[18][APPENDIX A:

I.FOOD CATEGORY SYSTEM

The food category system is a tool for assigning food additive uses in these Regulations. The food category system applies to all foodstuffs. The food category descriptors are not to be legal product designations nor are they intended for labelling purposes. The food category system is based on the following principles:

(a) The food category system is hierarchical, meaning that when an additive is recognised for use in a general category, it is recognised for use in all its sub-categories, unless otherwise stated. Similarly, when an additive is recognised for use in a sub-category, its use is recognised in any further subcategories or individual foodstuffs mentioned in a sub-category. The food category system is based on product descriptors of foodstuffs as marketed, unless otherwise stated.

(b) The food category system takes into consideration the carry-over principle. By doing so, the food category system does not need to specifically mention compound foodstuffs (e.g. prepared meals, such as pizza, because they may contain, pro rata, all the additives endorsed for use in their components), unless the compound foodstuff needs an additive that is not endorsed for use in any of its components.

1.0Dairy products and analogues, excluding products of food category 2.0

1.1 Milk and dairy-based drinks

1.1.1 Milk and buttermilk (plain)

1.1.1.1 Milk (plain)

1.1.1.2 Buttermilk (plain)

1.1.2Dairy-based drinks, flavoured and/or fermented

1.2 Fermented and renneted milk products (plain), excluding food category (dairy-based drinks)

1.2.1 Fermented milks (plain)

1.2.1.1 Fermented milks (plain), not heat-treated after fermentation

1.2.1.2 Fermented milks (plain), heat-treated after fermentation

1.2.2 Renneted milk (plain)

1.3 Condensed milk and analogues (plain)

1.3.1 Condensed milk (plain)

1.3.2 Beverage whiteners

[52][1.3.2.1 Non - dairy based beverage whitener]

1.4 Cream (plain) and the like

1.4.1 Pasteurized cream (plain)

1.4.2 Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams(plain)

1.4.3 Clotted cream (plain)

1.4.4 Cream analogues

1.5 Milk powder and cream powder and powder analogues (plain)

1.5.1 Milk powder and cream powder (plain)

[52][1.5.1.1 Dairy based dairy whitener]

1.5.2 Milk and cream powder analogues

1.6 Cheese and analogues

1.6.1 Unripened cheese

1.6.2 Ripened cheese

1.6.2.1 Ripened cheese, includes rind

1.6.2.2 Rind of ripened cheese

1.6.2.3 Cheese powder

1.6.3 Whey cheese

1.6.4 Processed cheese

1.6.4.1 Plain processed cheese

1.6.4.2 Flavoured processed cheese, including containing fruit, vegetables, meat etc.

1.6.5 Cheese analogues

1.6.6 Whey protein cheese

1.7 Dairy-based desserts

1.8 Whey and whey products, excluding whey cheeses

1.8.1 Liquid whey and whey products, excluding whey cheeses

1.8.2 Dried whey and whey products, excluding whey cheeses.

2.0 Fats and oils, and fat emulsions

2.1 Fats and oils essentially free from water

2.1.1 Butter oil, anhydrous milk fat, ghee

2.1.2 Vegetable oils and fats

2.1.3 Lard, tallow, fish oil, and other animal fats

2.2 Fat emulsions mainly of type water-in-oil

2.2.1 Butter

2.2.2 Fat spreads, dairy fat spreads and blended spreads

2.3 Fat emulsions mainly of type oil-in-water, including mixed and/or flavoured products based on fat emulsions

2.4 Fat-based desserts excluding dairy-based dessert products of food category 1.7

2.4.1 Coco based spreads, including fillings

3.0 Edible ices, including sherbet and sorbet

4.0 Fruits and vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

4.1 Fruit

4.1.1 Fresh fruit

4.1.1.1 Untreated fresh fruit

4.1.1.2 Surface-treated fresh fruit

[52][4.1.1.3 Peeled or cut, minimally processed fruit]

4.1.2 Processed fruit

4.1.2.1 Frozen fruit

4.1.2.2 Dried fruit, nuts and seeds

4.1.2.3 Fruit in vinegar, oil, or brine

4.1.2.4 Canned or bottled (pasteurized) fruit

4.1.2.5 Jams, jellies, marmalades, fruit bar/toffee and fruit cheese

[52][4.1.2.6 Fruit-based spreads (e.g. chutney) excluding products of food-category 4.1.2.5]

4.1.2.7 Candied fruit

4.1.2.8 Fruit preparations, including pulp, purees, fruit toppings and coconut milk

4.1.2.9 Fruit-based desserts, including fruit-flavoured water-based desserts

4.1.2.10 Fermented fruit products

4.1.2.11 Fruit fillings for pastries

4.1.2.12 Cooked fruit

4.2 Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloevera), seaweeds, and nuts and seeds

4.2.1 Fresh vegetables, (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds and nuts and seeds

4.2.1.1 Untreated fresh vegetables, (including mushrooms and fungi, roots and tubers, pulses and legumes including soybeans, and aloe vera), seaweeds and nuts and seeds

4.2.1.2 Surface-treated fresh vegetables, (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds and nuts and seeds

[52][4.2.1.3 Peeled, cut or shredded minimally processed vegetables [(including mushrooms and fungi, roots and tubers, fresh

pulses and legumes, and aloe vera) sea weeds, nuts and seeds]]

4.2.2 Processed vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

4.2.2.1 Frozen vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds and nuts and seeds

4.2.2.2 Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

4.2.2.3 Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds in vinegar, oil, brine, or soybean sauce

4.2.2.4 Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloevera), and seaweeds

4.2.2.5 Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g. peanut butter)

4.2.2.6 Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g. vegetable desserts and sauces, candied vegetables) other than food category 4.2.2.5

4.2.2.7 Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweed products, excluding fermented soybean products of food categories 6.8.6, 06.8.7, 12.9.1, 12.9.2.1 and 12.9.2.3

4.2.2.8 Cooked or fried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds

5.0 Confectionery

5.1 Cocoa products and chocolate products including imitations and chocolate substitutes

5.1.1 Cocoa mixes (powders) and cocoa mass/cake

5.1.2 Cocoa mixes (syrups)

5.1.3 Cocoa and chocolate products

5.1.4 Imitation chocolate, chocolate substitute products

5.2 Confectionery including hard and soft candy, nougats, etc. other than food categories 5.1,5.3, and 5.4

5.2.1 Hard candy

5.2.2 Soft candy

5.2.3 Nougats and marzipans

5.3Chewing gum

5.4 Decorations (e.g. for fine bakery wares), toppings (non-fruit), and sweet sauces

6.0 Cereals and cereal products, derived from cereal grains, from roots and tubers, pulses, legumes and pith or soft core of palm tree, excluding bakery wares of food category 7.0

6.1 Whole, broken, or flaked grain, including rice

6.2 Flours and starches (including soybean powder)

6.2.1 Flours

6.2.2 Starches

6.3 Breakfast cereals, including rolled oats

6.4 Pastas and noodles and like products

6.4.1 Fresh pastas and noodles and like products

6.4.2 Dried pastas and noodles and like products

6.4.3 Pre-cooked pastas and noodles and like products

6.5 Cereal and starch based desserts

6.6 Batters

6.7 Pre-cooked or processed cereal/grain/legume products

6.8 Soybean products (excluding soybean-based seasonings and condiments of food category12.9)

6.8.1 Soybean-based beverages

6.8.2 Soybean-based beverage film

6.8.3 Soybean curd (tofu)

6.8.4 Semi-dehydrated soybean curd

6.8.4.1 Thick gravy-stewed semi-dehydrated soybean curd

6.8.4.2 Deep fried semi-dehydrated soybean curd

6.8.4.3Semi-dehydrated soybean curd, other than food categories 6.8.4.1 and 6.8.4.2

6.8.5 Dehydrated soybean curd

6.8.6 Fermented soybeans

6.8.7 Fermented soybean curd

6.8.8 Other soybean protein products

7.0 Bakery wares

7.1 Bread and ordinary bakery wares and mixes

7.1.1 Breads and rolls

7.1.1.1 Yeast-leavened breads and specialty breads

7.1.1.2 Soda breads

7.1.2 Crackers

7.1.3 Other ordinary bakery products

7.1.4 Bread-type products, including bread stuffing and bread crumbs

7.1.5 Steamed breads and buns

7.1.6 Mixes for bread and ordinary bakery wares

7.2 Fine bakery wares (sweet, salty, savoury) and mixes

7.2.1 Cakes, cookies and pies

7.2.2 Other fine bakery products

7.2.3 Mixes for fine bakery wares

8.0 Meat and meat products including poultry

8.1 Fresh meat and poultry,

8.1.1 Fresh meat and poultry whole pieces or cuts

8.1.2 Fresh meat and poultry comminuted

8.2 Processed meat and poultry products in whole pieces or cuts

8.2.1 Non-heat treated processed meat and poultry products in whole pieces or cuts

8.2.1.1 Cured (including salted) non-heat treated processed meat and poultry products in whole pieces or cuts

8.2.1.2 Cured (including salted) and dried non-heat treated processed meat and poultry products in whole pieces or cuts

8.2.1.3 Fermented non-heat treated processed meat and poultry products in whole pieces or cuts

8.2.2 Heat-treated processed meat and poultry products in whole pieces or cuts

1.2.3 [77][Frozen raw, flavoured/marinated, processed meat and poultry products in whole pieces or cuts]

8.3 Processed comminuted meat and poultry products

8.3.1 Non-heat treated processed comminuted meat and poultry products

8.3.1.1 Cured (including salted) non-heat treated processed comminuted meat and poultry products

8.3.1.2 Cured (including salted) and dried non-heat treated processed comminuted meat and poultry products

8.3.1.3 Fermented non-heat treated processed comminuted meat and poultry products

8.3.2 Heat-treated processed comminuted meat and poultry products

8.3.3 Frozen processed comminuted meat and poultry products

8.4 Edible casings

9.0 Fish and fish products, including molluscs, crustaceans, and echinoderms

9.1 Fresh fish and fish products, including molluscs, crustaceans, and echinoderms

9.1.1 Fresh fish

9.1.2 Fresh molluscs, crustaceans, and echinoderms

9.2 Processed fish and fish products, including molluscs, crustaceans, and echinoderms

9.2.1 Frozen fish, fish fillets, and fish products, including molluscs, crustaceans, and echinoderms

09.2.2 Frozen battered fish, fish fillets and fish products, including molluscs, crustaceans, and echinoderms

9.2.3 Frozen minced and creamed fish products, including molluscs, crustaceans, and echinoderms

9.2.4 Cooked and/or fried fish and fish products, including molluscs, crustaceans, and echinoderms

9.2.4.1 Cooked fish and fish products

9.2.4.2 Cooked molluscs, crustaceans, and echinoderms

9.2.4.3 Fried fish and fish products, including molluscs, crustaceans, and Echinoderms

9.2.5 Smoked, dried, fermented, and/or salted fish and fish products, including molluscs, crustaceans, and echinoderms

9.3 Semi-preserved fish and fish products, including molluscs, crustaceans, and echinoderms

9.3.1 Fish and fish products, including molluscs, crustaceans, and echinoderms, marinated and/or in jelly

9.3.2 Fish and fish products, including molluscs, crustaceans and echinoderms, pickled and/or in brine

9.3.3 Salmon substitutes, caviar and other fish roe products

9.3.4 Semi-preserved fish and fish products, including molluscs, crustaceans and echinoderms (e.g. fish paste), excluding products of food categories 9.3.1 - 9.3.3

9.4 Fully preserved, including canned or fermented fish and fish products, including molluscs, crustaceans, and echinoderms

