 Viable spores of the microorganism *Bacillus thuringiensis* Berliner; exemption from the requirement of a tolerance.

(a) For the purposes of this section the microbial insecticide for which exemption from the requirement of a tolerance is being established shall have the following specifications:

(1) The microorganism shall be an authentic strain of *Bacillus thuringiensis* Berliner conforming to the morphological and biochemical characteristics of *Bacillus thuringiensis* as described in Bergey's Manual of Determinative Bacteriology, Eighth Edition.

(2) Spore preparations of *Bacillus thuringiensis* Berliner shall be produced by pure culture fermentation procedures with adequate control measures during production to detect any changes from the characteristics of the parent strain or contamination by other microorganisms.



(3) Each lot of spore preparation, prior to the addition of other materials, shall be tested by subcutaneous injection of at least 1 million spores into each of five laboratory test mice weighing 17 grams to 23 grams. Such test shall show no evidence of infection or injury in the test animals when observed for 7 days following injection.

(4) Spore preparations shall be free of the *Bacillus thuringiensis*  $\beta$ -exotoxin when tested with the fly larvae toxicity test ("Microbial Control of Insects and Mites," R.P.M. Bond et al., p. 280 ff., 1971). This specification can be satisfied either by determining that each master seed lot brought into production is a *Bacillus thuringiensis* strain which does not produce  $\beta$ -exotoxin under standard manufacturing conditions or by periodically determining that  $\beta$ -exotoxin synthesized during spore production is eliminated by the subsequent spore-harvesting procedure.

(b) Exemption from the requirement of a tolerance is established for residues of the microbial insecticide *Bacillus thuringiensis* Berliner, as specified in paragraph (a) of this section, in or on honey and honeycomb and all other raw agricultural commodities when it is applied either to growing crops, or when it is applied after harvest in accordance with good agricultural practices.

[36 FR 22540, Nov. 25, 1971, as amended at 38 FR 19045, July 17, 1973; 42 FR 28540, June 3, 1977; 45 FR 43721, June 30, 1980; 45 FR 56347, Aug. 25, 1980; 74 FR 26533, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1016 Ethylene; exemption from the requirement of a tolerance.**

Ethylene is exempted from the requirement of a tolerance for residues when:

(a) For all food commodities, it is used as a plant regulator on plants, seeds, or cuttings and on all food commodities after harvest and when applied in accordance with good agricultural practices.

(b) Injected into the soil to cause premature germination of witchweed in bean (lima and string), cabbage, cantaloupe, collard, corn, cotton, cucumber, eggplant, okra, onion, pasture grass, pea (field and sweet), peanut, pepper, potato, sweet potato, sorghum, soybean, squash, tomato, turnip, and watermelon fields as part of the U.S. Department of Agriculture witchweed control program.

[39 FR 33315, Sept. 17, 1974, as amended at 40 FR 19477, May 5, 1975; 64 FR 31505, June 11, 1999]

[↑ Back to Top](#)

#### **§180.1017 Diatomaceous earth; exemption from the requirement of a tolerance.**

(a) Diatomaceous earth is exempted from the requirement of a tolerance for residues when used in accordance with good agricultural practice in pesticide formulations applied to growing crops, to food commodities after harvest, and to animals.

(b) Diatomaceous earth may be safely used in accordance with the following conditions. Application shall be limited solely to spot and/or crack and crevice treatments in food or feed processing and food or feed storage areas in accordance with the prescribed conditions:

(1) It is used or intended for use for control of insects in food or feed processing and food or feed storage areas: *Provided*, That the food or feed is removed or covered prior to such use.

(2) To assure safe use of the insecticide, its label and labeling shall conform to that registered by the U.S. Environmental Protection Agency, and it shall be used in accordance with such label and labeling.

[65 FR 33716, May 24, 2000]

[↑ Back to Top](#)

#### **§180.1019 Sulfuric acid; exemption from the requirement of a tolerance.**

(a) Residues of sulfuric acid are exempted from the requirement of a tolerance when used in accordance with good agricultural practice when used as a herbicide in the production of garlic and onions, and as a potato vine desiccant in the production of potatoes.

(b) Residues of sulfuric acid are exempted from the requirement of a tolerance in cattle, meat; goat, meat; hog, meat; horse, meat; sheep, meat; poultry, fat; poultry, meat; poultry, meat, byproducts; egg; milk; fish, shellfish, and irrigated crops when it results from the use of sulfuric acid as an inert ingredient in a pesticide product used in irrigation conveyance systems and lakes, ponds, reservoirs, or bodies of water in which fish or shellfish are cultivated. The sulfuric acid is not to exceed 10% of the pesticide formulation (non-aerosol formulations only).

[69 FR 40787, July 7, 2004, as amended at 74 FR 26533, June 3, 2009]

[↑ Back to Top](#)

### **§180.1020 Sodium chlorate; exemption from the requirement of a tolerance.**

Sodium chlorate is exempted from the requirement of a tolerance for residues when used as a defoliant or desiccant in accordance with good agricultural practice on the following crops:

Bean, dry, seed  
Corn, field, forage  
Corn, field, grain  
Corn, field, stover  
Corn, pop, grain  
Corn, pop, stover  
Corn, sweet, forage  
Corn, sweet, stover  
Cotton, undelinted seed  
Flax, seed  
Grain, aspirated fractions  
Guar, seed  
Pea, southern  
Pepper, nonbell  
Potato  
Rice, grain  
Rice, straw  
Safflower, seed  
Sorghum, forage, forage  
Sorghum, grain, forage  
Sorghum, grain, grain  
Sorghum, grain, stover  
Soybean, forage  
Soybean, hay  
Soybean, seed  
Sunflower, seed  
Wheat, grain

[74 FR 47457, Sept. 16, 2009]

[↑ Back to Top](#)

### **§180.1021 Copper; exemption from the requirement of a tolerance.**

(a) Copper is exempted from the requirement of a tolerance in cattle, meat; goat, meat; hog, meat; horse, meat; sheep, meat; milk, poultry, fat; poultry, meat; poultry, meat byproducts; egg, fish, shellfish, and irrigated crops when it results from the use of:

(1) Copper sulfate as an algicide or herbicide in irrigation conveyance systems and lakes, ponds, reservoirs, or bodies of water in which fish or shellfish are cultivated.

(2) Basic copper carbonate (malachite) as an algicide or herbicide in impounded and stagnant bodies of water

(3) Copper triethanolamine and copper monoethanolamine as an algicide or herbicide in fish hatcheries, lakes, ponds, and reservoirs

(4) Cuprous oxide bearing antifouling coatings for control of algae or other coatings for control of algae or other organisms on submerged concrete or other (irrigation) structures.

(5) Copper oxide embedded in polymer emitter heads used in irrigation systems for root incursion prevention.

(b) The following copper compounds are exempt from the requirement of a tolerance when applied (primarily) as a fungicide to growing crops using good agricultural practices:

Copper compounds	CAS Reg. No.
Basic copper carbonate (malachite)	1184-64-1
Copper ammonia complex	16828-95-8
Copper ethylenediamine complex	13426-91-0
Copper hydroxide	20427-59-2
Copper octanoate	20543-04-8
Copper oxychloride	1332-65-6
Copper oxychloride sulfate	8012-69-9
Copper salts of fatty and rosin acids	9007-39-0
Copper sulfate basic	1344-73-6
Copper sulfate pentahydrate	7758-99-8
Cuprous oxide	1317-19-1

(c) Copper sulfate pentahydrate (CAS Reg. No. 7758-99-8) is exempt from the requirement of a tolerance when applied as a fungicide to growing crops or to raw agricultural commodities after harvest, and as a bactericide/fungicide in or on meat, fat and meat by-products of cattle, sheep, hogs, goats, horses and poultry, milk and eggs when applied as a bactericide/fungicide to animal premises and bedding.

(d) Copper (II) hydroxide (CAS Reg. No. 20427-59-2) is exempt from the requirement of a tolerance when applied to growing crops or to raw agricultural commodities as an inert ingredient (for pH control) in pesticide products.

[65 FR 68912, Nov. 15, 2000, as amended at 69 FR 4069, Jan. 28, 2004; 71 FR 46110, Aug. 11, 2006; 74 FR 26534, June 3, 2009; 74 FR 47457, Sept. 16, 2009; 80 FR 37551, July 1, 2015]

[↑ Back to Top](#)

#### **§180.1022 Iodine-detergent complex; exemption from the requirement of a tolerance.**

The aqueous solution of hydriodic acid and elemental iodine, including one or both of the surfactants (a) polyoxypropylene-polyoxyethylene glycol nonionic block polymers (minimum average molecular weight 1,900) and (b)  $\alpha$ -(p-nonylphenyl)- $\omega$ -hydroxypoly (oxyethylene) having a maximum average molecular weight of 748 and in which the nonyl group is a propylene trimer isomer, is exempted from the requirement of a tolerance for residues in egg, and poultry, fat; poultry, meat; poultry, meat byproducts when used as a sanitizer in poultry drinking water.

[74 FR 26534, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1023 Propanoic acid; exemptions from the requirement of a tolerance.**

(a) Postharvest application of propanoic acid or a mixture of methylene bispropionate and oxy(bismethylene) bispropionate when used as a fungicide is exempted from the requirement of a tolerance for residues in or on the following raw agricultural commodities: Alfalfa, forage; alfalfa, hay; alfalfa, seed; barley, grain; Bermudagrass, forage; Bermudagrass, hay; bluegrass, forage; bluegrass, hay; bromegrass, forage; bromegrass, hay; clover, forage; clover, hay; corn, field, grain; corn, pop, grain; cowpea, hay; fescue, forage; fescue, hay; lespedeza, forage; lespedeza, hay; lupin; oat, grain; orchardgrass, forage; orchardgrass, hay; peanut, hay; pea, field, hay; ryegrass, Italian, hay; sorghum, grain, grain; soybean, hay; sudangrass, forage; sudangrass, hay; timothy, forage; timothy, hay; vetch, forage; vetch, hay; and wheat, grain.

(b) Propanoic acid is exempt from the requirement of a tolerance for residues in or on cattle, meat; cattle, meat byproducts; goat, meat; goat, meat byproducts; hog, meat; hog meat byproducts; horse, meat; horse, meat byproducts; sheep, meat; sheep meat byproducts; and, poultry, fat; poultry meat; poultry meat byproducts; milk, and egg when applied as a bactericide/fungicide to livestock drinking water, poultry litter, and storage areas for silage and grain.

(c) Preharvest and postharvest application of propanoic acid (CAS Reg. No. 79-09-4), propanoic acid, calcium salt (CAS Reg. No. 4075-81-4), and propanoic sodium salt (CAS Reg. No. 137-40-6) are exempted from the requirement of a tolerance

on all crops when used as either an active or inert ingredient in accordance with good agricultural practice in pesticide formulations applied to growing crops, to raw agricultural commodities before and after harvest and to animals.

[69 FR 47025, Aug. 4, 2004, as amended at 74 FR 26534, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1025 Xylene; exemption from the requirement of a tolerance.**

Xylene is exempted from the requirement of a tolerance when used as an aquatic herbicide applied to irrigation conveyance systems in accordance with the following conditions:

(a) It is to be used only in programs of the Bureau of Reclamation, U.S. Department of Interior, and cooperating water user organizations.

(b) It is to be applied as an emulsion at an initial concentration not to exceed 750 parts per million.

(c) It is not to be applied when there is any likelihood that the irrigation water will be used as a source of raw water for a potable water system or where return flows of such treated irrigation water into receiving rivers and streams would contain residues of xylene in excess of 10 parts per million.

(d) Xylene to be used as an aquatic herbicide shall meet the requirement limiting the presence of a polynuclear aromatic hydrocarbons as listed in 21 CFR 172.250.

[38 FR 16352, June 22, 1973, as amended at 50 FR 2980, Jan. 3, 1985]

[↑ Back to Top](#)

#### **§180.1027 Nuclear polyhedrosis virus of *Heliothis zea*; exemption from the requirement of a tolerance.**

(a) For the purposes of this section, the viral insecticide must be produced with an unaltered and unadulterated inoculum of the single-embedded *Heliothis zea* nuclear polyhedrosis virus (HzSNPV). The identity of the seed virus must be assured by periodic checks.

(b) Each lot of active ingredient of the viral insecticide shall have the following specifications:

(1) The level of extraneous bacterial contamination of the final unformulated viral insecticide should not exceed  $10^7$  colonies per gram as determined by an aerobic plate on trypticase soy agar.

(2) Human pathogens, e.g., *Salmonella*, *Shigella*, or *Vibrio*, must be absent.

(3) Safety to mice as determined by an intraperitoneal injection study must be demonstrated.

(4) Identity of the viral product, as determined by the most sensitive and standardized analytical technique, e.g., restriction endonuclease and/or SDS-PAGE analysis, must be demonstrated.

(c) Exemptions from the requirement of a tolerance are established for the residues of the microbial insecticide *Heliothis zea* NPV, as specified in paragraphs (a) and (b) of this section, in or on all agricultural commodities.

[60 FR 42460, Aug. 16, 1995, as amended at 74 FR 26534, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1033 Methoprene; exemption from the requirement of a tolerance.**

Methoprene is exempt from the requirement of a tolerance in or on all food commodities when used to control insect larvae.

[68 FR 34829, June 11, 2003]

[↑ Back to Top](#)

#### **§180.1037 Polybutenes; exemption from the requirement of a tolerance.**

(a) Polybutenes are exempt from the requirement of a tolerance for residues in or on the raw agricultural commodity cotton, undelinted seed when used as a sticker agent for formulations of the attractant gossyplure (1:1 mixture of (Z,Z)- and (Z,E)-7,11-hexadecadien-1-ol acetate) to disrupt the mating of the pink bollworm.

(b) Polybutenes are exempt from the requirement of a tolerance for residues in or on the raw agricultural commodity artichoke when used as a sticker agent in multi-layered laminated controlled-release dispensers of (Z)-11-hexadecenal to disrupt the mating of the artichoke plume moth.

[74 FR 26534, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1040 Ethylene glycol; exemption from the requirement of a tolerance.**

Ethylene glycol as a component of pesticide formulations is exempt from the requirement of a tolerance when used in foliar applications to peanut plants.

[43 FR 41393, Sept. 18, 1978]

[↑ Back to Top](#)

#### **§180.1041 *Nosema locustae*; exemption from the requirement of a tolerance.**

The insecticide *Nosema locustae* is exempted from the requirement of a tolerance for residues in or on all raw agricultural commodities.

[47 FR 21537, May 19, 1982]

[↑ Back to Top](#)

#### **§180.1043 Gossyplure; exemption from the requirement of a tolerance.**

The pheromone gossyplure, a 1:1 mixture of (Z,Z)- and (Z,E)-7,11-hexadecadien-1-ol acetate is exempt from the requirement of a tolerance in or on the raw agricultural commodity cotton, undelinted seed when applied to cotton from capillary fibers.

[74 FR 26534, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1049 Carbon dioxide; exemption from the requirement of a tolerance.**

The insecticide carbon dioxide is exempted from the requirement of a tolerance when used after harvest in modified atmospheres for stored insect control on food commodities.

[65 FR 33716, May 24, 2000]

[↑ Back to Top](#)

#### **§180.1050 Nitrogen; exemption from the requirements of a tolerance.**

The insecticide nitrogen is exempted from the requirements of a tolerance when used after harvest in modified atmospheres for stored product insect control on all food commodities.

[65 FR 33716, May 24, 2000]

[↑ Back to Top](#)

#### **§180.1052 2,2,5-trimethyl-3-dichloroacetyl-1,3-oxazolidine; exemption from the requirement of a tolerance.**

2,2,5-trimethyl-3-dichloroacetyl-1,3-oxazolidine is exempted from the requirement of a tolerance when used as an inert ingredient in formulations of the herbicides S-ethyl dipropylthiocarbamate, S-propyl dipropylthiocarbamate, and S-ethyl diisobutylthiocarbamate applied to corn fields before the corn plants emerge from the soil with a maximum of 0.5 pound of the inert ingredient per acre.

[45 FR 51201, Aug. 1, 1980]

[↑ Back to Top](#)

#### **§180.1054 Calcium hypochlorite; exemptions from the requirement of a tolerance.**

(a) Calcium hypochlorite is exempted from the requirement of a tolerance when used preharvest or postharvest in solution on all raw agricultural commodities.

(b) Calcium hypochlorite is exempted from the requirement of a tolerance in or on grape when used as a fumigant postharvest by means of a chlorine generator pad.

[59 FR 59165, Nov. 16, 1994, as amended at 74 FR 26534, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1056 Boiled linseed oil; exemption from requirement of tolerance.**

Boiled linseed oil (containing no more than 0.33 percent manganese naphthenate and no more than 0.33 percent cobalt naphthenate) is exempt from the requirement of a tolerance when used as a coating agent for *S*-ethyl hexahydro-1*H*-azepine-1-carbothioate. No more than 15 percent of the pesticide formulation may consist of “boiled linseed oil.” This exemption is limited to use on rice before edible parts form.

[46 FR 33270, June 29, 1981]

[↑ Back to Top](#)

#### **§180.1057 *Phytophthora palmivora*; exemption from requirement of tolerance.**

*Phytophthora palmivora* is exempted from the requirement of a tolerance in or on the raw agricultural commodity fruit, citrus.

[74 FR 26534, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1058 Sodium diacetate; exemption from the requirement of a tolerance.**

Sodium diacetate, when used postharvest as a fungicide, is exempt from the requirement of a tolerance for residues in or on alfalfa, hay; Bermudagrass, hay; bluegrass, hay; bromegrass, hay; clover, hay; corm, field, grain; corn, pop, grain; oat, grain; orchardgrass, hay; sorghum, grain, grain; sudangrass, hay; ryegrass, Italian, hay; timothy, hay.

[74 FR 26534, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1064 Tomato pinworm insect pheromone; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for combined residues of both components of the tomato pinworm insect pheromone (*E*)-4-tridecen-1-yl acetate and (*Z*)-4-tridecen-1-yl acetate in or on all raw agricultural commodities (preharvest) in accordance with the following prescribed conditions:

(a) Application shall be limited solely to point source dispensers or point source chopped fibers containing the tomato pinworm insect pheromone.

(b) Cumulative yearly application cannot exceed 200 grams of tomato pinworm pheromone per acre.

[58 FR 34376, June 25, 1993]

[↑ Back to Top](#)

#### **§180.1065 2-Amino-4,5-dihydro-6-methyl-4-propyl-s-triazolo(1,5- $\alpha$ )pyrimidin-5-one; exemption from the requirement of a tolerance.**

The inert ingredient, 2-amino-4,5-dihydro-6-methyl-4-propyl-s-triazolo(1,5- $\alpha$ )pyrimidin-5-one is exempted from the requirement of a tolerance when used as an emetic at not more than 0.3 percent in formulations of paraquat dichloride. Further restrictions on this exemption are that this ingredient may not be advertised as an emetic and the paraquat product may not be promoted in any way because of the inclusion of this inert ingredient.

[70 FR 46431, Aug. 10, 2005]

[↑ Back to Top](#)

#### **§180.1067 Methyl eugenol and malathion combination; exemption from the requirement of a tolerance.**

The insect attractant methyl eugenol and the insecticide malathion are exempt from the requirement of tolerances on all raw agricultural commodities when used in combination in Oriental fruit fly eradication programs under the authority of the U.S.

Department of Agriculture, in accordance with the following directions and specifications:

(a) The combination shall be at the ratio of three parts methyl eugenol to one part technical malathion (3:1).

(b) This combination is to be impregnated on a carrier (cigarette filter tips (cellulose acetate); cotton strings; fiberboard squares) or mixed with a jel cleared under 40 CFR 180.920 or 180.950.

(c) The maximum actual dosage per application per acre shall be 28.35 grams (one ounce avoirdupois) methyl eugenol and 9.45 grams (one-third (0.33) ounce avoirdupois) technical malathion.

[47 FR 9002, Mar. 3, 1982, as amended at 69 FR 23142, Apr. 28, 2004]

[↑ Back to Top](#)

#### **§180.1068 C<sub>12</sub>-C<sub>18</sub> fatty acid potassium salts; exemption from the requirement of a tolerance.**

C<sub>12</sub>-C<sub>18</sub> fatty acids (saturated and unsaturated) potassium salts are exempted from the requirement of a tolerance for residues in or on all raw agricultural commodities when used in accordance with good agricultural practice.

[60 FR 34871, July 5, 1995]

[↑ Back to Top](#)

#### **§180.1069 (Z)-11-Hexadecenal; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biological insecticide (pheromone) (Z)-11-hexadecenal when used as a sex attractant on artichoke plants to control the artichoke plume moth.

[47 FR 14906, Apr. 7, 1982]

[↑ Back to Top](#)

#### **§180.1070 Sodium chlorite; exemption from the requirement of a tolerance.**

Sodium chlorite is exempted from the requirement of a tolerance for residues when used in accordance with good agricultural practice as a seed-soak treatment in the growing of the raw agricultural commodities vegetable, brassica, leafy, group 5 and radish, roots and radish, tops.

[74 FR 26534, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1071 Peanuts, Tree Nuts, Milk, Soybeans, Eggs, Fish, Crustacea, and Wheat; exemption from the requirement of a tolerance.**

(a) *General.* Residues resulting from the following uses of the food commodity forms of peanuts, tree nuts, milk, soybeans, eggs (including putrescent eggs), fish, crustacea, and wheat are exempted from the requirement of a tolerance in or on all food commodities under FFDC section 408 (when used as either an inert or an active ingredient in a pesticide formulation), if such use is in accordance with good agricultural practices:

(1) Use in pesticide products intended to treat seeds.

(2) Use in nursery and greenhouse operations, as defined in 40 CFR 170.3, which includes seeding, potting and transplanting activities.

(3) Pre-plant and at-transplant applications.

(4) Incorporation into seedling and planting beds.

(5) Applications to cuttings and bare roots.

(6) Applications to the field that occur after the harvested crop has been removed.

(7) Soil-directed applications around and adjacent to all plants.

(8) Applications to rangelands, which is land, mostly grasslands, whose plants can provide food (*i.e.*, forage) for grazing or browsing animals.



(9) Use in chemigation and irrigation systems (via flood, drip, or furrow application with no overhead spray applications).

(10) Application as part of a dry fertilizer on which an active ingredient is impregnated.

(11) Aerial and ground applications that occur when no above-ground harvestable food commodities are present (usually pre-bloom).

(12) Application as part of an animal feed-through product.

(13) Applications as gel and solid (non-liquid/non-spray) crack and crevice treatments that place the gel or bait directly into or on top of the cracks and crevices via a mechanism such as a syringe.

(14) Applications to the same crop from which the food commodity is derived, whether the plant fraction(s) intended for harvest are present or not, e.g., applications of peanut meal when applied to peanut plants.

(b) *Specific chemical substances.* Residues resulting from the use of the following substances as either an inert or an active ingredient in a pesticide formulation are exempted from the requirement of a tolerance under FFDCA section 408, if such use is in accordance with good agricultural practices and such use is included in paragraph (a):

Chemical Substance	CAS No.
Caseins	9000-71-9
Caseins, ammonium complexes	9005-42-9
Caseins, hydrolyzates	65072-00-6
Caseins, potassium complexes	68131-54-4
Caseins, sodium complexes	9005-46-3

[70 FR 1360, Jan. 7, 2005]

[↑ Back to Top](#)

#### §180.1072 Poly-D-glucosamine (chitosan); exemption from the requirement of a tolerance.

(a) An exemption from the requirement of a tolerance is established for residues of the biological plant growth regulator poly-D-glucosamine when used as a seed treatment in or on barley, beans, oats, peas, rice, and wheat.

(b) An exemption from the requirement of a tolerance is established for residues of the biological plant growth regulator poly-D-glucosamine when used as a pesticide in the production any raw agricultural commodity.

[60 FR 19524, Apr. 19, 1995]

[↑ Back to Top](#)

#### §180.1073 Isomate-M; exemption from the requirement of a tolerance.

The oriental fruit moth pheromone (Isomate-M) (Z-8-dodecen-1-yl acetate, E-8-dodecen-1-yl acetate, Z-8-dodecen-1-ol) is exempt from the requirement of a tolerance in or on all the raw agricultural commodities (food and feed) including, peach; quince; nectarine; and nut, macadamia when used in orchards with encapsulated polyethylene tubing to control oriental fruit moth.

[74 FR 26534, June 3, 2009]

[↑ Back to Top](#)

#### §180.1074 F.D.&C. Blue No. 1; exemption from the requirement of a tolerance.

F.D.&C. Blue No. 1 is exempted from the requirement of a tolerance when used as an aquatic plant control agent.

[47 FR 25963, June 16, 1982]

[↑ Back to Top](#)

#### §180.1075 *Colletotrichum gloeosporioides* f. sp. *aeschyromene*; exemption from the requirement of a tolerance.

An exemption from the requirement of a tolerance is established for residues of the mycoherbicide *Colletotrichum gloeosporioides* f. sp. *aeschyromene* in or on the following raw agricultural commodities:

##### COMMODITY

Aspirated grain fractions



Rice, grain

Soybean, forage

Soybean, hay

Soybean, seed

[47 FR 25742, June 15, 1982, as amended at 74 FR 26534, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1076 Viable spores of the microorganism *Bacillus popilliae*; exemption from the requirement of a tolerance.**

(a) For the purposes of this section the microbial insecticide for which exemption from the requirement of a tolerance is being established shall have the following specifications:

(1) The microorganism shall be an authentic strain of *Bacillus popilliae* conforming to the morphological and biochemical characteristics of *Bacillus popilliae* as described in Bergey's Manual of Determinative Bacteriology, Eighth Edition.

(2) Spore preparations of *Bacillus popilliae* shall be produced by an extraction process from diseased Japanese beetles, and may contain a small percentage of the naturally occurring milky disease bacterium *Bacillus lentimorbus*.

(3) Each lot of spore preparation, prior to the addition of other materials, shall be tested by subcutaneous injection of at least 1 million spores into each of five laboratory test mice weighing 17 grams to 23 grams. Such test shall show no evidence of infection or injury in the test animals when observed for 7 days following injection.

(b) Exemption from the requirement of a tolerance is established for residues of the microbial insecticide *Bacillus popilliae*, as specified in paragraph (a) of this section in or on grass, pasture, forage and grass, rangeland, forage when it is applied to growing crops in accordance with good agricultural practices.

[47 FR 38535, Sept. 1, 1982, as amended at 74 FR 26535, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1080 Plant volatiles and pheromone; exemptions from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the plant volatiles cyclic decadiene, cyclic decene, cyclic pentadecatriene, and decatriene and the pheromone Z-2-isopropenyl-1-methylcyclobutaneethanol; Z-3,3-dimethyl- $\Delta$ 1, $\beta$ -cyclohexaneethanol; Z-3,3-dimethyl- $\Delta$ 1, $\alpha$ -cyclohexaneethanal; E-3,3-dimethyl- $\Delta$ 1, $\alpha$ -cyclohexaneethanal combination when applied to cotton in hollow synthetic fibers.

[48 FR 28442, June 22, 1983]

[↑ Back to Top](#)

#### **§180.1083 Dimethyl sulfoxide; exemption from the requirement of a tolerance.**

Dimethyl sulfoxide (DMSO) [CAS Registry Number 67-68-5] is exempted from the requirement of a tolerance when used as an inert solvent or cosolvent in formulations with the following pesticides when used in accordance with good agricultural practices in or on the following raw agricultural commodities:

(a) Carbaryl (1-naphthyl methyl-carbamate)

Pea, dry, seed

Pea, succulent

(b) O-O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate

Pea, dry, seed

Pea, succulent

[48 FR 54819, Dec. 7, 1983, as amended at 74 FR 26535, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1084 Monocarbamide dihydrogen sulfate; exemption from the requirement of a tolerance.**

Monocarbamide dihydrogen sulfate is exempted from the requirement of a tolerance when used as a herbicide or desiccant in or on all raw agricultural commodities.

[53 FR 12152, Apr. 13, 1988]

[↑ Back to Top](#)

**§180.1086 3,7,11-Trimethyl-1,6,10-dodecatriene-1-ol and 3,7,11-trimethyl-2,6,10-dodecatriene-3-ol; exemption from the requirement of a tolerance.**

The insect pheromone containing the active ingredients 3,7,11-trimethyl-1,6,10-dodecatriene-1-ol and 3,7,11-trimethyl-2,6,10-dodecatriene-3-ol is exempted from the requirement of a tolerance in or on all raw agricultural commodities.

[52 FR 12165, Apr. 15, 1987; 52 FR 29014, Aug. 5, 1987]

[↑ Back to Top](#)

**§180.1087 Sesame stalks; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biorational nematicide sesame stalk in or on the following raw agricultural commodities: Almond; almond, hulls; cotton, undelinted seed; cotton, gin byproducts; soybean, seed; soybean, forage; soybean, hay; aspirated grain fractions; potato; beet, sugar, roots; beet, sugar, tops; tomato; pepper, bell; squash; strawberry; eggplant; cucumber; carrot, roots; radish, roots; radish, top; turnip, roots; turnip, tops; onion; pea, dry; pea, succulent; melon; grape; walnut; orange; grapefruit; mulberry; peach; apple; apricot; blackberry; loganberry; pecan; cherry; plum, and cranberry.