10.0 Eggs and egg products

10.1 Fresh eggs

10.2 Egg products

10.2.1 Liquid egg products

10.2.2 Frozen egg products

10.2.3 Dried and/or heat coagulated egg products

10.3 Preserved eggs, including alkaline, salted, and canned eggs

10.4 Egg-based desserts

11.0 Sweeteners, including honey

11.1 Refined and raw sugars

11.1.1 White sugar, dextrose anhydrous, dextrose monohydrate, fructose

11.1.2 Powdered sugar, powdered dextrose

11.1.3 Soft white sugar, soft brown sugar, glucose syrup, dried glucose syrup, raw cane sugar

11.1.3.1 Dried glucose syrup used to manufacture sugar confectionery

11.1.3.2 Glucose syrup used to manufacture sugar confectionery

11.1.4 Lactose

11.1.5 Plantation or mill white sugar

[52][11.1.6 Gur or Jaggery

11.1.6.1 Cane Jaggery or Gur

11.1.6.2 Palm Jaggery or Gur

11.1.6.3 Date Jaggery or Gur]

11.2 Brown sugar excluding products of food category 11.1.3

11.3 Sugar solutions and syrups, also (partially) inverted, including treacle and molasses, excluding products of food category 11.1.3

11.4 Other sugars and syrups 11.5 Honey

11.6 Table-top sweeteners, including those containing high-intensity sweeteners

12.0 Salts, spices, soups, sauces, salads and protein products

12.1 Salt and salt substitutes

12.1.1 Salt

12.1.2 Salt substitutes

12.2 Herbs, spices, seasonings, and condiments

[52][12.2.1 Herbs, spices, masalas, spice mixtures including oleoresins or extracts/derivatives thereof]

12.2.2 Seasonings and condiments

12.3 Vinegars

12.4 Mustards

12.5 Soups and broths

12.5.1 Ready-to-eat soups and broths, including canned, bottled, and frozen

12.5.2 Mixes for soups and broths

12.6 Sauces and like products

12.6.1 Emulsified sauces and dips

12.6.2 Non-emulsified sauces

12.6.3 Mixes for sauces and gravies

12.6.4 Clear sauces

12.7 Salads and sandwich spreads excluding cocoa-and nut based spreads of food categories 4.2.2.5 and 5.1.3

12.8 Yeast and like products

12.9 Soybean-based seasonings and condiments

12.9.1 Fermented soybean paste

12.9.2 Soybean sauce

12.9.2.1 Fermented soybean sauce

12.9.2.2 Non-fermented soybean sauce

12.9.2.3 Other soybean sauces

12.10 Protein products other than from soybeans

13.0 Foodstuffs intended for particular nutritional uses

13.1 Infant formulae, follow-on formulae, and formulae for special medical purposes for infants

13.1.1 Infant formulae

13.1.2 Follow-up formulae

13.1.3 Formulae for special medical purposes for infants

13.2 Complementary foods for infants and young children

13.3 Dietetic foods intended for special medical purposes (excluding products of food category 13.1)

13.4 Dietetic formulae for slimming purposes and weight reduction

13.5 Dietetic foods (e.g. supplementary foods for dietary use) excluding products of food categories13.1- 13.4 and 13.6

13.6 Food supplements

14.0 Beverages, excluding dairy products

14.1 Non-alcoholic ("soft") beverages

14.1.1 Waters

14.1.1.1 Natural mineral waters and source waters

14.1.1.2 Table waters and soda waters

14.1.2 Fruit and vegetable juices

14.1.2.1 Fruit juices

14.1.2.2 Vegetable juices

14.1.2.3 Concentrates of fruit juices

14.1.2.4 Concentrates of vegetable juices

14.1.3 Fruit and vegetable nectars

14.1.3.1 Fruit nectar

14.1.3.2 Vegetable nectar

14.1.3.3 Concentrates of fruit nectar

14.1.3.4 Concentrates of vegetable nectar

14.1.4 Water-based flavoured drinks, including "sport," “energy,” or "electrolyte" drinks and articulated drinks

14.1.4.1 Carbonated water-based flavoured drinks

14.1.4.2 Non-carbonated water-based flavoured drinks, including punches and ades

14.1.4.3 Concentrates (liquid or solid) for water-based flavoured drinks

14.1.5 Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa

14.2 Alcoholic beverages, including alcohol-free and low-alcoholic counterparts

14.2.1 Beer and malt beverages

14.2.2 Cider and Perry

14.2.3 Grape wines

14.2.3.1 Still grape wine

14.2.3.2 Sparkling and semi-sparkling grape wines

14.2.3.3 Fortified grape wine, grape liquor wine, and sweet grape wine

14.2.4 Wines (other than grape)

14.2.5 Mead

14.2.6 Distilled spirituous beverages containing more than 15% alcohol

14.2.7 Aromatized alcoholic beverages

15.0 Ready-to-eat savouries

15.1 Snacks - potato, cereal, flour or starch based (from roots and tubers, pulses and legumes)

15.2 Processed nuts, including coated nuts and nut mixtures 15.3 Snacks - fish based

II. FOOD CATEGORY DESCRIPTIONS

The examples wherever given below are only indicative and not exhaustive.

1.0 Dairy products and analogues, excluding products of food category 2.0

Includes all types of dairy products that are derived from the milk of healthy milch animal(s) (e.g. cow, sheep, goat, and buffalo). In this category, a "plain" product is one that is not flavoured, nor contains fruit, vegetables or other non-dairy ingredients, nor is mixed with other non-dairy ingredients, unless permitted by relevant standards. Analogues are products in which milk fat has been partially or wholly replaced by vegetable fats or oils.

1.1 Milk and dairy-based drinks

Includes all plain and flavoured fluid milk products based on skim, part-skim, low-fat and whole milk.

1.1.1Milk and buttermilk (plain)

Includes plain fluid products only. Includes reconstituted plain milk that contains only dairy ingredients.

1.1.1.1 Milk (plain)

Fluid milk obtained from milking animals (e.g. cows, sheep, goats, and buffalo). Milk is usually heat-treated by pasteurization, ultra-high temperature (UHT) treatment or sterilization. Includes skim, part-skim, low-fat and whole milk.

1.1.1.2 Buttermilk (plain)

Buttermilk is the nearly milk fat-free fluid remaining from the butter-making process (i.e. the churning fermented or non-fermented milk and cream) and buttermilk is also produced by fermentation of fluid skim milk, either by spontaneous souring by the action of lactic acid-forming or aroma-forming bacteria, or by inoculation of heated milk with pure bacterial cultures (cultured buttermilk). Buttermilk may be pasteurized or sterilized.

[52][1.1.2 Dairy-based drinks, flavoured or fermented

Includes all ready-to-drink flavoured and aromatised milk-based fluid beverages and their mixes, excluding mixes for cocoa (cocoa-sugar mixtures, category 5.1.1) such as hot chocolate, chocolate malt drinks, strawberry-flavoured yoghurt drink, whey

based drinks, lactic acid bacteria drinks, and lassi (liquid obtained by whipping curd from the lactic acid fermentation of milk, and mixing with sugar or synthetic sweetener)]

1.2 Fermented and renneted milk products (plain), excluding food category 1.1.2 dairy-based drinks)

Includes all plain products based on skim, part-skim, low-fat and whole milk. Flavoured products are included in 1.1.2 (beverages) and 1.7 (desserts).

1.2.1 Fermented milks (plain)

Includes all plain products, including fluid fermented milk, acidified milk and cultured milk. Plain yoghurt, which does not contain flavours or colours, may be found in one of the sub-categories of 1.2.1 depending on whether it is heat-treated after fermentation or not.

1.2.1.1 Fermented milks (plain), not heat-treated after fermentation

Includes fluid and non-fluid plain products such as yoghurt.

1.2.1.2 Fermented milks (plain), heat-treated after fermentation

Products similar to that in 1.2.1.1 except those heat-treated (e.g. sterilized or pasteurized) after fermentation.

1.2.2 Renneted milk (plain)

Plain, coagulated milk produced by the action of milk coagulating enzymes which includes curdled milk. Flavoured - renneted milk products are found in category 1.7.

1.3 Condensed milk and analogues (plain)

Includes plain and sweetened types of condensed milk, evaporated milk**,** and their analogues (including beverage whiteners) and products based on skim, part-skim, low-fat and whole milk, blends of evaporated skimmed milk and vegetable fat, and blends of sweetened condensed skimmed milk and vegetable fat.

1.3.1 Condensed milk (plain)

Condensed milk is obtained by partial removal of water from milk to which sugar may have been added. For evaporated milk, the water removal may be accomplished by heating. Includes partially dehydrated milk, evaporated milk, sweetened condensed milk, and khoya (cow or buffalo milk concentrated by boiling).

1.3.2 Beverage whiteners

1.3.2.1 [52]**[Omitted]**

1.3.2.2 Non-Dairy based beverage whitener

Milk or cream substitute consisting of a vegetable fat-water emulsion in water with milk protein and lactose or vegetable proteins for use in beverages such as coffee and tea and includes the same type of products in powdered form. Includes condensed milk analogues, blends of evaporated skimmed milk and vegetable fat and blends of sweetened condensed skimmed milk and vegetable fat.

1.4 Cream (plain) and the like

Cream is a fluid dairy product, relatively high in fat content in comparison to milk. Includes all plain fluid, semi-fluid and semi-solid cream and cream analogue products. Flavoured cream products are found in1.1.2 (beverages) and 1.7 (desserts).

1.4.1 Pasteurized cream (plain)

Cream subjected to pasteurization by appropriate heat treatment or made from pasteurized milk. Includes milk cream and “half-and-half.”

1.4.2 Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)

Includes every cream, regardless of fat content, which has undergone a higher heat-treatment than pasteurization, pasteurized creams with a reduced fat content, as well as every cream intended for whipping or being whipped. Sterilized cream is subjected to appropriate heat-treatment in the container in which it is presented to the consumer. Ultra-heat treated (UHT) or ultra-pasteurized cream is subjected to the appropriate heat treatment (UHT or ultra-pasteurization) in a continuous flow process and aseptically packaged. Cream may also be packaged under pressure (whipped cream). Includes whipping cream, heavy cream, whipped pasteurized cream, and whipped cream-type dairy toppings and fillings. Creams or toppings with partial or total replacement of milk fat by other fats are included in sub-category 1.4.4 (cream analogues).

1.4.3 Clotted cream (plain)

Thickened, viscous cream formed from the action of milk coagulating enzymes. Includes sour cream (cream subjected to lactic acid fermentation achieved as described for buttermilk (1.1.1.2).

1.4.4 Cream analogues

Cream substitute consisting of a vegetable fat-water emulsion in liquid or powdered form for use other than as a beverage whitener (1.3.2).Includes instant whipped cream toppings and sour cream substitutes.

1.5 Milk powder and cream powder and powder analogues (plain)

Includes plain milk powders, cream powders, or combination of the two, and their analogues. Includes products based on skim, part-skim, low-fat and whole milk.

1.5.1 Milk powder and cream powder (plain)

Milk products obtained by partial removal of water from milk or cream and produced in a powdered form. Includes casein and caseinates.

[52][**1.5.1.1 Dairy based dairy whitener**

Milk or cream constituting of milk protein and lactose]

1.5.2 Milk and cream powder analogues

Products based on a fat-water emulsion and dried for use other than as a beverage whitener (1.3.2). Examples include imitation dry cream mix and blends of skimmed milk and vegetable fat in powdered form.

1.6 Cheese and analogues

Cheese and cheese analogues are products that have water and fat included within a coagulated milk protein structure. Products such as cheese sauce (12.6.2), cheese-flavoured snacks (15.1), and composite prepared foods containing cheese as an ingredient (e.g. macaroni and cheese; 16.0) are categorized elsewhere.