[74 FR 26535, June 3, 2009]

[↑ Back to Top](#)

**§180.1089 Poly-*N*-acetyl-*D*-glucosamine; exemption from the requirement of tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biochemical nematicide poly-*N*-acetyl-*D*-glucosamine on a variety of agricultural crops.

[53 FR 10249, Mar. 30, 1988]

[↑ Back to Top](#)

**§180.1090 Lactic acid; exemption from the requirement of a tolerance.**

Lactic acid (2-hydroxypropanoic acid) is exempted from the requirement of a tolerance when used as a plant growth regulator in or on all raw agricultural commodities.

[53 FR 15286, May 4, 1988]

[↑ Back to Top](#)

**§180.1091 Aluminum isopropoxide and aluminum secondary butoxide; exemption from the requirement of a tolerance.**

Aluminum isopropoxide (CAS Reg. No. 555-31-7) and aluminum secondary butoxide (CAS Reg. No. 2269-22-9) are exempted from the requirement of a tolerance when used in accordance with good agricultural practices as stabilizers in formulations of the insecticide amitraz [*N*-(2,4-dimethylphenyl)-*N*-[[[(2,4-dimethylphenyl)imino]-*N*-methylmethanimidamide] applied to growing crops or animals.

[53 FR 34509, Sept. 7, 1988; 53 FR 36696, Sept. 21, 1988]

[↑ Back to Top](#)

**§180.1092 Menthol; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the pesticidal chemical menthol in or on honey and honeycomb when used in accordance with good agricultural practice in over-wintering bee hives.

[74 FR 26535, June 3, 2009]

[↑ Back to Top](#)

**§180.1095 Chlorine gas; exemptions from the requirement of a tolerance.**

Chlorine gas is exempted from the requirement of a tolerance when used preharvest or postharvest in solution on all raw agricultural commodities.

[56 FR 21309, May 8, 1991]

[↑ Back to Top](#)

**§180.1097 GBM-ROPE; exemption from the requirement of a tolerance.**

The grape berry moth pheromone (GBM-ROPE) containing the active ingredients (Z)-9-dedecenyl acetate and (Z)-11-tetradecenyl acetate is exempt from the requirement of a tolerance in or on the raw agricultural commodity grape when used in orchards with encapsulated polyethylene tubing to control grape berry moth.

[74 FR 26535, June 3, 2009]

[↑ Back to Top](#)

**§180.1098 Gibberellins [Gibberellic Acids (GA3 and GA4 + GA7), and Sodium or Potassium Gibberellate]; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of gibberellins [gibberellic acids (GA3 and GA4 + GA7), and sodium or potassium gibberellate] in or on all food commodities when used as plant regulators on plants, seeds, or cuttings and on all food commodities after harvest in accordance with good agricultural practices.

[64 FR 31505, June 11, 1999]

[↑ Back to Top](#)

**§180.1100 *Gliocladium virens* isolate GL-21; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biofungicide *Gliocladium virens* GL-21 in or on all raw agricultural commodities when used either as a fungicide for inoculation of plant growth media in greenhouses or on terrestrial food crops grown outdoors in accordance with good agricultural practices.

[60 FR 48659, Sept. 20, 1995; 60 FR 52248, Oct. 5, 1995]

[↑ Back to Top](#)

**§180.1101 Parasitic (parasitoid) and predatory insects; exemption from the requirement of a tolerance.**

Parasitic (parasitoid) and predatory insects are exempted from the requirement of a tolerance for residues when they are used in accordance with good agricultural and pest control practices to control insect pests of stored raw whole grains such as corn, small grains, rice, soybeans, peanuts, and other legumes either bulk or warehoused in bags. For the purposes of this rule, the parasites (parasitoids) and predators are considered to be species of Hymenoptera in the genera *Trichogramma*, *Trichogrammatidae*; *Bracon*, *Braconidae*; *Venturia*, *Mesostenus*, *Ichneumonidae*; *Anisopteromalus*, *Choetospila*, *Lariophagus*, *Dibrachys*, *Habrocytus*, *Pteromalus*, *Pteromalidae*; *Cephalonomia*, *Holepyris*, *Laelius*, *Bethylidae*; and of Hemiptera in the genera *Xylocoris*, *Lyctocoris*, and *Dufouriellus*, *Anthocoridae*. Whole insects, fragments, parts, and other residues of these parasites and predators remain subject to 21 U.S.C. 342(a)(3).

[57 FR 14646, Apr. 22, 1992]

[↑ Back to Top](#)

**§180.1102 *Trichoderma harzianum* KRL-AG2 (ATCC #20847) strain T-22; exemption from requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biofungicide *Trichoderma harzianum* KRL-AG2 (ATCC #20847); also known as strain T-22 when applied in/or on all food commodities.

[64 FR 16860, Apr. 7, 1999]

[↑ Back to Top](#)

**§180.1103 Isomate-C; exemption from the requirement of a tolerance.**

The codling moth pheromone (Isomate-C) E,E-8,10-dodecenyl alcohol, dodecanol, tetradecanol is exempt from the requirements of a tolerance in or on all raw agricultural commodities when formulated in polyethylene pheromone dispensers

for use in orchards with encapsulated polyethylene tubing to control codling moth.

[74 FR 26535, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1110 3-Carbamyl-2,4,5-trichlorobenzoic acid; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the residues of 3-carbamyl-2,4,5-trichlorobenzoic acid in or on all raw agricultural commodities which occur from the direct application of chlorothalonil to crops in §180.275 (a) and (b) and/or as an inadvertent residue resulting from the soil metabolism of chlorothalonil when applied to crops in §180.275 (a) and (b), and subsequent uptake by rotated crops when used according to approved agricultural practices.

[57 FR 24552, June 10, 1992]

[↑ Back to Top](#)

#### **§180.1111 *Bacillus subtilis* GB03; exemption from the requirement of a tolerance.**

The biofungicide *Bacillus subtilis* GB03 is exempted from the requirement of a tolerance in or on all raw agricultural commodities when used in accordance with good agricultural practices.

[73 FR 50556, Aug. 27, 2008]

[↑ Back to Top](#)

#### **§180.1114 *Pseudomonas fluorescens* A506, *Pseudomonas fluorescens* 1629RS, and *Pseudomonas syringae* 742RS; exemptions from the requirement of a tolerance.**

The biological pesticides *Pseudomonas fluorescens* A506, *Pseudomonas fluorescens* 1629RS, and *Pseudomonas syringae* 742RS are exempted from the requirement of a tolerance in or on all raw agricultural commodities when applied as a frost protection agent or biological control agent to growing agricultural crops in accordance with good agricultural practices.

[57 FR 42700, Sept. 16, 1992]

[↑ Back to Top](#)

#### **§180.1118 *Spodoptera exigua* nuclear polyhedrosis virus; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the microbial pest control agent *Spodoptera exigua* nuclear polyhedrosis virus when used as a pesticide control agent on all raw agricultural commodities.

[58 FR 25784, Apr. 28, 1993]

[↑ Back to Top](#)

#### **§180.1119 Azadirachtin; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the biochemical azadirachtin, which is isolated from the berries of the Neem tree (*Azadirachta indica*), when used as a pesticide at 20 grams or less per acre on all raw agricultural commodities.

[58 FR 8696, Feb. 17, 1993]

[↑ Back to Top](#)

#### **§180.1120 *Streptomyces* sp. strain K61; exemption from the requirement of a tolerance.**

The biological pesticide *Streptomyces* sp. strain K61 is exempted from the requirement of a tolerance in or on all raw agricultural commodities when used as a fungicide for the treatment of seeds, cuttings, transplants, and plants of agricultural crops in accordance with good agricultural practices.

[58 FR 21403, Apr. 21, 1993]

[↑ Back to Top](#)

#### **§180.1121 Boric acid and its salts, borax (sodium borate decahydrate), disodium octaborate tetrahydrate, boric oxide (boric anhydride), sodium borate and sodium metaborate; exemptions from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the pesticidal chemical boric acid and its salts, borax (sodium borate decahydrate), disodium octaborate tetrahydrate, boric oxide (boric anhydride), sodium borate and sodium metaborate, in or on raw agricultural commodities when used as an active ingredient in insecticides, herbicides, or fungicides preharvest or postharvest in accordance with good agricultural practices.

[58 FR 44283, Aug. 20, 1993]

[↑ Back to Top](#)

#### **§180.1122 Inert ingredients of semiochemical dispensers; exemptions from the requirement of a tolerance.**

(a) All inert ingredients of semiochemical dispenser products formulated with, and/or contained in, dispensers made of polymeric matrix materials (including the monomers, plasticizers, dispersing agents, antioxidants, UV protectants, stabilizers, and other inert ingredients) are exempted from the requirement of a tolerance when used as carriers in pesticide formulations for application to growing crops only. These dispensers shall conform to the following specifications:

(1) Exposure must be limited to inadvertent physical contact only. The design of the dispenser must be such as to preclude any contamination by its components of the raw agricultural commodity (RAC) or processed foods/feeds derived from the commodity by virtue of its proximity to the RAC or as a result of its physical size.

(2) The dispensers must be applied discretely. This exemption does not apply to components of semiochemical formulations applied in a broadcast manner either to a crop field plot or to individual plants.

(b) A semiochemical dispenser is a single enclosed or semi-enclosed unit that releases semiochemical(s) into the surrounding atmosphere via volatilization and is applied in a manner to provide discrete application of the semiochemical(s) into the environment.

(c) Semiochemicals are chemicals that are emitted by plants or animals and modify the behavior of receiving organisms. These chemicals must be naturally occurring or substantially identical to naturally occurring semiochemicals.

[58 FR 64494, Dec. 8, 1993]

[↑ Back to Top](#)

#### **§180.1124 Arthropod pheromones; exemption from the requirement of a tolerance.**

Arthropod pheromones, as described in §152.25(b) of this chapter, when used in retrievably sized polymeric matrix dispensers are exempt from the requirement of a tolerance in or on all raw agricultural commodities when applied to growing crops only at a rate not to exceed 150 grams active ingredient/acre/year in accordance with good agricultural practices.

[59 FR 14759, Mar. 30, 1994]

[↑ Back to Top](#)

#### **§180.1126 Codlure, (E,E)-8,10-Dodecadien-1-ol; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the insect pheromone codlure, (E,E)-8,10-dodecadien-1-ol, on all raw agricultural commodities in accordance with the following prescribed conditions:

(a) Application shall be limited solely to codlure dispensers that conform to the following specifications:

(1) Commodity exposure must be limited to inadvertent physical contact. The design of the dispenser must be such as to preclude any exposure of its components to the raw agricultural commodity (RAC) or processed foods/feeds derived from the commodity due to its proximity to the RAC or as a result of its physical size. Dispensers must be of such size and construction that they are readily recognized post-application.

(2) The dispensers must be applied discretely, *i.e.*, placed in the field in easily perceived distinct locations in a manner that does not prevent later retrieval. This exemption does not apply to codlure applied in a broadcast manner either to a crop field plot or to individual plants.

(b) A codlure dispenser is a single enclosed or semi-enclosed unit that releases codlure into the surrounding atmosphere via volatilization and is applied in a manner to provide discrete application (*i.e.*, in easily perceived distinct locations in a manner that does not prevent later retrieval) of the codlure into the environment.

[59 FR 9931, Mar. 2, 1994]

[↑ Back to Top](#)

**§180.1127 Biochemical pesticide plant floral volatile attractant compounds: cinnamaldehyde, cinnamyl alcohol, 4-methoxy cinnamaldehyde, 3-phenyl propanol, 4-methoxy phenethyl alcohol, indole, and 1,2,4-trimethoxybenzene; exemptions from the requirement of a tolerance.**

Residues of the biochemical pesticide plant floral volatile attractant compounds: cinnamaldehyde, cinnamyl alcohol, 4-methoxy cinnamaldehyde, 3-phenyl propanol, 4-methoxy phenethyl alcohol, indole, and 1,2,4-trimethoxybenzene are exempt from the requirement of a tolerance in or on the following raw agricultural commodities: the following field crops—alfalfa, clover, cotton, dandelion, peanuts (including hay), rice, sorghum (milo), soybeans, sunflower, sweet potatoes, and wheat; the following vegetable crops—asparagus, beans (including forage hay), beets, carrots, celery, cole crops (cabbage, broccoli, brussels sprouts, cauliflower), collards (kale, mustard greens, turnip greens, kohlrabi), corn, fresh (field, sweet, pop, seed), corn fodder and forage, chinese cabbage, cowpeas, cucurbitis (cucumbers, squash, pumpkin), egg plant, endive (escarole), horseradish (radish, rutabagas, turnip roots), leafy greens (spinach, swiss chard), lettuce (head leaf), okra, parsley, parsnip, peas, peas with pods, peppers, potatoes, sugar beets, tomatoes; the following tree fruit, berry and nut crops—almonds, apples, apricots, berries (blackberry, boysenberry, dewberry, loganberry, raspberry), blueberry, cherry, citrus (grapefruit, kumquat, lemon, lime, orange, tangelo, and tangerine) cranberry, grapes, melons, (watermelon, honeydew, crenshaw, cantaloupe, casaba, persian), nectarines, pears, pecans, peaches, and strawberry as dispersed from the end-use product Corn Rootworm Bait<sup>®</sup>, a pesticidal bait, in accordance with the prescribed conditions in paragraph (a) of this section.

(a) Cumulative yearly application cannot exceed 20 grams of each floral attractant/acre/application.

(b) [Reserved]

[59 FR 15857, Apr. 5, 1994]

[↑ Back to Top](#)

**§180.1128 *Bacillus amyloliquefaciens* MBI600; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biofungicide *Bacillus amyloliquefaciens* MBI600 (antecedent *Bacillus subtilis* MBI600) in or on all food commodities, including residues resulting from post-harvest uses, when applied or used in accordance wi

[80 FR 78143, Dec. 16, 2015]

[↑ Back to Top](#)

**§180.1130 N-(n-octyl)-2-pyrrolidone and N-(n-dodecyl)-2-pyrrolidone; exemptions from the requirement of a tolerance.**

(a) *N*-(*n*-octyl)-2-pyrrolidone and *N*-(*n*-dodecyl)-2-pyrrolidone are exempt from the requirement of a tolerance when used as solvents in cotton defoliant formulations containing thidiazuron and diuron as active ingredients.