1.6.1 Unripened cheese

Unripened cheese, including fresh cheese, is ready for consumption soon after manufacture. Such as cottage cheese (a soft, unripened, coagulated curd cheese), creamed cottage cheese (cottage cheese covered with a creaming mixture), cream cheese (rahmfrischkase, an uncured, soft spreadable cheese) mozzarella and scamorza cheeses and paneer (milk protein coagulated by the addition of citric acid

from lemon or lime juice or of lactic acid from whey, that is strained into a solid mass, and is used in vegetarian versions of, e.g. hamburgers). Includes the whole unripened cheese and unripened cheese rind (for those unripened cheeses with a "skin" such as mozzarella)**.** Most products are plain, however, some such as cottage cheese and cream cheese, may be flavoured or contain ingredients such as fruit, vegetables or meat. Excludes ripened cream cheese, where cream is a qualifier for a high fat content.

1.6.2 Ripened cheese

Ripened cheese is not ready for consumption soon after manufacture, but is held under such time and temperature conditions so as to allow the necessary biochemical and physical changes that characterize the specific cheese. For mould-ripened cheese, the ripening is accomplished primarily by the development of characteristic mould growth throughout the interior and/or on the surface of the cheese. Ripened cheese may be soft (e.g. camembert), firm (e.g. edam, gouda), hard (e.g. cheddar), or extra-hard and includes cheese in brine, which is a ripened semi-hard to soft cheese, white to yellowish in colour with a compact texture, and Without actual rind that has been preserved in brine until presented to the consumer.

1.6.2.1 Ripened cheese, includes rind

Refers to ripened (including mould-ripened) cheese, including rind, or any part thereof, such as cut, shredded, grated or sliced cheesesuch as blue cheese, brie, gouda, havarti, hard grating cheese, and Swiss cheese.

1.6.2.2 Rind of ripened cheese

Refers to the rind only of the cheese and the rind of the cheese is the exterior portion of the cheese mass that initially has the same composition as the interior portion of the cheese, but which may dry after brining and ripening.

1.6.2.3 Cheese powder

Dehydrated product prepared from a variety or processed cheese. Does not include grated or shredded cheese (1.6.2.1 for variety cheese; 1.6.4 for processed cheese). Product is intended either to be reconstituted with milk or water to prepare a sauce, or used as-is as an ingredient (e.g. with cooked macaroni, milk and butter to prepare a macaroni and cheese casserole). Includes spray-dried cheese.

1.6.3 Whey cheese

A solid or semi-solid product obtained by concentration of whey with or without the addition of milk, cream or other materials of milk origin and moulding of the concentrated product which includes the whole cheese and the rind of the cheese and it is different from whey protein cheese (1.6.6).

1.6.4 Processed cheese

Product with a very long shelf life obtained by melting and emulsifying cheese which includes products manufactured by heating and emulsifying mixtures of cheese, milk fat, milk protein, milk powder, and water indifferent amounts. Products may contain other added ingredients, such as aromas, seasonings and fruit, vegetables and/or meat. Product may be spreadable or cut into slices and pieces. The term "processed" does not mean cutting, grating, shredding, etc. of cheese. Cheeses treated by these mechanical processes are included under food category 1.6.2 (Ripened cheese).

1.6.4.1 Plain processed cheese

Processed cheese product that does not contain added flavours, seasonings, fruit, vegetables and/or meat. Examples include American cheese, Requeson etc.

1.6.4.2 Flavoured processed cheese, including containing fruit, vegetables, meat, etc.

Processed cheese product that contains added flavours, seasonings, fruit, vegetables and/or meat such asNeufchatel cheese spread with vegetables, pepper jack cheese, cheddar cheese spread with wine, and cheese balls (formed processed cheese coated in nuts, herbs or spices).

1.6.5 Cheese analogues

Products that look like cheese, but in which milk fat has been partly or completely replaced by other fats which includes imitation cheese, imitation cheese mixes, and imitation cheese powders.

1.6.6 Whey protein cheese

Product containing the protein extracted from the whey component of milk. These products are principally made by coagulation of whey proteins. Example: ricotta cheese. It is different from whey cheese (1.6.3).

1.7 Dairy-based desserts

Includes ready-to-eat flavoured dairy dessert products and dessert mixes, frozen dairy confections and novelties, and dairy-based fillings. Includes flavoured yoghurt (a milk product obtained by fermentation of milk and milk products to which flavours and ingredients (e.g. fruit, cocoa, coffee) have been added) that may or may not be heat-treated after fermentation. Other examples include ice cream (frozen dessert that may contain whole milk, skim milk products, cream or butter, sugar, vegetable oil, egg products, and fruit,cocoa, or coffee), ice milk (product similar to ice cream with reduced whole or skim milk content, or made with non-fat milk), jellied milk, frozen flavoured yoghurt, junket (sweet custard-like dessert made from flavoured milk set with rennet), dulce de leche (cooked milk with sugar and added ingredients such as coconut or chocolate),butterscotch pudding and chocolate mousse. Includes traditional milk-based sweets prepared from milk concentrated partially, from khoya (cow or buffalo milk concentrated by boiling), or chhena(cow or buffalo milk, heat coagulated aided by acids like citric acid, lactic acid, malic acid, etc), sugar orsynthetic sweetener, and other ingredients (e.g. *maida* (refined wheat flour), flavours and colours (e.g. peda,burfee, milk cake, gulab jamun, rasgulla, rasmalai, basundi). These products are different from those in food category3.0 (edible ices, including sherbet and sorbet) in that the foods in category 1.7 are dairy-based, while those in 3.0 are water-based and contain no dairy ingredients.

1.8 Whey and whey products, excluding whey cheeses

Includes a variety of whey-based products in liquid and powdered forms.

1.8.1 Liquid whey and whey products, excluding whey cheeses

Whey is the fluid separated from the curd after coagulation of milk, cream, skimmed milk or buttermilk with milk coagulating enzymes during the manufacture of cheese, casein or similar products. Acid whey is obtained after the coagulation of milk, cream, skimmed milk or buttermilk, mainly with acids of the type used for the manufacture of fresh cheese.

1.8.2 Dried whey and whey products, excluding whey cheeses

Whey powders are prepared by spray- or roller-drying whey or acid whey from which the major portion of the milk fat has been removed.

2.0 Fats and oils, and fat emulsions

Includes all fat-based products that are derived from vegetable, animal or marine sources, or their mixtures.

2.1 Fats and oils essentially free from water

Edible fats and oils are foods composed mainly of triglycerides of fatty acids from vegetable, animal or marine sources.

2.1.1 Butter oil, anhydrous milk fat, ghee

The milk fat products anhydrous milk fat, anhydrous butter oil and butter oil are products derived exclusively from milk and/or products obtained from milk by a process that almost completely removes water and non-fat solids. Ghee is a product obtained exclusively from milk, cream or butter by a process that almost completely removes water and non-fat solids; it has a specially developed flavour and physical structure.

2.1.2 Vegetable oils and fats

Edible fats and oils obtained from edible plant sources. Products may be from a single plant source or marketed and used as blended oils that are generally designated as edible, cooking, frying, table or salad oils. Virgin oils are obtained by mechanical means (e.g. pressing or expelling), with application of heat only so as not to alter the natural composition of the oil. Virgin oils are suitable for consumption in the natural state. Cold pressed oils are obtained by mechanical means without application of heat. Examples include virgin olive oil, cottonseed oil, peanut oil, and vanaspati.

2.1.3 Lard, tallow, fish oil, and other animal fats

All animal fats and oils should be derived from animals in good health at the time of slaughter and intended for human consumption.

2.2 Fat emulsions mainly of type water-in-oil

Include all emulsified products excluding fat-based counterparts of dairy products and dairy desserts.

2.2.1 Butter

Butter is a fatty product consisting of a primarily water-in-oil emulsion derived exclusively from milk or products obtained from milk or both.

2.2.2 Fat spreads, dairy fat spreads and blended spreads

Includes fat spreads (emulsions principally of the type water and edible fats and oils), dairy fat spreads (emulsions principally of the type water-in-milk fat), and blended

spreads (fat spreads blended with higher amounts of milk fat)such as margarine (a spreadable or fluid water-in-oil emulsion produced mainly from edible fats and oils); products derived from butter (e.g. "butterine," a spreadable butter blend with vegetable oils), blends of butter and margarine; and minarine (a spreadable water-in-oil emulsion produced principally from water and edible fats and oils that are not solely derived from milk). Also includes reduced fat-based products derived from milk fat or from animal or vegetable fats**,** including reduced-fat counterparts of butter, margarine, and their mixtures.

2.3 Fat emulsions mainly of type oil-in-water, including mixed and/or flavoured products based on fat emulsions

Includes fat-based counterparts of dairy-based foods excluding dessert products. The fat portion of these products are derived from sources other than milk fat (e.g. vegetable fats and oils) such as imitation milk (a fat-substituted milk produced from non-fat milk solids by addition of vegetable fats (coconut, safflower or corn oil)); non-dairy whipped cream; non-dairy toppings; and vegetable cream. Mayonnaise is included in food category 12.6.1.

2.4 Fat-based desserts excluding dairy-based dessert products of food category 1.7

Includes fat-based counterparts of dairy-based desserts, which are found in category 1.7. Includes ready-to-eat products and their mixes, cocoa based spreads including fillings. Also includes non-dairy fillings for desserts. Examples include ice cream-like products made with vegetable fats

3.0 Edible ices, including sherbet and sorbet

This category includes water-based frozen desserts, confections and novelties, such as fruit sorbet, and flavoured ice. Frozen desserts containing primarily dairy ingredients are included in food category1.7.

4.0 Fruits and vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

This major category is divided into two categories: 4.1(Fruit) and 4.2 (Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds). Each of these categories is further divided into sub-categories for fresh and processed products.

4.1 Fruits

Includes all fresh (4.1.1) and processed (4.1.2) products.

4.1.1 Fresh fruits

Fresh fruit is generally free of additives.

4.1.1.1 Untreated fresh fruits

Raw fruit presented fresh from harvest.

4.1.1.2 Surface-treated fresh fruits

The surfaces of certain fresh fruit are coated with glazes or waxes or are treated with other food additives that act as protective coatings and/or help to preserve the freshness and quality of the fruit such as apples, oranges, dates, and longans.

[52][4.1.1.3 Peeled or cut, minimally processed fruit]

Fresh fruit that is cut or peeled and presented to the consumer, e.g. in a fruit salad and includes fresh shredded or flaked coconut.

4.1.2 Processed fruits

Includes all forms of processing other than peeling, cutting and surface treating fresh fruits.

4.1.2.1 Frozen fruits

Fruits that may or may not be blanched prior to freezing. The product may be frozen in a juice or sugar syrup. Such as frozen fruit salad and frozen strawberries.

4.1.2.2 Dried fruits, nuts and seeds

Fruit from which water is removed to prevent microbial growth which includes dried fruit leathers (fruit rolls) prepared by drying fruit purees. Such as cashew nut, almond, raisins, dried apple slices, figs, copra (dried coconut whole or cut), dried shredded or flaked coconut, prunes, dehydrated fruits etc.

4.1.2.3 Fruits in vinegar, oil, or brine

Includes pickled products such as mango pickles, lime pickles, pickled gooseberries, plums and pickled watermelon rind. Oriental pickled (“cured” or “preserved”) fruit products are sometimes referred to as “candied” fruits. These are not the candied fruit products of category 4.1.2.7 (i.e. dried, sugar coated fruits).

4.1.2.4 Canned or bottled (pasteurized) fruits

Fully preserved product in which fresh fruit is cleaned and placed in cans or jars with natural juice or sugar syrup (including artificially sweetened syrup) and heat-sterilized or pasteurized. Includes products processed in retort pouches such as canned fruit salad, and applesauce in jars.

4.1.2.5 Jams, jellies, marmalades

Jams, preserves and conserves are thick, spreadable products prepared by boiling whole fruit or pieces of fruit, fruit pulp or puree, with or without fruit juice or concentrated fruit juice, and sugar to thicken, and to which pectin and fruit pieces may be added. Jelly is a clear spreadable product prepared similarly to jam, except that it is has a smoother consistency and does not contain fruit pieces. Marmalade is a thick spreadable fruit slurry prepared from whole fruit, fruit pulp or puree (usually citrus), and boiled with sugar to thicken, to which pectin and fruit pieces and fruit peel pieces may be added. Includes dietetic counterparts made with non-nutritive high-intensity sweeteners. Examples include orange marmalade, grape jelly, and strawberry jam.

4.1.2.6 Fruit-based spreads (e.g. chutney) excluding products of food category 4.1.2.5

Includes fruit based spreads, condiment-type fruit products such as mango chutney, raisinchutney, fruit and vegetables chutneys and their mixes (dry or paste form).

4.1.2.7 Candied fruits

Includes glazed fruits (fruits treated with a sugar solution and dried), candied fruits (dried glazed fruit immersed in a sugar solution and dried so that the fruit is covered by a candy-like sugar shell), and crystallized fruit is prepared (dried glazed fruit rolled in icing or granulated sugar and dried).

4.1.2.8 Fruit preparations, including pulp, purees, fruit toppings and coconut milk

Fruit pulp is not usually intended for direct consumption. It is slurry of lightly steamed and strained fresh fruit, with or without added preservatives. Fruit puree (e.g. mango puree, prune puree) is produced in the same way, but has a smoother, finer texture, and may be used as fillings for pastries, but is not limited to this use. Fruit sauce (e.g. pineapple sauce or strawberry sauce) is made from boiled fruit pulp

with or without added sweeteners and may contain fruit pieces. Fruit sauce may be used as toppings for fine bakery wares and ice cream sundaes. Fruit syrup (e.g. blueberry syrup) is a more liquid form of fruit sauce that may be used as a topping e.g. for pancakes. Non-fruit toppings are included in category 5.4 (sugar- and chocolate-based toppings) and sugar syrups (e.g. maple syrup) are included in category 11.4. Coconut milk and coconut cream are products prepared using a significant amount of separated, whole, disintegrated, macerated or comminuted fresh endosperm (kernel) of coconut palm and expelled, where most filterable fibers and residues are excluded, with or without coconut water, and/or with additional water. Coconut milk and coconut cream are treated by heat pasteurization, sterilization or ultrahigh temperature (UHT) processes. Coconut milk and coconut cream may also be produced in concentrated or skim (or "light") forms. Examples of traditional foods in this sub-category are tamarind concentrate (clean extract of tamarind fruit with not less than 65% total soluble solids), tamarind powder (tamarind paste mixed with tapioca starch), tamarind toffee (mixture of tamarind pulp, sugar, milk solids, antioxidants, flavours, stabilizers and preservatives), and fruit bars (a mixture of fruit (mango, pineapple, or guava) pulp mixed with sugar, flavours and preservatives, dried into a sheet).

4.1.2.9 Fruit-based desserts, including fruit-flavoured water-based desserts

Includes ready-to-eat products and mixes. Includes rote gruze, frutgrod, fruit compote, nata de coco, and *mitsumame* (desserts of agar jelly, fruit pieces and syrup) etc. This category does not include fine bakery wares containing fruit (categories 7.2.1 and 7.2.2), fruit-flavoured edible ices (category 3.0), or fruit-containing frozen dairy desserts (category 1.7).

4.1.2.10 Fermented fruit products

Type of pickled product produced by preservation in salt by lactic acid fermentation. Examples include fermented plums, amla/mango pickles etc.

4.1.2.11 Fruit fillings for pastries

Includes ready-to-eat products and mixes and all type of fillings excluding purees (category4.1.2.8). These fillings usually include whole fruit or fruit pieces such as cherry pie filling and raisin filling for oatmeal cookies.

4.1.2.12 Cooked fruits

Fruit that is steamed, boiled, baked, or fried, with or without a coating, for presentation to the consumer such as baked apples, fried apple rings, and peach dumplings (baked peaches with a sweet dough covering).

4.2 Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

Includes all fresh (4.2.1) and processed (4.2.2) products.

4.2.1 Fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

Fresh vegetables are generally free of additives.

4.2.1.1 Untreated fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes (including soybeans), and aloe vera), seaweeds, and nuts and seeds

Raw vegetables presented fresh from harvest.

4.2.1.2 Surface-treated fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

The surfaces of certain fresh vegetables are coated with glazes or waxes or are treated with other food additives that act as protective coatings and/or help to preserve the freshness and quality of the vegetable such as avocados, cucumbers, green peppers and pistachio nuts.

[52]**[4.2.1.3 Peeled, cut or shredded minimally processed vegetables [(including mushrooms and fungi, roots and tubers, fresh pulses and legumes, and aloevera) sea weeds, nuts and seeds]**

Fresh vegetables, e.g. peeled raw potatoes that are presented to the consumer to be cooked at home (e.g.in the preparation of hash brown potatoes).

4.2.2 Processed vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

Includes all forms of processing other than peeling, cutting and surface treating of fresh vegetables.

4.2.2.1 Frozen vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

Fresh vegetables are usually blanched and frozen. Examples include quick-frozen corn, quick-frozen French-fried potatoes, quick frozen peas, and quick frozen whole processed tomatoes.

4.2.2.2 Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds

Products in which the natural water content has been reduced below that critical for growth of microorganismswithout affecting the important nutrients. The product may or may not be intended for rehydration prior to consumption. Includes vegetable powders that are obtained from drying the juice, such as tomato powder and beet powder etc such as dried potato flakes, dehydrated carrots or peas or cabbage or mushroom or spinach leaf or lentil etc.

4.2.2.3 Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds in vinegar, oil, brine, or soybean sauce

Products prepared by treating raw vegetables with salt solution excluding fermented soybean products. Fermented vegetables, which are a type of pickled product, are classified in4.2.2.7. Fermented soybean products are classified in 6.8.6, 6.8.7, 12.9.1, 12.9.2.1 and 12.9.2.3 such as pickled cabbage, pickled cucumber, olives, pickled onions, mushrooms in oil, marinated artichoke hearts, acharetc. Other examples include pickled ginger, pickled garlic, and chilli pickles etc.

4.2.2.4 Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds

[77][Fully preserved product in which fresh vegetables are cleaned, blanched, and placed in cans or jars in liquid (e.g. brine, water, oil or sauce), and heat-sterilized or pasteurized such as canned peas, canned baby corn, asparagus packed in glass jars, canned and/or cooked/baked beans, canned tomato paste/ puree and canned tomatoes (pieces, wedges or whole), canned mushrooms, canned chestnuts etc.]

4.2.2.5 Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g. peanut butter)

Vegetable purees are finely dispersed slurries prepared from the concentration of vegetables, which may have been previously heat-treated (e.g. steamed). The slurries may be filtered prior to packaging. Purees contain lower amounts of solids than pastes (found in category 4.2.2.6). Examples include tomato puree, peanut butter (a spreadable paste made from roasted and ground peanuts by the addition of peanut oil) and other nut butters (e.g. cashew butter) etc.

4.2.2.6 Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g. vegetable desserts and sauces, candied vegetables) other than food category 4.2.2.5

Vegetable pastes and pulps are prepared as described for vegetable purees (category 4.2.2.5). However, pastes and pulps have a higher amount of solids, and are usually used as components of other foods (e.g. sauces)such as potato pulp, horseradish pulp, aloe extract, salsa (e.g. chopped tomato, onion, peppers, spices and herbs), sweet red bean paste (*an*), sweet coffee bean paste (filling), tomato paste, tomato pulp, tomato sauce, crystallized ginger, and bean-based vegetable dessert, sweets (vegetable based):- carrot halwa (gajar halwa/ gajrela), lauki halwa, coconut based sweets like coconut burfee, kaju based sweets etc.

4.2.2.7 Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweed products, excluding fermented soybean products of food category 6.8.6, 6.8.7, 12.9.1, 12.9.2.1 and 12.9.2.3

Fermented vegetables are a type of pickled product, formed by the action of lactic acid bacteria, usually in the presence of salt. Traditional Oriental fermented vegetable products are prepared by air-drying vegetables and exposing them to ambient temperatures so as to allow the microorganisms to flourish; the vegetables are then sealed in an anaerobic environment and salt (to generate lactic acid), spices and seasonings are added such as achar, pickled cabbage or carrot or cauliflower, pickled cucumber, olives, pickled onions, mushrooms in oil, marinated artichoke hearts, piccalilli, lemon pickles, soybean sauce-pickled vegetables , vinegar-pickled vegetables, brine-pickled vegetables, pickled ginger, pickled garlic, and chilli pickles, red pepper paste, fermented vegetable products, kimchi and sauerkraut (fermented cabbage) etc. Excludes fermented soybean products that are found in food categories6.8.6 (fermented soybeans (e.g. *natto* and *tempe*), 6.8.7 (fermented soybean curd), 12.9.1(fermented soybean paste e.g. *miso*), 12.9.2.1 (fermented soybean sauce), and 12.9.2.3 (other soybean sauce) etc.

4.2.2.8 Cooked or fried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds

Vegetables those are steamed, boiled, baked, or fried, with or without a coating, for presentation to the consumer such as simmered beans, pre-fried potatoes, fried okra, and ready-to-eat curries like paneer makhani, kadhaipaneer, palakpaneer, baigan-ka-bharta, alootamatar, mixed vegetable, dal makhani, frozen curried vegetables /ready-to-eat vegetables; vegetable gravies, vegetables boiled down in soy sauceetc.

5.0 Confectionery

Includes all cocoa and chocolate products (5.1), other confectionery products that may or may not contain cocoa (5.2), chewing gum (5.3), and decorations and icings (5.4), or foods produced solely with any combination of foods conforming to these sub-categories.

5.1 Cocoa products and chocolate products including imitations and chocolate substitutes

This category is divided to reflect the variety of standardized and non-standardized cocoa- and chocolatebasedproducts.

5.1.1 Cocoa mixes (powders) and cocoa mass/cake

Includes a variety of products that are used in the manufacture of other chocolate products or in the preparation of cocoa-based beverages. Most cocoa products have their origin in the cocoa nib, which is obtained from cocoa beans that have been cleaned and freed from the shells. Cocoa mass is obtained from the mechanical disintegration of the nib. Depending on the desired finished chocolate product, the cocoa nib or mass may be treated by an alkalinization process that mellows the flavour. Cocoa dust is the fraction of the cocoa bean produced as a product during winnowing and degerming. Cocoa powder is produced byreducing the fat content of cocoa mass or liquor by pressing (including expeller pressing) and molding into cocoa press cake. The cocoa press cake is disintegrated and ground to cocoa powder. Cocoa liquor is ahomogeneous flowing paste produced from cocoa nib, which has been roasted, dried, disintegrated and milled. Cocoa-sugar mixtures contain only cocoa powder and sugar. Chocolate powder for beverages is made from cocoa liquor or cocoa powder and sugar etc. Examples include drinking chocolate powder; breakfast cocoa; cocoa dust (fines), nibs, mass, press cake; chocolate liquor; cocoa mixes (powders for preparing the hot beverage); cocoa-sugar mixture; and dry mixes

for sugar-cocoa confectionery. Finished cocoa beverages and chocolate milk are included in category 1.1.2, and most finished chocolate products are included in category 5.1.4.