(b) *N*-(*n*-octyl)-2-pyrrolidone is exempt from the requirement of a tolerance when used as a solvent in formulations containing pyraflufen-ethyl as an active ingredient at a concentration not to exceed 20% by weight.

[79 FR 10682, Feb. 26, 2014]

[↑ Back to Top](#)

**§180.1135 *Pasteuria penetrans*; exemption from the requirement of a tolerance.**

The biological nematicide *Pasteuria penetrans* is exempted from the requirement of a tolerance in or on all raw agricultural commodities, except roots and tubers, when used as a nematicide in the production of fruits and vegetables in greenhouses.

[59 FR 66741, Dec. 28, 1994]

[↑ Back to Top](#)

**§180.1139 Sodium 5-nitroguaiacolate; exemption from the requirement of a tolerance.**

The biochemical sodium 5-nitroguaiacolate is exempted from the requirement of a tolerance when used as a plant growth regulator in end-use products at a concentration of 0.1% by weight and applied at an application rate of 20 g of a.i. per acre or less per application, in or on all food commodities.

[65 FR 66181, Nov. 3, 2000]

[↑ Back to Top](#)



**§180.1140 Sodium *o*-nitrophenolate; exemption from the requirement of a tolerance.**

The biochemical sodium *o*-nitrophenolate is exempted from the requirement of a tolerance when used as a plant growth regulator in end-use products at a concentration of 0.2% by weight and applied at an application rate of 20 g of a.i. per acre or less per application, in or on all food commodities.

[65 FR 66181, Nov. 3, 2000]

[↑ Back to Top](#)

**§180.1141 Sodium *p*-nitrophenolate; exemption from the requirement of a tolerance.**

The biochemical sodium *p*-nitrophenolate is exempted from the requirement of a tolerance when used as a plant growth regulator in end-use product at a concentration of 0.3% by weight and applied at an application rate of 20 g of a.i. per acre or less per application, in or on all food commodities.

[65 FR 66181, Nov. 3, 2000]

[↑ Back to Top](#)

**§180.1142 1,4-Dimethylnaphthalene; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the residues of the plant growth regulator, 1,4-dimethylnaphthalene (1,4-DMN), when applied postharvest to all sprouting root, tuber, and bulb crops in accordance with good agricultural practices.

[77 FR 68697, Nov. 16, 2012]

[↑ Back to Top](#)

**§180.1143 Methyl anthranilate; exemption from the requirement of a tolerance.**

Residues of methyl anthranilate, a biochemical pesticide, are exempt from the requirement of a tolerance in or on all food commodities, when used in accordance with good agricultural practices.

[67 FR 51088, Aug. 7, 2002]

[↑ Back to Top](#)

**§180.1145 *Pseudomonas syringae*; exemption from the requirement of a tolerance.**

*Pseudomonas syringae* is exempted from the requirement of a tolerance on all raw agricultural commodities when applied postharvest according to good agricultural practices.

[60 FR 12703, Mar. 8, 1995]

[↑ Back to Top](#)

**§180.1146 *Beauveria bassiana* Strain GHA; exemption from the requirement of a tolerance.**

*Beauveria bassiana* Strain GHA is exempted from the requirement of a tolerance in or on all raw agricultural commodities when applied to growing crops according to good agricultural practices.

[60 FR 18547, Apr. 12, 1995]

[↑ Back to Top](#)

**§180.1148 Occlusion Bodies of the Granulosis Virus of *Cydia pomonella*; tolerance exemption.**

An exemption from the requirement of a tolerance is established for residues of the microbial pest control agent Occlusion Bodies of the Granulosis Virus of *Cydia pomonella* (codling moth) in or on all raw agricultural commodities.

[60 FR 42450, Aug. 16, 1995]

[↑ Back to Top](#)

**§180.1149 Inclusion bodies of the multi-nuclear polyhedrosis virus of *Anagrapha falcifera*; exemption from the requirement of a tolerance.**

The microbial pest control agent inclusion bodies of the multi-nuclear polyhedrosis virus of *Anagrapha falcifera* is exempted from the requirement of a tolerance in or on all raw agricultural commodities when used to control certain lepidopteran pest species.

[60 FR 37020, July 19, 1995]

[↑ Back to Top](#)

#### **§180.1150 6-Benzyladenine; exemption from the requirement of a tolerance.**

The biochemical plant regulator 6-benzyladenine (6-BA) is exempt from the requirement of a tolerance in or on apple and pear when applied at a rate of ≤182 grams of active ingredient per acre per season, and in or on pistachio when applied at a rate of ≤60 grams of active ingredient per acre per season.

[72 FR 13179, Mar. 21, 2007]

[↑ Back to Top](#)

#### **§180.1153 Lepidopteran pheromones; exemption from the requirement of a tolerance.**

Lepidopteran pheromones that are naturally occurring compounds, or identical or substantially similar synthetic compounds, designated by an unbranched aliphatic chain (between 9 and 18 carbons) ending in an alcohol, aldehyde or acetate functional group and containing up to 3 double bonds in the aliphatic backbone, are exempt from the requirement of a tolerance in or on all raw agricultural commodities. This exemption only pertains to those situations when the pheromone is: Applied to growing crops at a rate not to exceed 150 grams active ingredient/acre/year in accordance with good agricultural practices; and applied as a post-harvest treatment to stored food commodities at a rate not to exceed 3.5 grams active ingredient/1,000 ft<sup>2</sup>/year (equivalent to 150 grams active ingredient/acre/year) in accordance with good agricultural practices.

[71 FR 45399, Aug. 9, 2006]

[↑ Back to Top](#)

#### **§180.1156 Cinnamaldehyde; exemption from the requirement of a tolerance.**

Cinnamaldehyde (3-phenyl-2-propenal) is exempted from the requirement of a tolerance in or on all food commodities, when used as a fungicide, insecticide, and algacide in accordance with good agricultural practices.

[64 FR 7804, Feb. 17, 1999; 64 FR 14099, Mar. 24, 1999]

[↑ Back to Top](#)

#### **§180.1157 Cytokinins; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of cytokinins (specifically: aqueous extract of seaweed meal and kinetin) in or on all food commodities when used as plant regulators on plants, seeds, or cuttings and on all food commodities after harvest in accordance with good agricultural practices.

[64 FR 31505, June 11, 1999]

[↑ Back to Top](#)

#### **§180.1158 Auxins; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of auxins (specifically: indole-3-acetic acid and indole-3-butyric acid) in or on all food commodities when used as plant regulators on plants, seeds, or cuttings and on all food commodities after harvest in accordance with good agricultural practices.

[64 FR 31505, June 11, 1999]

[↑ Back to Top](#)

#### **§180.1159 Pelargonic acid; exemption from the requirement of tolerances.**

(a) An exemption from the requirement of a tolerance is established for residues of pelargonic acid in or on all food commodities when used as a plant regulator on plants, seeds, or cuttings and on all food commodities after harvest in accordance with good agricultural practices.



(b) Pelargonic acid when used as an herbicide is exempt from the requirement of a tolerance on all plant food commodities provided that:

(1) Applications are not made directly to the food commodity except when used as a harvest aid or desiccant to: any root and tuber vegetable, bulb vegetable or cotton.

(2) When pelargonic acid is used as a harvest aid or desiccant, applications must be made no later than 24 hours prior to harvest.

(c) An exemption from the requirement of a tolerance is established for residues of pelargonic acid in or on all raw agricultural commodities and in processed commodities, when such residues result from the use of pelargonic acid as an antimicrobial treatment in solutions containing a diluted end-use concentration of pelargonic acid up to 170 ppm per application on food contact surfaces such as equipment, pipelines, tanks, vats, fillers, evaporators, pasteurizers and aseptic equipment in restaurants, food service operations, dairies, breweries, wineries, beverage and food processing plants.

[62 FR 28364, May 23, 1997, as amended at 64 FR 31505, June 11, 1999; 68 FR 7935, Feb. 19, 2003]

[↑ Back to Top](#)

#### **§180.1160 Jojoba oil; exemption from the requirement of a tolerance.**

The insecticide and spray tank adjuvant jojoba oil is exempted from the requirement of a tolerance in or on all raw agricultural commodities when applied at the rate of 1.0% or less of the final spray in accordance with good agricultural practices, provided the jojoba oil does not contain simmondsin, simmondsin-2-ferulate, and related conjugated organonitriles including demethyl simmondsin and didemethylsimmondsin.

[61 FR 2121, Jan. 25, 1996]

[↑ Back to Top](#)

#### **§180.1161 Clarified hydrophobic extract of neem oil; exemption from the requirement of a tolerance.**

Clarified hydrophobic extract of neem oil is exempt from the requirement of a tolerance on all food commodities when used as a botanical fungicide/insecticide/miticide.

[67 FR 43552, June 28, 2002]

[↑ Back to Top](#)

#### **§180.1162 Acrylate polymers and copolymers; exemption from the requirement of a tolerance.**

(a) Acrylate polymers and copolymers are exempt from the requirement of a tolerance when used as inert ingredients in pesticidal formulations applied to growing, raw agricultural commodities. This tolerance exemption covers the acrylate polymers/copolymers that are intrinsically safe and already listed in TSCA inventory or will meet the polymer tolerance exemption from requirements of premanufacturing notification under 40 CFR 723.250. Polymers exempted can be used as dispensers, resins, fibers, and beads, as long as the fibers, beads and resins particle sizes are greater than 10 microns and insoluble in water. This exemption pertains to the acrylate polymers/copolymers used as inert ingredients for sprayable and dispenser pesticide formulations that are applied on food crops. Any acrylate polymers/copolymers used for encapsulating material must be cleared as an inert ingredient when used in pesticide formulation applied on food crops.

(b) For the purposes of this exemption, acrylate polymers/copolymers used as inert ingredients in an end-use formulation must meet the definition for a polymer as given in 40 CFR 723.250(b), are not automatically excluded by 40 CFR 723.250(d), and meet the tolerance exemption criteria in 40 CFR 723.250(e)(1), 40 CFR 723.250(e)(2) or 40 CFR 723.250(e)(3). Therefore, acrylate polymers and copolymers that are already listed in the TSCA inventory or will meet the polymer tolerance exemption under 40 CFR 723.250 as amended on March 29, 1995 are covered by this exemption.

[61 FR 6551, Feb. 21, 1996]

[↑ Back to Top](#)

#### **§180.1163 Killed *Myrothecium verrucaria*; exemption from the requirement of a tolerance.**

Killed *Myrothecium verrucaria* is exempted from the requirement of a tolerance in or on all raw agricultural commodities when applied as a pre-seed or pre- or post-planting soil treatment alone or mixed with water and the mixed suspension be applied through drip or border irrigation systems and the indicator mycotoxin levels do not exceed 15 ppm.

[61 FR 11315, Mar. 20, 1996, as amended at 61 FR 58332, Nov. 14, 1996]

[↑ Back to Top](#)

**§180.1165 Capsaicin; exemption from the requirement of a tolerance.**

Capsaicin is exempt from the requirement of a tolerance in or on all food commodities when used in accordance with approved label rates and good agricultural practice.

[63 FR 39521, July 23, 1998]

[↑ Back to Top](#)

**§180.1167 Allyl isothiocyanate as a component of food grade oil of mustard; exemption from the requirement of a tolerance.**

The insecticide and repellent Allyl isothiocyanate is exempt from the requirement of a tolerance for residues when used as a component of food grade oil of mustard, in or on all raw agricultural commodities, when applied according to approved labeling.

[61 FR 24894, May 17, 1996]

[↑ Back to Top](#)

**§180.1176 Sodium bicarbonate; exemption from the requirement of a tolerance.**

The biochemical pesticide sodium bicarbonate is exempted from the requirement of a tolerance in or on all raw agricultural commodities when applied as a fungicide or post-harvest fungicide in accordance with good agricultural practices.

[61 FR 67473, Dec. 23, 1996]

[↑ Back to Top](#)

**§180.1177 Potassium bicarbonate; exemption from the requirement of a tolerance.**

The biochemical pesticide potassium bicarbonate is exempted from the requirement of a tolerance in or on all raw agricultural commodities when applied as a fungicide or post-harvest fungicide in accordance with good agricultural practices.

[61 FR 67473, Dec. 23, 1996]

[↑ Back to Top](#)

**§180.1178 Formic acid; exemption from the requirement of a tolerance.**

The pesticide formic acid is exempted from the requirement of a tolerance in or on honey and honeycomb when used to control tracheal mites and suppress varroa mites in bee colonies, and applied in accordance with label use directions.

[74 FR 26535, June 3, 2009]

[↑ Back to Top](#)

**§180.1179 Plant extract derived from *Opuntia lindheimeri*, *Quercus falcata*, *Rhus aromatica*, and *Rhizophoria mangle*; exemption from the requirement of a tolerance.**

The biochemical pesticide plant extract derived from *Opuntia lindheimeri*, *Quercus falcata*, *Rhus aromatica*, and *Rhizophoria mangle* is exempted from the requirement of a tolerance in or on all raw agricultural commodities when applied as a nematicide/plant regulator in accordance with good agricultural practices.

[62 FR 24842, May 7, 1997]

[↑ Back to Top](#)

**§180.1180 Kaolin; exemption from the requirement of a tolerance.**

Kaolin is exempted from the requirement of a tolerance for residues when used on or in food commodities to aid in the control of insects, fungi, and bacteria (food/feed use).

[81 FR 34907, June 1, 2016]

[↑ Back to Top](#)

**§180.1181 *Bacillus cereus* strain BPO1; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance for residues of the *Bacillus cereus* strain BPO1 in or on all raw agricultural commodities when applied/used in accordance with label directions.

[67 FR 70017, Nov. 20, 2002]

[↑ Back to Top](#)

**§180.1187 L-glutamic acid; exemption from the requirement of a tolerance.**

L-glutamic acid is exempt from the requirement of a tolerance on all food commodities when used in accordance with good agricultural practices.

[66 FR 33198, June 21, 2001]

[↑ Back to Top](#)

**§180.1188 Gamma aminobutyric acid; exemption from the requirement of a tolerance.**

Gamma aminobutyric acid is exempt from the requirement of a tolerance on all food commodities when used in accordance with good agricultural practices.

[66 FR 33198, June 21, 2001]

[↑ Back to Top](#)

**§180.1189 Methyl salicylate; exemption from the requirement of a tolerance.**

The biochemical pesticide methyl salicylate is exempt from the requirement of a tolerance for residues in or on food or feed when used as an insect repellent in food packaging and animal feed packaging at an application rate that does not exceed 0.2 mg of methyl salicylate per square inch of packaging materials.

[62 FR 61639, Nov. 19, 1997]

[↑ Back to Top](#)

**§180.1191 Ferric phosphate; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biochemical pesticide, ferric phosphate (FePO<sub>4</sub>, CAS No. 11045-86-0) in or on all food commodities.