5.1.2 Cocoa mixes (syrups)

Products that may be produced by adding a bacterial amylase to cocoa liquor. The enzyme prevents the syrup from thickening or setting by solubilizing and dextrinizing cocoa starch. Includes products such as chocolate syrup used to prepare chocolate milk or hot chocolate. Chocolate syrup differs from fudge sauce (e.g. for ice cream sundaes), which is found in category 5.4.

5.1.3 Cocoa and chocolate products

Chocolate is produced from cocoa nibs, mass, press cake, powder, or liquor with or without addition of sugar, cocoa butter, aroma or flavouring substances, and optional ingredients (e.g. nuts). This category is for chocolate as defined in these regulations, and for confectionery that uses chocolate that meets the standard and may contain other ingredients, for example chocolate-covered nuts and fruit (e.g. raisins). This category includes only the chocolate portion of any confectionery within the scope of food category 5.2. Examples include cocoabutter confectionery (composed of cocoa butter, milk solids and sugar), white chocolate, chocolate chips, milk chocolate, cream chocolate, sweet chocolate, bitter chocolate, enrobing chocolate, chocolate covered in a sugar-based “shell” or with coloured decorations, filled chocolate (chocolate with a texturally distinctcentre and external coating, excluding flour confectionery and pastry products of categories 7.2.1and 7.2.2) and chocolate with added edible ingredients. This category does not include yoghurt-, cereal-, and honey-covered nuts (category 15.2).

[52][5.1.4 Imitation chocolate, chocolate substitute products]

Includes chocolate-like products that may or may not be cocoa-based, but have similar organoleptic properties as chocolate, such as carob chips, and cocoa-based products that contain greater than 5% vegetable fat (other than cocoa butter) that are excluded from the scope of the *Standard for Chocolate*. These chocolate-like products may contain additional optional ingredients and may include filled confectionery. This category includes only the chocolate-like portion of any confectionery within the scope of food category 5.2.

5.2 Confectionery including hard and soft candy, nougats, etc. other than food categories 5.1, 5.3, and 5.4

Includes all types of products that primarily contain sugar and their dietetic counterparts, and may or may not contain cocoa. Includes hard candy (5.2.1), soft candy (5.2.2), and nougats and marzipans (5.2.3).

[52][5.2.1 Hard candy

Products made from water and sugar (simple syrup), colour and flavour that may or may not have a filling, their dietetic counterparts, and products that may or may not contain cocoa. Includes: pastilles and lozenges (rolled, shaped and filled sweetened candy). These types of products may be used as fillings for chocolate products within the scope of food categories 5.1.3 and 5.1.4.

5.2.2 Soft candy

Products include soft, chewy products such as caramels (containing sugar syrup, fats, colour and flavour) and their dietetic counterparts; products that may or may not contain cocoa and milk (e.g. toffees and chocolate-flavoured caramels); jelly-based candies (e.g. jelly beans, jellied fruit paste covered in sugar, made from pectin, colour and flavour); and licorice. Also included are halwa, and oriental specialties, such as sweet bean jelly etc. These types of products may be used as fillings for chocolate products within the scope of food categories 5.1.3 and 5.1.4.

5.2.3 Nougats and Marzipans

Nougats consist of roasted ground nuts, sugar and cocoa and their dietetic counterparts, that may be consumed as is, or may be used as a filling for chocolate products within the scope of food categories 5.1.3 and 5.1.4. Marzipan consists of almond paste and sugar and their dietetic counterparts that may be shaped and coloured for direct consumption, or may be used as a filling for chocolate products within the scope of food categories 5.1.3 and 5.1.4.]

5.3 Chewing gum

Product made from natural or synthetic gum base containing flavours, sweeteners (nutritive or non-nutritive), aroma compounds, and other additives. Includes bubble gum and breath-freshener gum products.

5.4 Decorations, toppings (non-fruit) and sweet sauces

Includes ready-to-eat icings and frostings for cakes, cookies, pies and bread and flour confectionery, as well as mixes for these products. Also includes sugar- and chocolate-based coatings for baked goods. Sweet sauces and toppings include butterscotch sauce for use, e.g. on ice cream. These sweet sauces are different than the syrups (e.g. maple, caramel, and flavoured syrups for fine bakery wares and ices) included in category 11.4. Fruit-based toppings are included in 4.1.2.8. Chocolate sauce is included in 5.1.2.

6.0 Cereals and cereal products derived from cereal grains, roots and tubers, pulses, legumes and pith or soft core of palm tree, excluding bakery wares of food category 7.0

Includes unprocessed (6.1) and various processed forms of cereal and cereal-based products.

6.1 Whole, broken, or flaked grain, including rice

Includes whole, husked, unprocessed cereals and grains. Examples include rice (including enriched, instant and parboiled), wheat, corn (maize), sorghum, barley, oats, millets, dried peas or legumes etc.

6.2 Flours and starches (including soybean powder)

The basic milled products of cereal grains, roots, tubers, pulses, pith or softy core of palm tree or legumes sold as such or used as ingredients (e.g. in baked goods).

6.2.1 Flour

Flour is produced from the milling of grain, cereals and tubers (e.g. cassava) and seeds, pith or soft core of palm tree. Includes flour pastes for bread and flour confectionery, flour for bread, pastries, noodles and pasta, and flour mixes (physical mixtures of flours from different cereal or grain sources, which are different from mixes for bakery goods (dry mixes containing flour and other ingredients, categories 7.1.6 (mixes for ordinary bakery wares) and 7.2.3 (mixes for fine bakery wares) such as Atta, besan, suji, durum wheat flour, self-rising flour, enriched flour, instantized flour, corn flour, corn meal, kuttu-ka-atta, singhade-ka-atta, roasted soybean flour, konjac flour, and maida (refined wheat flour) and sago flour.

6.2.2 Starches

Starch is a glucose polymer occurring in granular form in certain plant species, notably seeds (e.g. cereals, pulses, corn, wheat, rice, beans, peas) and tubers (e.g.

tapioca, potato). The polymer consists of linkedanhydro-alpha-D-glucose units. Native starch is separated by processes that are specific for each raw material.

6.3 Breakfast cereals, including rolled oats

Includes all ready-to-eat, instant, and regular hot breakfast cereal products. Examples include granola-type breakfast cereals, instant oatmeal, corn flakes, puffed wheat or rice or other cereals (puffed, pounded, popped) like poha, kheel, popcorn, multi-grain (e.g. rice, wheat and corn) breakfast cereals, breakfast cereals made from soy or bran, and extruded-type breakfast cereals made from grain flour or powder etc.

6.4 Pastas and noodles and like products

Includes all pasta, noodles and similar products e.g. rice paper, rice vermicelli, soybean pastas and noodles.

6.4.1 Fresh pastas and noodles and like products

Products that are untreated (i.e. not heated, boiled, steamed, cooked, pre-gelatinized or frozen) and are no dehydrated. These products are intended to be consumed soon after preparation. Examples include unboiled noodles, and “skins” or crusts for spring rolls, wontons, and *shuo mai*.

6.4.2 Dried pastas and noodles and like products

Products that are untreated (i.e. not heated, boiled, steamed, cooked, pre-gelatinized or frozen) and are dehydrated. Examples include dried forms of: spaghetti, bean vermicelli, rice vermicelli, macaroni, and rice noodles.

6.4.3 Pre-cooked pastas and noodles and like products

Products that are treated (i.e. heated, boiled, steamed, cooked, pre-gelatinized or frozen). These products may be sold directly to the consumer (e.g. pre-cooked, chilled gnocchi to be heated prior to consumption), or may be the starch component of prepared meals (e.g. heat-and-serve frozen dinner entrees containing spaghetti, macaroni or noodles; canned spaghetti and meatballs entrée). Also includes instant noodles, e.g. pre-cooked ramen, udon, rice noodles, that are pre-gelatinized, heated and dried prior to sale to the consumer.

6.5 Cereal and starch based desserts

Dessert products containing cereal, starch or grain as the main ingredient. Also includes cereal- or starch based fillings for desserts such as rice pudding, semolina pudding, tapioca pudding, gujiya, balusahi, soan-papdi, patisa, malpua, and starchy pudding based desserts, cereal based desserts, suji or moong dal halwa, jalebi, boondiladdoo, motichoorladdoo, mysorepak, emarti, modak,rice flourdumplings, steamed yeast-fermented wheat flour dough desserts, starchy pudding based dessertsetc.

6.6 Batters

Products containing flaked or ground cereal or grain that when combined with other ingredients (e.g. water, milk, egg, fats, milk solids, spices, seasonings etc.) may be used as a coating for fish or poultry and includes products sold as dry mix of cereal or grain component. Examples include idli or vada or dosa batters, upma, idli or vada or dosa mixes, pongal mix, sattu, etc., batters for breading or batters for fish or poultry etc. Doughs (e.g. for bread) are found in 7.1.4, and other mixes (e.g. for bread or cakes) are found in 7.1.6 and 7.2.3, respectively.

6.7 Pre-cooked or processed cereal/grain/legume products

Fermented or non-fermented products prepared from cereals and/or pulse. Including processed cereals, cereal or malt-based food or beverage and/or pulse and enriched cereals and/or pulse products, such as poha, upma, idli, vada, dhokla, khandvi, papad etc. Products prepared from rice that is soaked, drained, steamed, kneaded and shaped into cake forms. Crisp snacks made from rice grains, also called “rice cakes” are categorized in 15.1, and dessert-type rice cakes are in 6.5. Category 6.7 would also include processed rice and enriched rice products, such as pre-cooked products that are sold canned, chilled or frozen; and processed rice products sold in retort pouches. This is to distinguish from category 6.1 (Whole, broken, or flaked grain, including rice) that is intended to include only whole, husked, unprocessed cereals and grains.

6.8 Soybean products (excluding soybean-based seasonings, and condiments of food category 12.9)

Includes dried, cooked, fried or fermented soybean products, and soybean curd products.

6.8.1 Soybean-based beverages

Products prepared from dried soybeans that are soaked in water, pureed, boiled and strained, or prepared fromsoybean flour, soybean concentrate, or soybean isolate. Also includes soybean products, such as soybean-based beverage powder.

6.8.2 Soybean-based beverage film

Film formed on the surface of boiling soybean-based beverage that is dried. It may be deep-fried or softened in water prior to use in soups or poached food.

6.8.3 Soybean curd (tofu)

Soybean curd is prepared from dried soybeans that are soaked in water, pureed, and strained to produce soybean-based beverages, which is then made into a curd with a coagulant, and placed in a mould. Soybean curds may be of a variety of textures (e.g. soft, semi-firm, firm).

6.8.4 Semi-dehydrated soybean curd

Soybean curd that has been pressed while being moulded into blocks so that some moisture has been removed, but so that it is not completely dried (see food category 6.8.5). Semi-dehydrated soybean curd typically contains 62% water, and has a chewy texture.

6.8.4.1 Thick gravy-stewed semi-dehydrated soybean curd

Partially dehydrated soybean curd that is cooked (stewed) with a thick sauce (e.g. miso sauce). The partially dehydrated soybean curd typically absorbs the sauce, and so regains its original texture.

6.8.4.2 Deep fried semi-dehydrated soybean curd

Partially dehydrated soybean curd that is deep-fried. It may be consumed as such, or cooked (e.g. stewed in sauce) after frying.

6.8.4.3 Semi-dehydrated soybean curd, other than food categories 6.8.4.1 and 6.8.4.2

Partially dehydrated soybean curd prepared other than by stewing in thick (e.g. miso) sauce or by deepfrying. Includes grilled products and mashed products that may be combined with other ingredients (e.g. to make a patty or a loaf).

6.8.5 Dehydrated soybean curd

Soybean curd from which all moisture has been removed through the process of freezing, aging, and dehydrating. It may be reconstituted with water or sauce for consumption, or is used directly in prepared dishes. It may also be deep-fried or simmered in sauce.