[62 FR 56105, Oct. 29, 1997]

[↑ Back to Top](#)

**§180.1193 Potassium dihydrogen phosphate; exemption from the requirement of a tolerance.**

Potassium dihydrogen phosphate is exempted from the requirement of a tolerance in or on all food commodities when applied as a fungicide in accordance with good agricultural practices.

[63 FR 43085, Aug. 12, 1998]

[↑ Back to Top](#)

**§180.1195 Titanium dioxide.**

(a) Titanium dioxide (CAS Reg. No. 13463-67-7) is exempted from the requirement of a tolerance for residues in or on growing crops, when used as an inert ingredient (UV protectant) in microencapsulated formulations of the insecticide lambda cyhalothrin at no more than 3.0% by weight of the formulation and as an inert ingredient (UV stabilizer) at no more than 5% in pesticide formulations containing the active ingredient napropamide.

(b) Residues of titanium dioxide (CAS Reg. No. 13463-67-7) in honey are exempted from the requirement of a tolerance, when used as an inert ingredient (colorant) in pesticide formulations intended for varroa mite control around bee hives at no more than 0.1% by weight in the pesticide formulation.

(c) Titanium dioxide (CAS Reg. No. 13463-67-7) is exempted from the requirement of a tolerance for residues in or on growing crops, when used as an inert ingredient (colorant) in foliar applications at no more than 45% of the formulations

containing anthraquinone.

[82 FR 30997, July 5, 2017, as amended at 83 FR 8619, Feb. 28, 2018]

[↑ Back to Top](#)

#### **§180.1196 Peroxyacetic acid; exemption from the requirement of a tolerance.**

(a) An exemption from the requirement of a tolerance is established for residues of peroxyacetic acid in or on all food commodities, when such residues result from the use of peroxyacetic acid as an antimicrobial treatment in solutions containing a diluted end use concentration of peroxyacetic acid up to 100 ppm per application on fruits, vegetables, tree nuts, cereal grains, herbs, and spices.

(b) An exemption from the requirement of a tolerance is established for residues of peroxyacetic acid, in or on all food commodities when used in sanitizing solutions containing a diluted end-use concentration of peroxyacetic acid up to 500 ppm, and applied to tableware, utensils, dishes, pipelines, tanks, vats, fillers, evaporators, pasteurizers, aseptic equipment, milking equipment, and other food processing equipment in food handling establishments including, but not limited to dairies, dairy barns, restaurants, food service operations, breweries, wineries, and beverage and food processing plants.

(c) An exemption from the requirement of a tolerance is established for residues of the biochemical pesticide peroxyacetic acid and its metabolites and degradates, including hydrogen peroxide and acetic acid, in or on all food commodities, when used in accordance with good agricultural practices.

[74 FR 26535, June 3, 2009, as amended at 76 FR 11969, Mar. 4, 2011]

[↑ Back to Top](#)

#### **§180.1197 Hydrogen peroxide; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of hydrogen peroxide in or on all food commodities at the rate of  $\leq 1\%$  hydrogen peroxide per application on growing and postharvest crops.

[67 FR 41844, June 20, 2002]

[↑ Back to Top](#)

#### **§180.1198 *Gliocladium catenulatum* strain J1446; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticide, *Gliocladium catenulatum* strain J1446 when used in or on all food commodities.

[63 FR 37288, July 10, 1998]

[↑ Back to Top](#)

#### **§180.1199 Lysophosphatidylethanolamine (LPE); exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biochemical pesticide lysophosphatidylethanolamine in or on all food commodities.

[67 FR 17636, Apr. 11, 2002]

[↑ Back to Top](#)

#### **§180.1202 *Bacillus sphaericus*; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticides, *Bacillus sphaericus* when used in or on all food crops.

[63 FR 48597, Sept. 11, 1998]

[↑ Back to Top](#)

#### **§180.1204 Harpin protein; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of individual harpin proteins that meet specified physiochemical and toxicological criteria when used as biochemical pesticides on all food commodities to enhance

plant growth, quality and yield, to improve overall plant health, and to aid in pest management. The physiochemical and toxicological criteria identifying harpin proteins are as follows:

(a) Consists of a protein less than 100 kD in size, that is acidic (pI<7.0), glycine rich (>10%), and contains no more than one cystine residue.

(b) The source(s) of genetic material encoding the protein are bacterial plant pathogens not known to be mammalian pathogens.

(c) Elicits the hypersensitive response (HR) which is characterized as rapid, localized cell death in plant tissue after infiltration of harpin into the intercellular spaces of plant leaves.

(d) Possesses a common secondary structure consisting of  $\alpha$  and  $\beta$  units that form an HR domain.

(e) Is heat stable (retains HR activity when heated to 65 °C for 20 minutes).

(f) Is readily degraded by a proteinase representative of environmental conditions (no protein fragments >3.5 kD after 15 minutes degradation with Subtilisin A).

(g) Exhibits a rat acute oral toxicity (LD<sub>50</sub>) of greater than 5,000 mg product/kg body weight.

[69 FR 24996, May 5, 2004]

[↑ Back to Top](#)

#### **§180.1205 *Beauveria bassiana* ATCC #74040; exemption from the requirements of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the insecticide *Beauveria bassiana* (ATCC #74040) in or on all food commodities when applied or used as ground and aerial foliar sprays for use only on terrestrial crops.

[64 FR 22796, Apr. 28, 1999]

[↑ Back to Top](#)

#### **§180.1206 *Aspergillus flavus* AF36; exemption from the requirement of a tolerance.**

(a) An exemption from the requirement of a tolerance is established for residues of the microbial pesticide *Aspergillus flavus* AF36 in or on cotton, gin byproducts; cotton, hulls; cotton, meal; cotton, refined oil; cotton, undelinted seed.

(b) An exemption from the requirement of a tolerance is established for residues of *Aspergillus flavus* AF36 in or on pistachio when applied as an antifungal agent and used in accordance with good agricultural practices.

(c) An exemption from the requirement of a tolerance is established for residues of *Aspergillus flavus* AF36 in or on corn, field, forage; corn, field, grain; corn, field, stover; corn, field, aspirated grain fractions; corn, sweet, kernel plus cob with husk removed; corn, sweet, forage; corn, sweet, stover; corn, pop, grain; and corn, pop, stover, when applied/used as an antifungal agent.

(d) *Section 18 emergency exemptions.* A time-limited exemption from the requirement of a tolerance is established for residues of *Aspergillus flavus* AF36, in or on dried figs, resulting from use of the pesticide pursuant to a FIFRA section 18 emergency exemption. This time-limited exemption from the requirement of a tolerance for residues of *Aspergillus flavus* AF36 in or on dried figs will expire and is revoked on December 31, 2017.

(e) An exemption from the requirement of a tolerance is established for residues of *Aspergillus flavus* AF36 in or on almond and fig when used in accordance with label directions and good agricultural practices.

[68 FR 41541, July 14, 2003, as amended at 72 FR 28871, May 23, 2007; 72 FR 72965, Dec. 26, 2007; 74 FR 26535, 26546, June 3, 2009; 76 FR 16301, Mar. 23, 2011; 77 FR 14291, Mar. 9, 2012; 81 FR 1894, Jan. 14, 2016; 82 FR 14632, Mar. 22, 2017]

[↑ Back to Top](#)

#### **§180.1207 N-acyl sarcosines and sodium N-acyl sarcosinates; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the following substances when used as inert ingredients (surfactants) at levels not to exceed 10% in pesticide formulations containing glyphosate:

Name	CAS Reg. No.
N-acyl sarcosines	

N-cocoyl sarcosine mixture	68411-97-2
N-lauroyl sarcosine	97-78-9
N-myristoyl sarcosine	52558-73-3
N-oleoyl sarcosine	110-25-8
N-stearoyl sarcosine	142-48-3
Sodium N-acyl sarcosinates	
N-cocoyl sarcosine sodium salt mixture	61791-59-1
N-methyl-N-(1-oxo-9-octodecenyl) glycine	3624-77-9
N-methyl-N-(1-oxododecyl) glycine	137-16-6
N-methyl-N-(1-oxooctadecyl) glycine	5136-55-0
N-methyl-N-(1-oxotetradecyl) glycine	30364-51-3

[64 FR 68046, Dec. 6, 1999]

[↑ Back to Top](#)

**§180.1209 *Bacillus subtilis* strain QST 713 and strain QST 713 variant soil; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticides *Bacillus subtilis* strain QST 713 and strain QST 713 variant soil when used in or on all food commodities.

[77 FR 73937, Dec. 12, 2012]

[↑ Back to Top](#)

**§180.1210 Phosphorous acid; exemption from the requirement of a tolerance.**

(a) An exemption from the requirement of a tolerance is established for residues of phosphorous acid and its ammonium, sodium and potassium salts in or on all food commodities when used as an agricultural fungicide and in or on potatoes when applied as a post-harvest treatment at 35,600 ppm or less phosphorous acid.

(b) An exemption from the requirement of a tolerance is established for residues of calcium salts of phosphorous acid, including its metabolites and degradates, in or on all food commodities when used as a fungicide or as a systemic acquired resistance (SAR) inducer.

[83 FR 3605, Jan. 26, 2018]

[↑ Back to Top](#)

**§180.1212 *Pseudomonas chlororaphis* Strain 63-28; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticide *Pseudomonas chlororaphis* Strain 63-28 in or on all food commodities.

[66 FR 53346, Oct. 22, 2001]

[↑ Back to Top](#)

**§180.1213 *Coniothyrium minitans* strain CON/M/91-08; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticide *Coniothyrium minitans* strain CON/M/91-08 when used in or on all food commodities.

[66 FR 16874, Mar. 28, 2001]

[↑ Back to Top](#)

**§180.1218 Indian Meal Moth Granulosis Virus; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticide Indian Meal Moth Granulosis Virus when used in or on all food commodities.

[68 FR 55875, Sept. 29, 2003]

[↑ Back to Top](#)

**§180.1219 Foramsulfuron; exemption from the requirement of a tolerance.**

The pesticide foramsulfuron is exempted from the requirement of a tolerance in corn, field, grain/corn, field, forage/ corn, field, stover/corn, pop, grain/corn, pop, forage/corn, pop, stover; corn, sweet, forage; corn, sweet, kernel plus cob with husks removed; corn, sweet, stover when applied as a herbicide in accordance with good agricultural practices.

[74 FR 26535, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1220 1-Methylcyclopropene; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the 1-Methylcyclopropene in or on fruits and vegetables when:

- (a) Used as a post harvest plant growth regulator, *i.e.*, for the purpose of inhibiting the effects of ethylene.
- (b) Applied or used outdoors for pre-harvest treatments.

[73 FR 19150, Apr. 9, 2008]

[↑ Back to Top](#)

#### **§180.1222 Sucrose octanoate esters; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of sucrose octanoate esters [( $\alpha$ -D-glucopyranosyl- $\beta$ -D-fructofuranosyl-octanoate), mono-, di-, and triesters of sucrose octanoate] in or on all food commodities when used in accordance with good agricultural practices.

[67 FR 60152, Sept. 25, 2002]

[↑ Back to Top](#)

#### **§180.1223 Imazamox; exemption from the requirement of a tolerance.**

The herbicide imazamox, ( $\pm$ ) 2, -[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(methoxymethyl)-3-pyridinecarboxylic acid, is exempt from the requirement of a tolerance on all food commodities when applied as a herbicide in accordance with good agricultural practices.

[68 FR 7433, Feb. 14, 2003]

[↑ Back to Top](#)

#### **§180.1224 *Bacillus pumilus* GB34; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticide *Bacillus pumilus* GB34 when used as a seed treatment in or on all food commodities. An exemption is also granted for such residues on treated but unplanted soybean seeds.

[69 FR 76625, Dec. 22, 2004]

[↑ Back to Top](#)

#### **§180.1225 Decanoic acid; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of decanoic acid in or on all raw agricultural commodities and in processed commodities, when such residues result from the use of decanoic acid as an antimicrobial treatment in solutions containing a diluted end-use concentration of decanoic acid (up to 170 ppm per application) on food contact surfaces such as equipment, pipelines, tanks, vats, fillers, evaporators, pasteurizers and aseptic equipment in restaurants, food service operations, dairies, breweries, wineries, beverage and food processing plants.

[68 FR 7939, Feb. 19, 2003; 68 FR 17308, Apr. 9, 2003]

[↑ Back to Top](#)

#### **§180.1226 *Bacillus pumilus* strain QST2808; temporary exemption from the requirement of a tolerance.**

A temporary exemption from the requirement of a tolerance is established for residues of the microbial pesticide *Bacillus pumilus* strain QST2808 when used in or on all agricultural commodities when applied/used in accordance with label directions.



[68 FR 36480, June 18, 2003]

[↑ Back to Top](#)

**§180.1228 Diallyl sulfides; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of diallyl sulfides when used in/on garlic, leeks, onions, and shallots.

[68 FR 40808, July 9, 2003]

[↑ Back to Top](#)

**§180.1230 Ferrous sulfate; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of ferrous sulfate.

[70 FR 33363, June 8, 2005]

[↑ Back to Top](#)

**§180.1231 Lime; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of lime.

[70 FR 33363, June 8, 2005]

[↑ Back to Top](#)

**§180.1232 Lime-sulfur; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of lime-sulfur.

[70 FR 33363, June 8, 2005]

[↑ Back to Top](#)

**§180.1233 Potassium sorbate; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of potassium sorbate.

[70 FR 33363, June 8, 2005]

[↑ Back to Top](#)

**§180.1234 Sodium carbonate; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of sodium carbonate.

[70 FR 33363, June 8, 2005]

[↑ Back to Top](#)

**§180.1235 Sodium hypochlorite; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of sodium hypochlorite.

[70 FR 33363, June 8, 2005]

[↑ Back to Top](#)

**§180.1236 Sulfur; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of sulfur.

[70 FR 33363, June 8, 2005]

[↑ Back to Top](#)

**§180.1237 Sodium metasilicate; exemption from the requirement of a tolerance.**



(a) An exemption from the requirement of a tolerance is established for residues of sodium metasilicate in or on all food commodities when used in accordance with approved label rates and good agricultural practices as a plant desiccant, so long as the sodium metasilicate does not exceed 4% by weight in aqueous solution.

(b) An exemption from the requirement of a tolerance is established for residues of sodium metasilicate in or on all food commodities when used in accordance with approved label rates and good agricultural practices as an insecticide and fungicide, so long as the sodium metasilicate does not exceed 2.41% by weight in aqueous solution.

[71 FR 19441, Apr. 14, 2006]

[↑ Back to Top](#)

#### **§180.1240 Thymol; exemption from the requirement of a tolerance.**

(a) Time-limited exemptions from the requirement of a tolerance are established for residues of thymol on honey and honeycomb in connection with use of the pesticide under section 18 emergency exemptions granted by the EPA. These time-limited exemptions from the requirement of a tolerance for residues of thymol will expire and are revoked on June 30, 2007.

(b) An exemption from the requirement of a tolerance for residues of the thymol (as present in thyme oil) in or on food commodities when applied/used in/on public eating places, dairy processing equipment, and/or food processing equipment and utensils.

[70 FR 37696, June 30, 2005, as amended at 71 FR 2895, Jan. 18, 2006; 74 FR 12617, Mar. 25, 2009]

[↑ Back to Top](#)

#### **§180.1243 *Bacillus subtilis* var. *amyloliquefaciens* strain FZB24; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance for residues of the *Bacillus subtilis* var. *amyloliquefaciens* strain FZB24 in or on all agricultural commodities when applied/used in accordance with label directions.

[68 FR 44640, July 30, 2003]

[↑ Back to Top](#)

#### **§180.1244 Ammonium bicarbonate; exemption from the requirement of a tolerance.**

An exemption from the requirement of tolerance is established for residues of ammonium bicarbonate used in or on all food commodities when used in accordance with good agricultural practices.

[69 FR 13745, Mar. 24, 2004]

[↑ Back to Top](#)

#### **§180.1245 Rhamnolipid biosurfactant; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of rhamnolipid biosurfactant when used in accordance with good agricultural practices as a fungicide in or on all food commodities.

[69 FR 16800, Mar. 31, 2004]

[↑ Back to Top](#)

#### **§180.1246 Yeast Extract Hydrolysate from *Saccharomyces cerevisiae*; exemption from the requirement of a tolerance.**

This regulation establishes an exemption from the requirement of a tolerance for residues of the biochemical pesticide Yeast Extract Hydrolysate from *Saccharomyces cerevisiae* on all food commodities when applied/used for the management of plant diseases.

[69 FR 9958, Mar. 3, 2004]

[↑ Back to Top](#)

#### **§180.1248 Exemption of citronellol from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biochemical pesticide citronellol in or on all food commodities.

[69 FR 23146, Apr. 28, 2004]

[↑ Back to Top](#)

**§180.1250 C8, C10, and C12 fatty acid monoesters of glycerol and propylene glycol; exemption from the requirement of a tolerance.**

The C8, C10, and C12 straight-chain fatty acid monoesters of glycerol (glycerol monocaprylate, glycerol monocaprinate, and glycerol monolaurate) and propylene glycol (propylene glycol monocaprylate, propylene glycol monocaprinate, and propylene glycol monolaurate) are exempt from the requirement of a tolerance in or on all food commodities when used in accordance with approved label rates and good agricultural practice.

[69 FR 34944, June 23, 2004]

[↑ Back to Top](#)

**§180.1251 Geraniol; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biochemical pesticide geraniol in or on all food commodities.

[69 FR 23151, Apr. 28, 2004]

[↑ Back to Top](#)

**§180.1253 *Streptomyces lydicus* WYEC 108; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticide *Streptomyces lydicus* WYEC 108 when used in or on all agricultural commodities when applied/used in accordance with label directions.

[69 FR 31301, June 3, 2004]

[↑ Back to Top](#)

**§180.1254 *Aspergillus flavus* NRRL 21882; exemption from the requirement of a tolerance.**

(a) An exemption from the requirement of a tolerance is established for residues of *Aspergillus flavus* NRRL 21882 on peanut; peanut, hay; peanut, meal; and peanut, refined oil.

(b) An exemption from the requirement of a tolerance is established for residues of *Aspergillus flavus* NRRL 21882 on corn, field, forage; corn, field, grain; corn, field, stover; corn, field, aspirated grain fractions; corn, sweet, kernel plus cob with husk removed; corn, sweet, forage; corn, sweet, stover; corn, pop, grain; and corn, pop, stover.

[75 FR 6576, Feb. 10, 2010]

[↑ Back to Top](#)

**§180.1255 *Bacillus pumilus* strain QST 2808; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticide *Bacillus pumilus* strain QST 2808 when used in or on all agricultural commodities when applied/used in accordance with label directions.

[69 FR 63954, Nov. 3, 2004]

[↑ Back to Top](#)

**§180.1257 *Paecilomyces lilacinus* strain 251; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticide *Paecilomyces lilacinus* strain 251 when used in or on all agricultural commodities when applied/used in accordance with label directions.

[70 FR 19283, Apr. 13, 2005]

[↑ Back to Top](#)

**§180.1258 Acetic acid; exemption from the requirement of a tolerance.**

(a) An exemption from the requirement of a tolerance is established for residues of the biochemical pesticide acetic acid when used as a preservative on post-harvest agricultural commodities intended for animal feed, including Alfalfa, seed; alfalfa,

hay; barley, grain; bermudagrass, hay; bluegrass, hay; bromegrass, hay; clover, hay; corn, field, grain; corn, pop, grain; cowpea, hay; fescue, hay; lespedeza, hay; lupin; oat, grain; orchardgrass, hay; peanut, hay; timothy, hay; vetch, hay; and wheat, grain, or commodities described as grain or hay.

(b) An exemption from the requirement of a tolerance is established for residues of acetic acid in or on all food crops resulting from unintentional spray and drift to non-target vegetation including non-food, food and feed crops when used as a non-selective contact herbicide spray.

[75 FR 40741, July 14, 2010]

[↑ Back to Top](#)

#### **§180.1259 *Reynoutria sachalinensis* extract; exemption from the requirement of a tolerance.**

Residues of the biochemical pesticide *Reynoutria sachalinensis* extract, when derived from the whole plant extract, are exempt from the requirement of a tolerance in or on all food commodities.

[70 FR 55277, Sept. 21, 2005]

[↑ Back to Top](#)

#### **§180.1260 *Muscodor albus* QST 20799 and the volatiles produced on rehydration; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established on all food/feed commodities, for residues of *Muscodor albus* QST 20799, and the volatiles produced on its rehydration, when the pesticide is used for all agricultural applications, including seed, propagule and post harvest treatments.

[70 FR 56576, Sept. 28, 2005]

[↑ Back to Top](#)

#### **§180.1261 *Xanthomonas campestris* pv. *vesicatoria* and *Pseudomonas syringae* pv. *tomato* specific Bacteriophages.**

An exemption from the requirement of a tolerance is established for residues of *Xanthomonas campestris* pv. *vesicatoria* and *Pseudomonas syringae* pv. *tomato* specific bacteriophages in or on pepper and tomato.

[74 FR 26536, June 3, 2009]

[↑ Back to Top](#)

#### **§180.1262 Sorbitol octanoate; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of sorbitol octanoate in or on all food commodities when used in accordance with label directions.

[71 FR 4518, Jan. 27, 2006]

[↑ Back to Top](#)

#### **§180.1263 Tetrahydrofurfuryl alcohol; exemption from the requirement of a tolerance.**

Tetrahydrofurfuryl alcohol (THFA, CAS Reg. No. 97-99-4) is exempt from the requirement of a tolerance in or on all raw agricultural commodities when used in accordance with good agricultural practices as an inert ingredient applied only:

- (a) For use as a seed treatment.
- (b) For applications prior to planting and at the time of planting.
- (c) For use on cotton.
- (d) For use in herbicides with one application to wheat, buckwheat, barley, oats, rye, sorghum, triticale, rice, and wild rice prior to the pre-boot stage.
- (e) For use in herbicides with two applications to field corn and popcorn up to 36 inches tall (V8 stage).
- (f) For use in herbicides with two applications to canola prior to the early bolting stage.

(g) For use in herbicides with two applications to soybeans prior to the bloom growth stage.

[71 FR 45415, Aug. 9, 2006, as amended at 83 FR 53002, Oct. 19, 2018]

[↑ Back to Top](#)

**§180.1267 *Pantoea agglomerans* strain C9-1; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Pantoea agglomerans* strain C9-1 when used on apples and pears.

[71 FR 24596, Apr. 26, 2006]

[↑ Back to Top](#)

**§180.1268 Potassium silicate; exemption from the requirement of a tolerance.**

Potassium silicate is exempt from the requirement of a tolerance in or on all food commodities so long as the potassium silicate is not applied at rates exceeding 1% by weight in aqueous solution and when used in accordance with good agricultural practices.

[71 FR 34272, June 14, 2006]

[↑ Back to Top](#)

**§180.1269 *Bacillus mycoides* isolate J; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Bacillus mycoides* isolate J in or on all agricultural commodities when used in accordance with label directions and good agricultural practices.

[81 FR 67922, Oct. 3, 2016]

[↑ Back to Top](#)

**§180.1270 Isophorone; exemption from the requirement of a tolerance.**

Isophorone (CAS Reg. No. 78-59-1) is exempt from the requirement of a tolerance when used as an inert ingredient in pesticide formulations applied to beets, ginseng, rice, spinach, sugar beets, and Swiss chard.

[71 FR 45408, Aug. 9, 2006]

[↑ Back to Top](#)

**§180.1271 Eucalyptus oil; exemption from the requirement of a tolerance.**

An exemption from the requirement of tolerance is established for residues of eucalyptus oil in or on honey, honeycomb, and honeycomb with honey when used at 2g or less eucalyptus oil per hive, where the eucalyptus oil contains 80% or more eucalyptol.

[71 FR 53979, Sept. 13, 2006]

[↑ Back to Top](#)

**§180.1272 *Pantoea agglomerans* strain E325; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Pantoea agglomerans* strain E325 when used on apples and pears.

[71 FR 54933, Sept. 20, 2006]

[↑ Back to Top](#)

**§180.1273 *Beauveria bassiana* HF23; exemption from the requirement of a tolerance.**

Residues of *Beauveria bassiana* HF23 are exempt from the requirement of a tolerance on all food/feed commodities, when the pesticide is used for the treatment of chicken and livestock facilities, including the treatment of chicken and livestock manure.

[75 FR 10190, Mar. 5, 2010]

[↑ Back to Top](#)

**§180.1274 Tris (2-ethylhexyl) phosphate; exemption from the requirement of a tolerance.**

Tris (2-ethylhexyl) phosphate (TEHP, CAS Reg. No. 78-42-2) is exempt from the requirement of a tolerance for residues in grain, aspirated fractions; barley, grain, barley, hay, barley, straw; wheat, grain; wheat, forage; wheat, hay; wheat, straw when used under the following conditions:

- (a) The use is in accordance with good agricultural practices;
- (b) Tris (2-ethylhexyl) phosphate is used as an inert ingredient in pesticide formulations with the active ingredients pinoxaden, clodinafop-propargyl, and tralkoxydium;
- (c) Tris (2-ethylhexyl) phosphate is applied no more than twice per season; and
- (d) The applications occur no later than the pre-boot stage (prior to formation of edible grain).

[72 FR 5624, Feb. 7, 2007, as amended at 74 FR 26536, June 3, 2009]

[↑ Back to Top](#)

**§180.1275 Pythium oligandrum DV 74; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established on all food/feed commodities for residues of *Pythium oligandrum* DV 74 when the pesticide is used on food crops.

[81 FR 34907, June 1, 2016]

[↑ Back to Top](#)

**§180.1276 Tobacco mild green mosaic tobamovirus strain U2; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Tobacco mild green mosaic tobamovirus* strain U2 in or on all commodities of crop groups 17 and 18 when applied as a post-emergent herbicide and used in accordance with label directions and good agricultural practices.

[79 FR 75756, Dec. 19, 2014]

[↑ Back to Top](#)

**§180.1277 Dibasic esters; exemption from the requirement of a tolerance.**

Dibasic esters (CAS Reg. No. 95481-62-2) is exempted from the requirement of a tolerance for residues when used as an inert ingredient (solvent and/or anti-freeze) at 10% W/W or less in microencapsulated pesticide formulations with the active ingredient cyfluthrin.

[73 FR 10398, Feb. 27, 2008]

[↑ Back to Top](#)

**§180.1278 Quillaja saponaria extract (saponins); exemption from the requirement of a tolerance.**

Residues of the biochemical pesticide *Quillaja saponaria* extract (saponins) are exempt from the requirement of a tolerance in or on all food commodities.

[72 FR 41935, Aug. 1, 2007]

[↑ Back to Top](#)

**§180.1280 Poly(hexamethylenebiguanide) hydrochloride (PHMB); exemption from the requirement of a tolerance.**

Poly(hexamethylenebiguanide) hydrochloride (PHMB)(CAS Reg. No. 32289-58-0) is exempt from the requirement of a tolerance for residues of the antimicrobial in or on all food commodities when the residues are the result of the lawful application of a food contact surface sanitizer containing PHMB at 550 parts per million (ppm).

[73 FR 1517, Jan. 9, 2008]

[↑ Back to Top](#)

**§180.1281 S-Absciscic Acid, (S)-5-(1-hydroxy-2,6,6-trimethyl-4-oxo-1-cyclohex-2-enyl)-3-methyl-penta-(2Z,4E)-dienoic Acid; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of S-Absciscic Acid in or on all food commodities when applied or used preharvest as a plant regulator.

[75 FR 11744, Mar. 12, 2010]

[↑ Back to Top](#)

**§180.1282 Bacillus firmus I-1582; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established in/on all food/feed commodities, for residues of *Bacillus firmus* I-1582 when used as a soil application or seed treatment.

[73 FR 25528, May 7, 2008]

[↑ Back to Top](#)

**§180.1283 (Z)-7,8-epoxy-2-methyloctadecane (Disparlure); exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of (Z)-7,8-epoxy-2-methyloctadecane on all food and feed crops that occur when it is used to treat trees, shrubs, and pastures and such use results in unintentional spray and drift to non-target vegetation including non-food, food, and feed crops. This active ingredient is also known as Disparlure.

[73 FR 33714, June 13, 2008]

[↑ Back to Top](#)

**§180.1284 Ammonium salts of higher fatty acids (C<sub>8</sub>-C<sub>18</sub> saturated; C<sub>8</sub>-C<sub>12</sub> unsaturated); exemption from the requirement of a tolerance.**

Ammonium salts of C<sub>8</sub>-C<sub>18</sub> saturated and C<sub>8</sub>-C<sub>12</sub> unsaturated higher fatty acids are exempted from the requirement of a tolerance for residues in or on all food commodities when used in accordance with good agricultural practice.

[74 FR 47457, Sept. 16, 2009]

[↑ Back to Top](#)

**§180.1285 Polyoxin D zinc salt; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the residues of polyoxin D zinc salt in or on all food commodities when applied as a fungicide and used in accordance with good agricultural practices.