6.8.6 Fermented soybeans

The product is prepared from soybeans that have been steamed and fermented with certain fungi or bacteria (starter). The soft, whole beans have a distinctive aroma and taste. It includes products such as Kinema (Darjeeling hills and Sikkim), Turangbai (Meghalaya), Bekang (Mizoram), Peruyyan (Arunachal Pradesh), Hawaijar (Manipur), and Aakhuni (Nagaland) and other like Natto, and Tempe etc.

6.8.7 Fermented soybean curd

The product is prepared by forming soybean curd into a loaf during the fermentation process. It is a soft, flavoured product, either in red, rice-yellow, or grey-green.

6.8.8 Other soybean protein products

Other products from soybeans composed mainly of soybean protein such as extruded, textured, concentrated, and isolated soybean protein.

7.0 Bakery wares

Includes categories for bread and ordinary bakery wares (7.1) and for sweet, salty and savoury fine bakery wares (7.2).

7.1 Bread and ordinary bakery wares and mixes

Includes all types of non-sweet bakery products and bread-derived products.

7.1.1 Breads and rolls

Includes yeast-leavened and specialty breads like white or brown ormultigrain breadandIndian breads (like kulcha, chapatti, roti, parantha, nan, pav etc.), wheat rolls, milk rolls, challa bread, pizza-base or pizza-bread, soda bread etc.

7.1.1.1 Yeast-leavened breads and specialty breads

Includes all types of non-sweet bakery products and bread-derived products such as include white bread, rye bread, pumpernickel bread, raisin bread, whole wheat bread, pain courant francais, malt bread, hamburger rolls, whole wheat rolls, and milk rolls.

7.1.1.2 Soda breads
Includes all soda breads.

7.1.2 Crackers, excluding sweet crackers
The term “cracker” refers to a thin, crisp wafer, usually dough. Flavoured crackers (e.g. cheese flavoured) that are consumed as snacks are in 15.1 such as soda crackers, rye crispsetc.

7.1.3 Other ordinary bakery products
Includes all other ordinary bakery wares, such as cornbread and biscuits, bagels, pita and muffins. The term “biscuit” in this category refers to a small cake of shortened bread, leavened with baking powder or baking soda. It does not refer tithe British “biscuit,” which is a “cookie” or “sweet cracker” included in category 7.2.1.

7.1.4 Bread-type products, including bread stuffing and bread crumbs
Includes bread-based products such as croutons, bread stuffing and stuffing mixes, and prepared doughs (e.g. for biscuits, toasted bread (rusks), prepared doughs for bread/bread-type products including their frozen counterparts etc.). Bread mixes are included in category 7.1.6.

7.1.5 Steamed breads and buns
Oriental-style leavened wheat or rice products that are cooked in a steamer. Products may be made with or without fillingsuch as twisted rolls of various shapes, filled dumplings and steamed bun with meat, jam or other filling.

7.1.6 Mixes for bread and ordinary bakery wares
Includes all the mixes containing the dry ingredients to which wet ingredients (e.g. water, milk, oil, butter, and eggs) are added to prepare dough for baked goods from food categories 7.1.1 to 7.1.5 such as French bread mix, tin bread mix, panettone mix, ciabatta mix, among others. Mixes for fine bakerywares (e.g. cakes, cookies, pancakes) are found in category 7.2.3.

7.2 Fine bakery wares (sweet, salty, savoury) and mixes

Includes sub-categories for ready-to-eat products (7.2.1 and 7.2.2) as well as mixes (7.2.3) for preparing fine baked goods.

7.2.1 Cakes, cookies and pies

The term “sweet cracker” or “sweet biscuit” used in this category refers to a cookie-like product that may beaten as a dessert such as butter cake, cheesecake, fruit-filled cereal bars, pound cake, moist cake (type of starchy dessert), western cakes, moon cakes, sponge cake, fruit filled pies (e.g. apple pie), custard types, oatmeal cookies, sugar cookies and British “biscuits” (cookies or sweet crackers).

7.2.2 Other fine bakery products

Includes products that may be eaten as a dessert or as breakfast such as doughnuts, sweet rolls, muffins, pancakes, waffles, filled sweet buns, Danish pastry, wafers or cones for ice cream, flour confectionery, and trifles.

7.2.3 Mixes for fine bakery wares

Mixes containing the dry ingredients to which wet ingredients (e.g. water, milk, oil, butter, eggs) are added to prepare dough for fine baked goods such as cake mix, flour confectionery mix, pancake mix, pie-mix, and waffle mix. Prepared dough is found in category 7.1.4. Mixes for ordinary bakery wares (e.g. bread) is found in category 7.1.6.

8.0 Meat and meat products, including poultry

This category includes all types of meat and poultry products, in pieces and cuts or comminutes fresh (8.1) and processed (8.2 and 8.3).

8.1 Fresh meat and poultry

Fresh products are usually free of additives.

8.1.1 Fresh meat and poultry whole pieces or cuts

Untreated raw meat, and poultry carcasses and cuts.

8.1.2 Fresh meat and poultry comminuted

Untreated raw comminuted or mechanically deboned meat and poultry.

8.2 Processed meat, and poultry products in whole pieces or cuts

Includes various treatments for non-heat treated meat cuts (8.2.1), and heat-treated meat cuts (8.3.2).

8.2.1 Non-heat treated processed meat and poultry products in whole pieces or cuts

This category describes several treatment methods (e.g. curing, salting, drying, pickling) that preserve and extend the shelf life of meats.

8.2.1.1 Cured (including salted) non-heat treated processed meat and poultry products in whole pieces or cuts

Salted products are treated with sodium chloride. Dry cured (dry pickled) products are prepared by rubbing salt directly on the meat surface. Wet pickle cured products are prepared by submerging the meat in a brine solution. Pump cured products are prepared by injecting brine into the meat. Curing may also be achieved by addition of additives. Smoked products are also included here.

8.2.1.2 Cured (including salted) and dried non-heat treated processed meat and poultry products in whole pieces or cuts

The meat cuts may be cured or salted as described for category 8.2.1.1, and then dried, or they may only be dried. Drying is achieved either in hot air or in vacuum.

8.2.1.3 Fermented non-heat treated processed meat and poultry products in whole pieces or cuts

Fermented products are a type of pickled product produced by the action of lactic acid bacteria in the presence of salt.

8.2.2 Heat-treated processed meat and poultry products in whole pieces or cuts

Includes cooked (including cured and cooked, and dried and cooked), heat-treated (including sterilized) and canned meat cuts.

[77][8.2.3 Frozen raw, flavored/marinated, processed meat and poultry products in whole pieces or cuts –

Includes raw, flavoured/marinated raw and cooked meat cuts that have been frozen.]

8.3 Processed comminuted meat and poultry products

Includes various treatments for non-heat treated products (8.3.1) and heat-treated products (8.3.2).

8.3.1 Non-heat treated processed comminuted meat and poultry products

This category describes several treatment methods (e.g. curing, salting, drying, pickling) that preserve and extend the shelf life of comminuted and mechanically deboned meat products.

8.3.1.1 Cured (including salted) non-heat treated processed comminuted meat and poultry products

Salted products are treated with sodium chloride. Dry cured (dry pickled) products are prepared by rubbing salt directly on the meat surface. Wet pickle cured products are prepared by submerging the meat in a brine solution. Pump cured products are prepared by injecting brine into the meat. Curing may also be achieved by addition of additives. Also includes smoked products.

8.3.1.2 Cured (including salted) and dried non-heat treated processed comminuted meat and poultry products

The comminuted or mechanically deboned products may be cured or salted as described for category 8.3.1.1, and then dried, or they may only be dried. Drying is achieved either in hot air or in vacuum.

8.3.1.3 Fermented non-heat treated processed comminuted meat and poultry products

Fermented products are a type of pickled product produced by the action of lactic acid bacteria in the presence of salt. Certain types of sausages may be fermented.

8.3.2 Heat-treated processed comminuted meat and poultry products

Includes cooked (including cured and cooked, and dried and cooked), heat-treated (including sterilized) and canned comminuted products.

8.3.3 Frozen processed comminuted meat andpoultry products

Includes raw, partially cooked and fully cooked comminuted or mechanically deboned meat products that have been frozen.

8.4 Edible casings (e.g. sausage casings)

Casings or tubing prepared from collagen, cellulose, or food-grade synthetic material or from natural sources that contain the sausage mix.

9.0 Fish and fish products, including molluscs, crustaceans, and echinoderms

This broad category is divided into categories for fresh fish (9.1) and various processed fish products (9.2– 9.4). This category includes aquatic vertebrates (e.g. fish) and aquatic invertebrates (e.g. jellyfish), as well as molluscs (e.g. clams, snails), crustaceans (e.g. shrimp, crab, lobster), and echinoderms (e.g. sea urchins, sea cucumbers). Fish products may be treated with coatings, such as glazes and spice rubs, prior to marketing to the consumer (e.g. glazed frozen fish fillets).

9.1 Fresh fish and fish products, including molluscs, crustaceans, and echinoderms

The term "fresh" refers to fish and fish products that are untreated except for refrigeration, storage on ice, or freezing upon catching at sea or in lakes or other bodies of water in order to prevent decomposition and spoilage.

9.1.1. Fresh fish

Includes fresh rohu, catla, hilsa, singhada, trout, pomphret, cod, salmon, fishroe etc

9.1.2 Fresh molluscs, crustaceans and echinoderms

Includes fresh shrimp, clams, crabs, lobster, snails etc.

9.2 Processed fish and fish products, including molluscs, crustaceans, and echinoderms

This category refers to fish products that are frozen and may require further cooking, as well as ready-to-eat cooked, smoked, dried, fermented, and salted products.

9.2.1 Frozen fish, fish fillets, and fish products, including molluscs, crustaceans, and echinoderms

Fresh, including partially cooked, fish subjected to freezing or quick-freezing at sea and on land for further processing such as frozen or deep frozen clams, cod fillets, crab, finfish, haddock, hake, lobster, minced fish, prawns and shrimp; frozen fish roe; frozen surimietc.

9.2.2 Frozen battered fish, fish fillets and fish products, including molluscs, crustaceans, and echinoderms

Uncooked product prepared from fish or fish portions, with dressing in eggs and bread crumbs or batter. Examples include frozen raw breaded or batter-coated shrimp; and frozen or quick-frozen breaded or batter coated fish fillets, fish portions and fish sticks (fish fingers) etc.

9.2.3 Frozen minced and creamed fish products, including molluscs, crustaceans, and echinoderms

Uncooked product prepared from minced fish pieces in cream-type sauce.

9.2.4 Cooked and/or fried fish and fish products, including molluscs, crustaceans, and echinoderms

Includes all ready-to-eat cooked products as described in the sub-categories.

9.2.4.1 Cooked fish and fish products

Cooked products include steamed, boiled or any other cooking method except frying (see 9.2.4.3). The fish may be whole, in portions or comminuted such as fish sausage; cooked fish products boiled down in soy sauce; cooked surimi products, cooked fish roe; cooked fish and lobster paste (surimi-like products. Other fish paste (Oriental type) is found in 9.3.4.

9.2.4.2 Cooked molluscs, crustaceans, and echinoderms

Cooked products include steamed, boiled or any other cooking method except frying (see 9.2.4.3) such as cooked *Crangon crangon* and *Crangon vulgaris* (brown shrimp; cooked shrimp), clams and crabs.

9.2.4.3 Fried fish and fish products, including molluscs, crustaceans, and echinoderms

Ready-to-eat products prepared from fish or fish portions, with or without further dressing in eggs and breadcrumbs or batter, that are fried, baked, roasted or barbecued, and then packaged or canned with or without sauce or oil. Examples include ready-to-eat fried surimi, fried calamari, and fried soft-shell crabs.