[77 FR 56133, Sept. 12, 2012]

[↑ Back to Top](#)

**§180.1287 Extract of *Chenopodium ambrosioides* near *ambrosioides*; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the residues of Extract of *Chenopodium ambrosioides* near *ambrosioides* when used as an insecticide/acaricide on all food commodities.

[74 FR 634, Jan. 7, 2009]

[↑ Back to Top](#)

**§180.1288 Tristyrylphenol ethoxylates; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of poly(oxy-1,2-ethanediyl), α-[2,4,6-tris(1-phenylethyl)phenyl]-ω-hydroxy-, (CAS Reg. No. 70559-25-0) and poly(oxy-1,2-ethanediyl), α-[tris(1-phenylethyl)phenyl]-ω-hydroxy-, (CAS Reg. No. 99734-09-5) on citrus crops, group 10, when used as inert ingredients under the following conditions:

- (a) They are applied post-harvest;
- (b) They are used as inert ingredients in pesticide formulations with azoxystrobin and fludioxonil; and
- (c) They constitute no more than 10.0% of the formulated pesticide product.

[74 FR 12625, Mar. 25, 2009]

[↑ Back to Top](#)

**§180.1289 *Candida oleophila* Strain O; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the residues of the microbial pesticide, *Candida oleophila* Strain O, on apples and pears when applied/used as a post-harvest biofungicide.

[74 FR 22464, May 13, 2009]

[↑ Back to Top](#)

**§180.1290 *Pasteuria usgae*; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Pasteuria usgae* in or on all food commodities when applied preharvest and used as a nematocide in accordance with good agricultural practices.

[75 FR 37737, June 30, 2010]

[↑ Back to Top](#)

**§180.1291 Cold pressed neem oil; exemption from the requirement of a tolerance.**

Residues of the biochemical pesticide cold pressed neem oil are exempt from the requirement of a tolerance in or on all food commodities.

[74 FR 55463, Oct. 28, 2009]

[↑ Back to Top](#)

**§180.1292 *Ulocladium oudemansii* (U3 Strain); exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established in/on all food commodities for residues of *Ulocladium oudemansii* (U3 Strain), when applied or used pre-harvest-only, excluding applications made post-harvest or to processed commodities, as a microbial fungicide in accordance with good agricultural practices.

[74 FR 55458, Oct. 28, 2009]

[↑ Back to Top](#)

**§180.1293 *Trichoderma gamsii* strain ICC 080; exemption from the requirement of a tolerance.**

*Trichoderma gamsii* strain ICC 080 is exempted from the requirement of a tolerance in or on all food and feed commodities when applied preharvest and used in accordance with good agricultural practices.

[75 FR 8507, Feb. 25, 2010]

[↑ Back to Top](#)

**§180.1294 *Trichoderma asperellum* strain ICC 012; exemption from the requirement of a tolerance.**

*Trichoderma asperellum* strain ICC 012 is exempted from the requirement of a tolerance in or on all food and feed commodities when applied pre-harvest and used in accordance with good agricultural practices.

[75 FR 9530, Mar. 3, 2010]

[↑ Back to Top](#)

**§180.1295 Laminarin; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of laminarin in or on all food commodities when laminarin is applied preharvest.

[75 FR 8256, Feb. 24, 2010]

[↑ Back to Top](#)



**§180.1296 Terpene Constituents  $\alpha$ -terpinene, d-limonene and p-cymene, of the Extract of *Chenopodium ambrosioides* near *ambrosioides* as Synthetically Manufactured; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the residues of the biochemical pesticide Terpene Constituents  $\alpha$ -terpinene, d-limonene and p-cymene, of the Extract of *Chenopodium ambrosioides* near *ambrosioides* as Synthetically Manufactured when used as an insecticide/acaricide in or on all food commodities.

[75 FR 39455, July 9, 2010]

[↑ Back to Top](#)

**§180.1297 Homobrassinolide; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the residues of homobrassinolide in or on all food commodities when applied/used as a plant growth regulator in accordance with good agricultural practices.

[75 FR 39459, July 9, 2010]

[↑ Back to Top](#)

**§180.1298 *Trichoderma hamatum* isolate 382; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Trichoderma hamatum* isolate 382 in or on all food commodities when applied as a fungicide and used in accordance with good agricultural practices.

[75 FR 43076, July 23, 2010]

[↑ Back to Top](#)

**§180.1299 Prohydrojasmon; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biochemical pesticide prohydrojasmon (PDJ), propyl-3-oxo-2-pentylcyclo-pentylacetate, when used as a plant growth regulator in or on apple and grape pre-harvest, in accordance with label directions and good agricultural practices.

[78 FR 75257, Dec. 11, 2013]

[↑ Back to Top](#)

**§180.1300 Potassium hypochlorite; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of potassium hypochlorite in or on all commodities.

[76 FR 11343, Mar. 2, 2011]

[↑ Back to Top](#)

**§180.1301 *Escherichia coli* O157:H7 specific bacteriophages; temporary exemption from the requirement of a tolerance.**

A temporary exemption from the requirement of a tolerance is established for residues of lytic bacteriophages that are specific to *Escherichia coli* O157:H7, sequence negative for shiga toxins I and II, and grown on atoxigenic host bacteria when used/applied on food contact surfaces in food processing plants in accordance with the terms of Experimental Use Permit (EUP) No. 74234-EUP-2. This temporary exemption expires on April 1, 2013.

[76 FR 20546, Apr. 13, 2011]

[↑ Back to Top](#)

**§180.1302 Sodium Ferric Ethylenediaminetetraacetate (EDTA); exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of sodium ferric EDTA in or on all food commodities when applied as a molluscicide and used in accordance with good agricultural practices.

[76 FR 17561, Mar. 30, 2011]

[↑ Back to Top](#)



**§180.1303 *Metarhizium anisopliae* strain F52; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Metarhizium anisopliae* strain F52 in or on all food commodities when applied as an insecticide, miticide, or ixodicide and used in accordance with good agricultural practices.

[76 FR 26198, May 6, 2011]

[↑ Back to Top](#)

**§180.1304 *Pseudomonas fluorescens* strain CL145A; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Pseudomonas fluorescens* strain CL145A in or on all food commodities when applied as a molluscicide.

[76 FR 52875, Aug. 24, 2011]

[↑ Back to Top](#)

**§180.1305 *Chromobacterium subtsugae* strain PRAA4-1<sup>T</sup>; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Chromobacterium subtsugae* strain PRAA4-1<sup>T</sup> in or on all food commodities when applied as an insecticide or miticide and used in accordance with good agricultural practices.

[76 FR 55272, Sept. 7, 2011]

[↑ Back to Top](#)

**§180.1306 *Isaria fumosorosea* (formerly *Paecilomyces fumosoroseus*) Apopka strain 97; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Isaria fumosorosea* (formerly *Paecilomyces fumosoroseus*) Apopka strain 97 in or on all food commodities when applied as an insecticide or miticide and used in accordance with good agricultural practices.

[76 FR 59905, Sept. 28, 2011]

[↑ Back to Top](#)

**§180.1307 Bacteriophage of *Clavibacter michiganensis* subspecies *michiganensis*; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of lytic bacteriophage of *Clavibacter michiganensis* subspecies *michiganensis* produced in *Clavibacter michiganensis* subspecies *michiganensis* in or on tomato when applied as a bactericide in accordance with good agricultural practices.

[76 FR 66192, Oct. 26, 2011]

[↑ Back to Top](#)

**§180.1308 *Bacillus amyloliquefaciens* strain D747; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticide, *Bacillus amyloliquefaciens* strain D747 in or on all food commodities when used in accordance with good agricultural practices.

[77 FR 749, Jan. 6, 2012. Redesignated at 77 FR 2911, Jan. 20, 2012]

[↑ Back to Top](#)

**§180.1309 *Bacillus subtilis* strain CX-9060; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the microbial pesticide *Bacillus subtilis* strain CX-9060, in or on all food commodities, when applied or used in accordance with good agricultural practices.

[77 FR 1637, Jan. 11, 2012]

[↑ Back to Top](#)

**§180.1310 *Trichoderma virens* strain G-41; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Trichoderma virens* strain G-41, in or on all food commodities, when applied as a fungicide and used in accordance with good agricultural practices.

[77 FR 4908, Feb. 1, 2012]

[↑ Back to Top](#)

**§180.1311 *Pasteuria nishizawae*—Pn1; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Pasteuria nishizawae*—Pn1 in or on all food commodities when applied as a nematicide and used in accordance with good agricultural practices.

[77 FR 8741, Feb. 15, 2012]

[↑ Back to Top](#)

**§180.1312 *Aureobasidium pullulans* strains DSM 14940 and DSM 14941; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Aureobasidium pullulans* strains DSM 14940 and DSM 14941 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[80 FR 73662, Nov. 25, 2015]

[↑ Back to Top](#)

**§180.1313 *Bacillus pumilus* strain GHA 180; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Bacillus pumilus* strain GHA 180 in or on all food commodities when used in accordance with good agricultural practices.

[77 FR 19112, Mar. 30, 2012]

[↑ Back to Top](#)

**§180.1314 Killed, nonviable *Streptomyces acidiscabies* strain RL-110<sup>T</sup>; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of killed, nonviable *Streptomyces acidiscabies* strain RL-110<sup>T</sup> in or on all food commodities when applied as a pre- or post-emergent herbicide and used in accordance with good agricultural practices.

[77 FR 35295, June 13, 2012]

[↑ Back to Top](#)

**§180.1315 Natamycin; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the residues of natamycin in or on mushrooms, pineapples, citrus, pome, stone fruit crop groups, avocado, kiwi, mango, and pomegranates when used in accordance with label directions and good agricultural practices.

[81 FR 58410, Aug. 25, 2016]

[↑ Back to Top](#)

**§180.1316 *Pasteuria* spp. (*Rotylenchulus reniformis* nematode)—Pr3; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Pasteuria* spp. (*Rotylenchulus reniformis* nematode)—Pr3 in or on all food commodities when applied as a nematicide and used in accordance with label directions and good agricultural practices.

[77 FR 40276, July 9, 2012]

[↑ Back to Top](#)

**§180.1317 Pesticide chemicals; exemption from the requirements of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of Didecyl dimethyl ammonium chloride in or on broccoli resulting from the use of Didecyl dimethyl ammonium chloride as a seed treatment at a treatment concentration of 1200 ppm prior to planting by immersion.

[77 FR 47296, Aug. 8, 2012]

[↑ Back to Top](#)

**§180.1318 3-decen-2-one; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biochemical pesticide, 3-decen-2-one, in or on potatoes when applied as a potato sprout inhibitor and used in accordance with label directions and good agricultural practices.

[78 FR 11766, Feb. 20, 2013]

[↑ Back to Top](#)

**§180.1319 Banda de *Lupinus albus* doce (BLAD); exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the residues of Banda de *Lupinus albus* doce (BLAD), a naturally occurring polypeptide from the catabolism of a seed storage protein ( $\beta$ -conglutin) of sweet lupines (*Lupinus albus*), in or on all food commodities when applied as a fungicide and used in accordance with label directions and good agricultural practices.

[78 FR 17604, Mar. 22, 2013]

[↑ Back to Top](#)

**§180.1320 Methyl jasmonate; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of methyl jasmonate in or on all food commodities when methyl jasmonate is applied pre-harvest.

[78 FR 22794, Apr. 17, 2013]

[↑ Back to Top](#)

**§180.1321 Complex Polymeric Polyhydroxy Acids; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for the residues of complex polymeric polyhydroxy acids in or on all food commodities when applied as a plant growth regulator and used in accordance with good agricultural practices.

[78 FR 46267, July 31, 2013]

[↑ Back to Top](#)

**§180.1322 *Bacillus pumilus* strain BU F-33; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Bacillus pumilus* strain BU F-33 in or on all food commodities when applied to elicit induced systemic resistance in plants and used in accordance with label directions and good agricultural practices.

[78 FR 35149, June 12, 2013]

[↑ Back to Top](#)

**§180.1323 Ethyl-2E,4Z-decadienoate (Pear Ester); exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biochemical pesticide, ethyl-2E,4Z-decadienoate (pear ester), in or on all food commodities, when used in accordance with label directions and good agricultural practices.

[78 FR 53054, Aug. 28, 2013]

[↑ Back to Top](#)

**§180.1324 GS-omega/kappa-Htxx-Hv1a; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the pesticide GS-omega/kappa-Htxx-Hv1a in or on all food commodities when applied or used in accordance with label directions and good agricultural practices.

[79 FR 10685, Feb. 26, 2014]

[↑ Back to Top](#)

**§180.1325 Heat-killed *Burkholderia* spp. strain A396 cells and spent fermentation media exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of heat-killed *Burkholderia* spp. strain A396 cells and spent fermentation media in or on all food commodities when applied as a biological insecticide to agricultural crops and used in accordance with label directions and good agricultural practices.

[79 FR 15704, Mar. 21, 2014]

[↑ Back to Top](#)

**§180.1326 *Pseudomonas fluorescens* strain D7; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Pseudomonas fluorescens* strain D7 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[79 FR 60750, Oct. 8, 2014]

[↑ Back to Top](#)

**§180.1327 Tetraacetylenediamine (TAED) and its metabolite Diacetylenediamine (DAED); exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the pesticide, tetraacetylenediamine (TAED), and its metabolite diacetylenediamine (DAED), in or on rice and strawberries, when used as a fungicide and bactericide in accordance with label directions and good agricultural practices.

[79 FR 59121, Oct. 1, 2014]

[↑ Back to Top](#)

**§180.1328 *Beauveria bassiana* strain ANT-03; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Beauveria bassiana* strain ANT-03 in or on all food commodities, when applied as a microbial insecticide and used in accordance with label directions and good agricultural practices.

[79 FR 77396, Dec. 24, 2014]

[↑ Back to Top](#)

**§180.1329 *Bacillus subtilis* strain IAB/BS03, exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Bacillus subtilis* strain IAB/BS03 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[80 FR 9217, Feb. 20, 2015]

[↑ Back to Top](#)

**§180.1330 1-Octanol; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of 1-octanol in or on root and tuber vegetables when applied as a plant growth regulator in accordance with label directions and good agricultural practices.

[80 FR 25953, May 6, 2015]

[↑ Back to Top](#)

**§180.1331 *Trichoderma asperelloides* strain JM41R; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Trichoderma asperelloides* strain JM41R in or on all food commodities when used in accordance with label directions and good agricultural practices.