9.2.5 Smoked, dried, fermented, and/or salted fish and fish products, including molluscs, crustaceans, and echinoderms

Smoked fish are usually prepared from fresh deep frozen or frozen fish that are dried directly or after boiling, with or without salting, by exposing the fish to freshly-generated sawdust smoke. Dried fish are prepared by exposing the fish to sunlight or drying directly or after boiling in a special installation; the fish may be salted prior to drying. Salted fish are either rubbed with salt or placed in a salt solution. This manufacturing process is different from that described in food category 9.3 for marinated and pickled fish. Cured fish is prepared by salting and then smoking fish

such as salted anchovies, shrimp, and shad; smoked chub, cuttlefish and octopus; fish ham; dried and salted species of the *Gadidae* species; smoked or salted fish paste and fish roe; cured and smoked sablefish, shad, and salmon; dried shellfish, dried bonito, and boiled, dried fish.

9.3 Semi-preserved fish and fish products, including molluscs, crustaceans, and echinoderms

Includes products treated by methods such as marinating, pickling and partial cooking that have a limited shelf life.

9.3.1 Fish and fish products, including molluscs, crustaceans, and echinoderms, marinated and/or in jelly

Marinated products are manufactured by soaking the fish in vinegar or wine with or without added salt and spices. They are packaged in jars or cans and have a limited shelf life. Products in jelly may be manufactured by tenderizing fish products by cooking or steaming, adding vinegar or wine, salt and preservatives, and solidifying in a jelly such as “roll mops” (a type of marinated herring), sea eel(dogfish) in jelly and fish aspic.

9.3.2 Fish and fish products, including molluscs, crustaceans, and echinoderms, pickled and/or in brine

Pickled products are sometimes considered a type of marinated product. Pickling results from the treatment of the fish with a salt and vinegar or alcohol (e.g. wine) solution. Examples include different types of Oriental pickled productse.g. pickled fish, pickled herring and sprat.

9.3.3 Salmon substitutes, caviar, and other fish roe products

The term “caviar” refers only to the roe of the sturgeon species. Caviar substitutes are made of roe of various sea and freshwater fish (e.g. cod and herring) that are salted, spiced, dyed and may be treated with a preservative such as salted salmon roe, processed, salted salmon roe, cod roe, salted cod roe and lumpfish caviar. Occasionally, roe may be pasteurized. In this case, it is included in food category 9.4, since it is a fully preserved product. Roe products that are frozen, cooked or smoked are included in category 9.2.1, 9.2.4.1, and 9.2.5, respectively; fresh fish roe is found in category 9.1.1, 9.3.4. Semi-preserved fish and fish products, including molluscs, crustaceans, and echinoderms (e.g. fish paste), excluding products of food categories 9.3.1 – 9.3.3such as fish or crustacean pates and traditional Oriental fish paste. The

latter is produced from fresh fish or the residue from fish sauce production, which is combined with other ingredients such as wheat flour, rice or soybeans. The product may be further fermented. Cooked fish or crustacean pastes (surimi-like products) are found in 9.2.4.1 and 9.2.4.2, respectively.

9.4 Fully preserved, including canned or fermented fish and fish products, including molluscs, crustaceans, and echinoderms

Products with extended shelf life, manufactured by pasteurizing or steam retorting and packaging in vacuum sealed air-tight containers to ensure sterility. Products may be packed in their own juice or in added oil or sauce. This category excludes fully cooked products (see category 9.2.4) such as canned tuna, clams, crab, fish roe and sardines; gefilte fish balls; and surimi (heat-pasteurized).

10.0 Eggs and egg products

Includes fresh in-shell eggs (10.1), products that may substitute for fresh eggs (10.2) and other egg products (10.3 and 10.4).

10.1 Fresh eggs

Fresh in-shell eggs are free of additives.

10.2 Egg products

Products that may be used as replacement for fresh eggs in recipes or as a food (e.g. omelette). They are produced from fresh eggs by either (i) mixing and purifying the whole egg; or (ii) separating the egg white and yolk, and then mixing and purifying each separately. The purified whole egg, white or yolk is then further processed to produce liquid, frozen or dried eggs.

10.2.1 Liquid egg products

The purified whole egg, egg yolk or egg white is pasteurized and chemically preserved (e.g. by addition of salt).

10.2.2 Frozen egg products

Includes purified, pasteurized and frozen whole egg, egg yolk or egg white.

10.2.3 Dried and/or heat coagulated egg products

De-sugared purified, pasteurized and dried whole egg, egg yolk or egg white.

10.3 Preserved eggs, including alkaline, salted, and canned eggs

Includes traditional Oriental preserved products, such as salt-cured and alkaline treated eggs.

10.4 Egg-based desserts

Includes ready-to-eat products and products to be prepared from a dry mix such as flan and egg custard. Also includes custard fillings for fine bakery wares (e.g. pies).

11.0 Sweeteners, including honey

Includes all standardized sugars (11.1), non-standardized products (e.g. 11.2, 11.3, 11.4 and 11.6), and natural sweeteners (11.5 – honey).

11.1 Refined and raw sugars

Nutritive sweeteners, such as fully or partially purified sucrose (derived from sugar beet and sugar cane), glucose (derived from starch), or fructose, that are included in sub-categories 11.1.1 to 11.1.5.

11.1.1 White sugar, dextrose anhydrous, dextrose monohydrate, fructose

White sugar is purified and crystallized sucrose. Dextrose anhydrous is purified and crystallized D-glucose without water of crystallization. Dextrose monohydrate is purified and crystallized D-glucose with one molecule of water of crystallization. Fructose is purified and crystallized D-fructose. Examples include refined sugar, cube sugar, mishri etc.

11.1.2 Powdered sugar, powdered dextrose

Powdered sugar (icing sugar) is finely pulverized white sugar with or without added anti-caking agents. Powdered dextrose (icing dextrose) is finely pulverized dextrose anhydrous or dextrose monohydrate, or a mixture of the two, with or without added anti-caking agents.

11.1.3 Soft white sugar, soft brown sugar, glucose syrup, dried glucose syrup, raw cane sugar

Soft white sugar is fine grain purified, moist sugar, that is white in colour. Soft brown sugar is fine grain moist sugar that is light to dark brown in colour. Glucose syrup is a purified concentrated aqueous solution of nutritive saccharides derived from starch or inulin or both. Dried glucose syrup is glucose syrup from which water has been partially removed. Raw cane sugar is partially purified sucrose crystallized

from partially purified cane juice without further purification. Examples include Khandsari sugar.

11.1.3.1 Dried glucose syrup used to manufacture sugar confectionery
Dried glucose syrup, as described in 11.1.3, used to manufacture candy products that are included in food category5.2 (e.g. hard or soft candies).

11.1.3.2 Glucose syrup used to manufacture sugar confectionery
Glucose syrup, as described in 11.1.3, used to manufacture candy products that are included in food category5.2 (e.g. hard or soft candies).

11.1.4 Lactose
A natural constituent of milk normally obtained from whey. It may be anhydrous, or contain one molecule of water of crystallization, or be a mixture of both forms.

11.1.5 Plantation or mill white sugar
Purified and crystallized sucrose.

[52][**11.1.6 Gur or Jaggery** means the product obtained by boiling or processing juice pressed out of sugarcane or extracted from palmyra palm, date palm or coconut palm.

11.1.6.1 Cane Jaggery or Gur means the product obtained by boiling or processing juice pressed out of or extracted from sugarcane.

11.1.6.2 Palm Jaggery or Gur means the product obtained by boiling or processing juice pressed out of or extracted from palmyra palm or coconut palm.

11.1.6.3 Date Jaggery or Gur means the product obtained by boiling or processing juice pressed out of or extracted from date palm.]

11.2 Brown sugar excluding products of food category 11.1.3
Includes large-grain, brown or yellow lump sugars, such as demerara sugar, gur and jaggery.

11.3 Sugar solutions and syrups, also (partially) inverted, including treacle and molasses, excluding products of food category 11.1.3

Includes co-products of the sugar refining process (e.g. treacle and molasses), invert sugar (equimolarmixture of glucose and fructose produced from the hydrolysis of sucrose), and other sweeteners, such as high fructose corn syrup, high fructose inulin syrup and corn sugar.

11.4 Other sugars and syrups

Includes all types of table syrups (e.g. xylose, maple syrup), syrups for fine bakery wares and ices (e.g. caramel syrup, flavoured syrups), and decorative sugar toppings (e.g. coloured sugar crystals for cookies).

11.5 Honey:

Honey is the natural sweet substance produced by honeybees from the nectar of blossoms or secretions of plants. Examples of honey include wild flora honey, multi-flora honey, rapeseed or mustard honey, clover honey etc.

11.6 Table-top sweeteners, including those containing high-intensity sweeteners

Includes products that are preparations of high-intensity sweeteners (e.g. acesulfame potassium, steviols) and/or ofpolyols (e.g. sorbitol). These products, which are sold to the final consumer, may be in powder, solid (e.g. tablets or cubes), or liquid form.

12.0 Salts, spices, soups, sauces, salads, protein products

This is a broad category that includes substances added to food to enhance its aroma and taste (12.1 – salt and salt substitutes; 12.2 – herbs, spices, seasonings and condiments (e.g. seasoning for instant noodles);12.3 – vinegars; and 12.4 - mustards), certain prepared foods (12.5 – soups and broths; 12.6 – sauces and like products; and 12.7 – salads (e.g. macaroni salad, potato salad) and sandwich spreads, excluding cocoa and nut-based spreads of food categories 4.2.2.5 and 5.1.3)), and products composed primarily of protein that are derived from soybeans or from other sources (e.g. milk, cereal, or vegetables) (12.9 –soybean based seasonings and condiments; and 12.10 – protein products other than from soybeans).

12.1 Salt and salt substitutes

Includes salt (12.1.1) and salt substitutes (12.1.2) used as seasoning for food.

12.1.1 Salt

Primarily food-grade sodium chloride. Includes table salt, iodized and fluoride iodized salt, and dendritic salt. This category also includes similar traditional

products like black salt, rock salt (sendhanamak, kala namak, Gumma namak) sea salt etc.

12.1.2 Salt substitutes

Salt substitutes are seasonings with reduced sodium content intended to be used on food in place of salt.

[52][12.2 Herbs, spices, seasonings, and condiments

This category describes items intended to enhance the aroma and taste of food. Spices means any form of spice including curry powders, spice oils, oleoresins and other mixtures where spice content is predominant.]

[52][12.2.1 Herbs, spices, masalas, spice mixtures including oleoresins or extracts/derivatives thereof]

Herbs and spices are usually derived from botanical sources, and may be dehydrated, and either ground or whole. Examples include chilli, turmeric, pepper, asafoetida, anise, aniseed (saunf), basil, bay leaf, caraway (shiajeera), cardamom (elaichi), large cardamom, cinnamon, clove, cumin, and carom seeds (ajowain) etc. Spices may also be found as blends in powder or paste form. Examples of spice blends include chilli seasoning, chilli paste, curry paste, curry roux, and dry cures or rub that are applied to external surfaces of meat or fish. Blends of spices with other ingredients (Masalas) include curry powder, sambhar masala, rasam masala, chhole masala, pavbhaji masala etc.

12.2.2 Seasonings and condiments

Seasonings and condiments are spice mixes with other ingredients which go as toppings to sprinkle on rice and other foods, and include seasonings for noodles, Puliyogare mix, onion salt, garlic salt etc. The term “condiments” as used in the Food Category System does not include condiment sauces (e.g. ketchup, mayonnaise, mustard) or relishes.

12.3 Vinegars

Liquid produced from fermentation of ethanol from a suitable source (e.g. wine, cider). Examples include cider vinegar, wine vinegar, malt vinegar, spirit vinegar, grain vinegar, raisin vinegar, fruit (wine) vinegar and synthetic vinegar.