[80 FR 28203, May 18, 2015]

[↑ Back to Top](#)

#### **§180.1332 Lavandulyl senecioate; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the arthropod pheromone, lavandulyl senecioate (5-methyl-2-(1-methylethenyl)-4-hexenyl 3-methyl-2-butanate), in or on all raw agricultural commodities when applied or used in microbeads/dispensers at a rate not to exceed 150 grams active ingredient/acre/year in accordance with good agricultural practices.

[80 FR 49171, Aug. 17, 2015]

[↑ Back to Top](#)

#### **§180.1333 Potassium Salts of Hops Beta acids; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of the biochemical potassium salts of hops beta acids in or on honey and honeycomb, when used for the control of Varroa mites in accordance with label directions and good agricultural practices.

[80 FR 63683, Oct. 21, 2015]

[↑ Back to Top](#)

#### **§180.1334 Choline Chloride; Exemption from the Requirement of a Tolerance.**

An exemption from the requirement of a tolerance is established for residues of Choline Chloride in or on all food commodities when Choline Chloride is applied pre-harvest and used in accordance with label directions and good agricultural practices.

[80 FR 78149, Dec. 16, 2015]

[↑ Back to Top](#)

#### **§180.1335 Isaria fumosorosea strain FE 9901; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Isaria fumosorosea* strain FE 9901 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[81 FR 47311, July 21, 2016]

[↑ Back to Top](#)

#### **§180.1336 Bacillus amyloliquefaciens strain PTA-4838; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Bacillus amyloliquefaciens* strain PTA-4838 in or on all food commodities.

[81 FR 41222, June 24, 2016]

[↑ Back to Top](#)

#### **§180.1337 Citrus tristeza virus expressing spinach defensin proteins 2, 7, and 8; exemption from the requirement of a tolerance.**

A temporary exemption from the requirement of a tolerance is established for residues of the microbial pesticide *Citrus tristeza* virus expressing spinach defensin proteins 2, 7, and 8 (either alone or in combinations with each other) in or on the commodities listed in fruit, citrus group 10-10, when used in accordance with the terms of Experimental Use Permit No. 88232-EUP-2. This temporary exemption from the requirement of a tolerance expires on August 31, 2020.

[81 FR 59502, Aug. 30, 2016]

[↑ Back to Top](#)

**§180.1338 *Aspergillus flavus* strains TC16F, TC35C, TC38B, and TC46G; temporary exemptions from the requirement of a tolerance.**

Temporary exemptions from the requirement of a tolerance are established for residues of *Aspergillus flavus* strains TC16F, TC35C, TC38B, and TC46G in or on the food and feed commodities of corn, field; corn, pop; and corn, sweet when used in accordance with the terms of Experimental Use Permit No. 91163-EUP-1. These temporary exemptions from the requirement of a tolerance expire on June 30, 2020.

[81 FR 63710, Sept. 16, 2016]

[↑ Back to Top](#)

**§180.1339 *Spodoptera frugiperda* multiple nucleopolyhedrovirus strain 3AP2; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Spodoptera frugiperda* multiple nucleopolyhedrovirus strain 3AP2 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[81 FR 83706, Nov. 22, 2016]

[↑ Back to Top](#)

**§180.1340 *Muscodor albus* strain SA-13 and the volatiles produced on rehydration; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Muscodor albus* strain SA-13 and the volatiles produced on rehydration in or on all food commodities when used in accordance with label directions and good agricultural practices.

[81 FR 86581, Dec. 1, 2016]

[↑ Back to Top](#)

**§180.1341 *Pseudomonas chlororaphis* strain AFS009; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Pseudomonas chlororaphis* strain AFS009 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[82 FR 35122, July 28, 2017]

[↑ Back to Top](#)

**§180.1344 Cyclaniliprole; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for indirect and inadvertent residues of the insecticide cyclaniliprole, including its metabolites and degradates, in or on all raw agricultural commodities not listed in paragraph (a) of §180.694, when residues are present therein as a result of subsequent uptake by crops rotated into fields where the crops in §180.694 (a) were treated with cyclaniliprole.

[82 FR 36095, Aug. 3, 2017]

[↑ Back to Top](#)

**§180.1345 1-Triacontanol; exemption from the requirement of a tolerance.**

Residues of the biochemical pesticide 1-Triacontanol are exempt from the requirement of a tolerance in or on all food commodities.

[82 FR 38852, Aug. 16, 2017]

[↑ Back to Top](#)

**§180.1346 1,3-Dibromo-5,5-Dimethylhydantoin; exemption from the requirement of a tolerance.**

Residues of 1,3-dibromo-5,5-dimethylhydantoin, including its metabolites and degradates, resulting from the use of 1,3-dibromo-5,5-dimethylhydantoin in antimicrobial treatment solutions of raw agricultural commodities in treatment facilities are exempt from the requirement of a tolerance.

[82 FR 57370, Dec. 5, 2017]

[↑ Back to Top](#)

**§180.1347 *Bacillus amyloliquefaciens* strain F727; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Bacillus amyloliquefaciens* strain F727 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[82 FR 49747, Oct. 27, 2017]

[↑ Back to Top](#)

**§180.1348 *Bacillus subtilis* strain BU1814; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Bacillus subtilis* strain BU1814 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[82 FR 57873, Dec. 8, 2017]

[↑ Back to Top](#)

**§180.1350 *Bacillus licheniformis* strain FMCH001; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Bacillus licheniformis* strain FMCH001 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[83 FR 17498, Apr. 20, 2018]

[↑ Back to Top](#)

**§180.1351 *Bacillus subtilis* strain FMCH002; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Bacillus subtilis* strain FMCH002 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[83 FR 17500, Apr. 20, 2018]

[↑ Back to Top](#)

**§180.1352 Methyl-alpha-D-mannopyranoside (Alpha methyl mannoside); exemption from the requirement of a tolerance.**

Residues of the biochemical pesticide Methyl-alpha-D-mannopyranoside (alpha methyl mannoside) are exempt from the requirement of a tolerance in or on all raw agricultural commodities.

[83 FR 7619, Feb. 22, 2018]

[↑ Back to Top](#)

**§180.1353 Lipochitooligosaccharide (LCO) SP104; exemption from the requirement of a tolerance.**

Residues of the biochemical pesticide Lipochitooligosaccharide (LCO) SP104 (which has been used in accordance with label directions and good agricultural practices) are exempt from the requirement of a tolerance in or on all food commodities.

[83 FR 9442, Mar. 6, 2018]

[↑ Back to Top](#)

**§180.1354 Flutianil; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for indirect and inadvertent residues of the fungicide flutianil, including its metabolites and degradates, in or on all food commodities not listed in §180.697(a), when residues are present therein as a result of uptake by crops rotated into fields containing the crops in §180.697(a) that were previously treated with flutianil.

[83 FR 12269, Mar. 21, 2018]

[↑ Back to Top](#)



**§180.1355 *Duddingtonia flagrans* strain IAH 1297; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Duddingtonia flagrans* strain IAH 1297 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[83 FR 19972, May 7, 2018]

[↑ Back to Top](#)

**§180.1356 Extract of *Swinglea glutinosa*; exemption from the requirement of a tolerance.**

Residues of the biochemical pesticide Extract of *Swinglea glutinosa* are exempt from the requirement of a tolerance in or on all food commodities when applied pre-harvest in accordance with label directions and good agricultural practices.

[83 FR 27713, June 14, 2018]

[↑ Back to Top](#)

**§180.1357 Cerevisane (cell walls of *Saccharomyces cerevisiae* strain LAS117); exemption from the requirement of a tolerance.**

Residues of the biochemical pesticide cerevisane (cell walls of *Saccharomyces cerevisiae* strain LAS117) are exempt from the requirement of a tolerance in or on all food commodities, when used in accordance with label directions and good agricultural practices.

[83 FR 39375, Aug. 9, 2018]

[↑ Back to Top](#)

**§180.1358 *Metschnikowia fructicola* strain NRRL Y-27328; exemption from the requirement of a tolerance.**

Residues of *Metschnikowia fructicola* strain NRRL Y-27328 are exempt from the requirement of a tolerance in or on the food commodities included in the following crop groups and subgroups when this pesticide chemical is used in accordance with label directions and good agricultural practices: Fruit, stone group 12-12; Fruit, small fruit vine climbing, except fuzzy kiwifruit, subgroup 13-07F; and Berry, low growing subgroup 13-07G.

[83 FR 46117, Sept. 12, 2018]

[↑ Back to Top](#)

**§180.1359 Bacteriophage active against *Erwinia amylovora*; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of lytic bacteriophage active against *Erwinia amylovora* that are produced in *Erwinia amylovora* in or on apple and pear, when used in accordance with label directions and good agricultural practices.

[83 FR 46403, Sept. 13, 2018]

[↑ Back to Top](#)

**§180.1360 Bacteriophage active against *Xanthomonas citri* subsp. *citri*; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of lytic bacteriophage active against *Xanthomonas citri* subsp. *citri* that are produced in *Xanthomonas citri* subsp. *citri* in or on food commodities included in the fruit, citrus groups 10 and 10-10, when used in accordance with label directions and good agricultural practices.

[83 FR 46405, Sept. 13, 2018]

[↑ Back to Top](#)

**§180.1361 *Pepino mosaic virus*, strain CH2, isolate 1906; exemption from the requirement of a tolerance.**

Residues of *Pepino mosaic virus*, strain CH2, isolate 1906 are exempt from the requirement of a tolerance in or on tomato when this pesticide chemical is used in accordance with label directions and good agricultural practices.

[83 FR 46407, Sept. 13, 2018]



[↑ Back to Top](#)

**§180.1362 *Beauveria bassiana* strain PPRI 5339; exemption from the requirement of a tolerance.**

Residues of *Beauveria bassiana* strain PPRI 5339 are exempt from the requirement of a tolerance in or on all food commodities when this pesticide chemical is used in accordance with label directions and good agricultural practices.

[83 FR 47076, Sept. 18, 2018]

[↑ Back to Top](#)

**§180.1363 *Bacillus amyloliquefaciens* strain ENV503; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Bacillus amyloliquefaciens* strain ENV503 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[83 FR 58508, Nov. 20, 2018]

[↑ Back to Top](#)

**§180.1364 Chlorate; exemption from the requirement of a tolerance.**

Residues of chlorate in or on tomato and cantaloupe are exempt from the requirement of a tolerance when resulting from the application of gaseous chlorine dioxide as a fungicide, bactericide, and antimicrobial pesticide.

[83 FR 66143, Dec. 26, 2018]

[↑ Back to Top](#)

**§180.1365 Bacteriophage active against *Xylella fastidiosa*; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of lytic bacteriophage active against *Xylella fastidiosa* in or on all food commodities when the bacteriophage are sequenced and have sequences free of toxins and lysogenic genes and are used in accordance with label directions and good agricultural practices.

[84 FR 16791, Apr. 23, 2019]

[↑ Back to Top](#)

**§180.1366 24-Epibrassinolide; exemption from the requirement of a tolerance.**

Residues of the plant growth regulator 24-epibrassinolide in or on all food commodities are exempt from the requirement of a tolerance, when used in accordance with label directions and good agricultural practices.

[84 FR 27968, June 17, 2019]

[↑ Back to Top](#)

**§180.1367 *Bacillus amyloliquefaciens* subspecies *plantarum* strain FZB42; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Bacillus amyloliquefaciens* subspecies *plantarum* strain FZB42 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[84 FR 28237, June 18, 2019]

[↑ Back to Top](#)

**§180.1368 *Clonostachys rosea* strain CR-7; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Clonostachys rosea* strain CR-7 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[84 FR 40271, Aug. 14, 2019]

[↑ Back to Top](#)

**§180.1369 *Autographa californica* multiple nucleopolyhedrovirus strain FV#11; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Autographa californica* multiple nucleopolyhedrovirus strain FV#11 in or on all food commodities when used in accordance with label directions and good agricultural practices.

[84 FR 38562, Aug. 7, 2019]

[↑ Back to Top](#)

**§180.1370 Lipochitoalgiosaccharide (LCO) MOR116; exemption from the requirement of a tolerance.**

Residues of the plant growth regulator Lipochitoalgiosaccharide (LCO) MOR116 in or on all food commodities are exempt from the requirement of a tolerance, when used in accordance with label directions and good agricultural practices.

[84 FR 43705, Aug. 22, 2019]

[↑ Back to Top](#)

**§180.1371 Florpyrauxifen-benzyl; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of florpyrauxifen-benzyl, including its metabolites and degradates, in or on all food and feed commodities, when it is applied as an herbicide in accordance with good agricultural practices.

[84 FR 50766, Sept. 26, 2019]

[↑ Back to Top](#)

**§180.1372 Sodium lauryl sulfate; exemption from the requirement of a tolerance.**

Residues of the fungicide and miticide sodium lauryl sulfate (CAS No. 151-21-3) in or on all food commodities are exempt from the requirement of a tolerance, when used in accordance with label directions and good agricultural practices.

[84 FR 52372, Oct. 2, 2019]

[↑ Back to Top](#)

**Subpart E—Pesticide Chemicals Not Requiring a Tolerance or an Exemption From a Tolerance**

SOURCE: 66 FR 66772, Dec. 27, 2001, unless otherwise noted.

[↑ Back to Top](#)

**§180.2000 Scope.**

This subpart sets forth the pesticide chemicals for use in agricultural or other food-related settings for which neither a tolerance nor an exemption is deemed to be needed by EPA.

[↑ Back to Top](#)

**§180.2003 Definitions.**

(a) Food uses are the uses of a pesticide chemical that are likely to yield residues in food or feed crops, meat, milk, poultry or egg.

(b) Non-food uses are those uses that are not likely to yield residues in food or feed crops, meat, milk, poultry or egg.

[66 FR 66772, Dec. 27, 2001, as amended at 73 FR 60158, Oct. 10, 2008]

[↑ Back to Top](#)

**§180.2010 [Reserved]**

[↑ Back to Top](#)

**§180.2020 Non-food determinations.**

The following pesticide chemical uses do not need a tolerance or exemption from the requirement of a tolerance based on EPA's determination that they are not likely to result in residues in or on food.

Pesticide Chemical	CAS Reg. No.	Limits	Uses
Methyl bromide	74-83-9	When applied as a pre-plant soil fumigant	All pre-plant soil uses
Potassium triiodide (KI <sub>3</sub> )	12298-68-9	When applied to growing crops in foreign countries	Bananas, grapes, and melons
Rhodamine B	81-88-9	Not to exceed 2% by weight of the formulated product and 60 ppm on the treated seed	Dye for seed treatment

[66 FR 66772, Dec. 27, 2001, as amended at 70 FR 40201, July 13, 2005; 71 FR 45402, Aug. 9, 2006]

[↑ Back to Top](#)

[Need assistance?](#)