12.4 Mustards

Condiment sauce prepared from ground often defatted mustard seed that is mixed into slurry with water, vinegar, salt, oil and other spices and refined. Examples include Dijon mustard, and “hot” mustard (prepared from seeds with hulls).

12.5 Soups and broths

Includes ready-to-eat soups and mixes. The finished products may be water- (e.g. consommé) or milk-based (e.g. chowder).

12.5.1 Ready-to-eat soups and broths, including canned, bottled, and frozen

Water- or milk-based products consisting of vegetable, meat or fish broth with or without other ingredients (e.g. vegetables, meat, noodles) such as rasam, bouillon, broths, consommés, water- and cream-based soups, chowders, and bisques.

12.5.2 Mixes for soups and broths

Concentrated soup to be reconstituted with water and/or milk, with or without addition of other optional ingredients (e.g. vegetables, meat, noodles) such as rasam powder, bouillon powders and cubes; powdered and condensed soups; and stock cubes and powders etc.

12.6 Sauces and like products

Includes ready-to-eat sauces, gravies and dressings, and mixes to be reconstituted before consumption. The ready-to-eat products are divided into sub-categories for emulsified (12.6.1) and non-emulsified (12.6.2) products, whereas the sub-category for the mixes (12.6.3) encompasses both emulsified and non-emulsified sauce mixes.

12.6.1 Emulsified sauces and dips

Sauces, gravies, dressings based and dips, at least in part, on a fat- or oil-in water emulsion such as salad dressing (e.g. French, Italian, Greek, ranch style), fat-based sandwich spreads (e.g. mayonnaise with mustard), salad cream, and fatty sauces and snack dips (e.g. bacon and cheddar dip, onion dip).

12.6.2 Non-emulsified sauces

Include water-, coconut milk-, and milk-based sauces, gravies and dressings. Examples include barbecue sauce, tomato ketchup, cheese sauce, Worcestershire sauce, Oriental thick Worcestershire sauce, chilli sauce, sweet and sour dipping sauce, and white (cream-based) sauce (sauce consisting primarily of milk or cream, with little added fat (e.g. butter) and flour, with or without seasoning or spices).

12.6.3 Mixes for sauces and gravies

Concentrated product, usually in powdered form, to be mixed with water, milk, oil or other liquid to prepare a finished sauce or gravy such as mixes for cheese sauce, and salad dressings etc.

12.6.4 Clear sauces

Includes thin, non-emulsified clear sauces that may be water-based. These sauces may be used as condiments or ingredients rather than as finished gravy such as oyster sauce and fish sauce.

12.7 Salads and sandwich spreads excluding cocoa- and nut-based spreads of food categories 4.2.2.5 and 5.1.3

Includes prepared salads (e.g. macaroni salad, potato salad), milk-based sandwich spreads, non-standardized mayonnaise-like sandwich spreads, and dressings etc.

12.8 Yeast and like products:

Includes baker's yeast and leaven used in the manufacture of baked goods. Includes the products used in the production of alcoholic beverages.

12.9 Soybean-based seasonings and condiments

Includes products that are derived from soybeans and other ingredients intended for use as seasonings and condiments, such as fermented soybean paste and soybean sauces.

12.9.1 Fermented soybean paste

The product is made of soybeans, salt, water and other ingredients, using the process of fermentation (e.g. miso).

12.9.2 Soybean sauce

A liquid seasoning obtained by fermentation of soybeans, non-fermentation (e.g. hydrolysis) of soybeans, orby hydrolysis of vegetable protein.

12.9.2.1 Fermented soybean sauce

A clear, non-emulsified sauce made of soybeans, cereal, salt and water by the fermentation process.

12.9.2.2 Non-fermented soybean sauces

Non-fermented soybean sauce, which is also known as non-brewed soybean sauce, may be produced from vegetable proteins, such as defatted soybeans that are acid-hydrolyzed (e.g. with hydrochloric acid), neutralized (e.g. with sodium carbonate), and filtered.

12.9.2.3 Other soybean sauce

Non-emulsified sauce made from fermented soybean sauce and/or non-fermented soybean sauce, with or without sugar, with or without caramelization process.

12.10 Protein products other than from soybeans

Includes cereal or legume or vegetable protein products such as wheat gluten, vegetable protein analogues, and proteinaceous meat or milk and fish substitutes. Includes their isolates, concentrates and hydrolystes, single cell protein including Spirulina.

13.0 Foodstuffs intended for particular nutritional uses

13.1 Infant formulae, follow-up formulae, and formulae for special medical purposes for infants

13.1.1 Infant formulae

13.1.2 Follow-up formulae

13.2 Complementary foods for infants and young children

13.3 Dietetic foods intended for special medical purposes (excluding products of food category 13.1)

13.4 Dietetic formulae for slimming purposes and weight reduction

13.5 Dietetic foods (e.g., supplementary foods for dietary use) excluding products of food categories 13.1 -13.4 and 13.6

13.6 Food supplements

14.0 Beverages, excluding dairy products

14.1 Non-alcoholic ("soft") beverages

This broad category includes waters and carbonated waters (14.1.1), fruit and vegetable juices (14.1.2), fruit and vegetable nectars (14.1.3), water-based flavoured carbonated and non-carbonated drinks (14.1.4), and water-based brewed or steeped beverages such as coffee and tea (14.1.5).

14.1.1 Waters

Includes natural waters (14.1.1.1) and other bottled waters (14.1.1.2), each of which may be non-carbonated or carbonated.

14.1.1.1 Natural mineral waters and source waters

Waters obtained directly at the source and packaged close to the source; are characterized by the presence of certain mineral salts in relative proportions and trace elements or other constituents. Natural mineral water may be naturally carbonated (with carbon dioxide from the source), carbonated (with added carbon dioxide of another origin), decarbonised (with less carbon dioxide than present in the water at the source so it does not spontaneously give off carbon dioxide under conditions of standard temperature and pressure), or fortified (with carbon dioxide from the source), and non-carbonated (contains no free carbon dioxide).

14.1.1.2 Table waters and soda waters

Includes waters other than natural source waters that may be carbonated by addition of carbon dioxide and may be processed by filtration, disinfection, or other suitable means. These waters may contain added mineral salts. Carbonated and non-carbonated waters containing flavours are found in category 14.1.4such as table water, bottled water with or without added minerals, purified water, seltzer water, club soda, and sparkling water.

14.1.2 Fruit and vegetable juices

This category applies only to fruit and vegetable juices. Beverages based on fruit and vegetable juices are found in food category 14.1.4.2. Fruit-vegetable juice blends have separate classifications for each component (i.e. fruit juice (14.1.2.1) and vegetable juice (14.1.2.3).

14.1.2.1 Fruit juices

Fruit juice is the unfermented but fermentable liquid obtained from the edible part of sound, appropriately mature and fresh fruit or of fruit maintained in sound condition by suitable means. The juice is prepared by suitable processes, which maintain the essential physical, chemical, organoleptical and nutritional characteristics of the juices of the fruit from which it comes. The juice may be cloudy or clear, and may have restored (to the normal level attained in the same kind of fruit) aromatic substances and volatile flavour components, all of which must be obtained by suitable physical means, and all of which must have been recovered from the same kind of fruit. Pulp and cells obtained by suitable physical means from the same kind of fruit may be added. A single juice is obtained from one kind of fruit. A mixed juice is obtained by blending two or more juices or juices and purees, from different kinds of fruit. Fruit juice may be obtained, e.g. by directly expressing the juice by mechanical extraction processes, by reconstituting concentrated fruit juice (food category 14.1.2.3) with water, or in limited situations by water extraction of the whole fruit. Examples include orange juice, apple juice, black currant juice, lemon juice, orange-mango juice and coconut water.

14.1.2.2 Vegetable juices

Vegetable juice is the liquid unfermented but fermentable product intended for direct consumption obtained by mechanical expression, crushing, grinding, and/or sieving of one or more sound fresh vegetables or vegetables preserved exclusively by physical means. The juice may be clear, turbid, or pulpy. It may have been concentrated and reconstituted with water. Products may be based on a single vegetable (e.g. carrot) or blends of vegetables (e.g. carrots, celery).

14.1.2.3 Concentrates of fruit juices

Concentrated fruit juice is the product that complies with the definition given in food category 14.1.2.1. It is prepared by the physical removal of water from fruit juice in an amount to increase the Brix level to a value at least 50% greater than that established for reconstituted juice from the same fruit. In the production of juice that is to be concentrated, suitable processes are used, and may be combined; with simultaneous diffusion of the pulp cells or fruit pulp by water, provided that the water-extracted soluble fruit solids are added in-line to the primary juice, before the concentration procedure. Fruit juice concentrates may have restored (to the normal level attained in the same kind of fruit) aromatic substances and volatile flavour components, all of which must be obtained by suitable physical means, and all of which must be recovered from the same kind of fruit. Pulp and cells obtained by

suitable physical means from the same kind of fruit may be added. Sold in liquid, syrup and frozen forms for the preparation of a ready-to-drink juice by addition of water. Examples include frozen orange juice concentrate, and lemon juice concentrate.

14.1.2.4 Concentrates of vegetable juices

Prepared by the physical removal of water from vegetable juice. Sold in liquid, syrup and frozen forms for the preparation of a ready-to-drink juice by addition of water. Includes carrot juice concentrate.

14.1.3 Fruit and vegetable nectars

Fruit and vegetable nectars are beverages produced from purees, juices, or concentrates of either, blended with water and sugar, honey, syrups, and/or sweeteners. Fruit-vegetable nectar blends are reported under their components (i.e. fruit nectar (14.1.3.1) and vegetable nectar (14.1.3.2).

14.1.3.1 Fruit nectar

Fruit nectar is the unfermented but fermentable product obtained by adding water with or without the addition of sugar, honey, syrups, and/or sweeteners to fruit juice, concentrated fruit juice, fruit purees or concentrated fruit purees, or a mixture of those products. Aromatic substances, volatile flavour components, pulp and cells, all of which must have been recovered from the same kind of fruit and obtained by suitable physical means, may be added. Products may be based on a single fruit or on fruit blends such aspear nectar and peach nectar.

14.1.3.2 Vegetable nectar

Product obtained by adding water with or without the addition of sugar, honey, syrups, and/or sweeteners to vegetable juice or concentrated vegetable juice, or a mixture of those products. Products may be based on a single vegetable or on a blend of vegetables.

14.1.3.3 Concentrates of fruit nectar

Prepared by the physical removal of water from fruit nectar or its starting materials. Sold in liquid, syrup and frozen forms for the preparation of a ready-to-drink nectar by addition of water. Examples: pear nectar concentrate and peach nectar concentrate.

14.1.3.4 Concentrates of vegetable nectar

Prepared by the physical removal of water from vegetable nectar. Sold in liquid, syrup and frozen forms forth preparation of ready-to-drink nectars by addition of water.

14.1.4 Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulateddrinks

Includes all carbonated and non-carbonated varieties and concentrates, products based on fruit and vegetable juices, coffee-, tea- and herbal-based drinks etc.

14.1.4.1 Carbonated water-based flavoured drinks

Includes water-based flavoured drinks with added carbon dioxide with nutritive, non-nutritive and/or intense sweeteners and other permitted food additives. Includes *gaseosa* (water-based drinks with added carbon dioxide, sweetener, and flavour), and sodas such as colas, pepper-types, root beer, lemon-lime, and citrus types, both diet/light and regular types. These beverages may be clear, cloudy, or may contain particulate matter (e.g. fruit pieces). Includes so-called "energy" drinks that are carbonated and contain high levels of nutrients and other ingredients.

14.1.4.2 Non-carbonated water-based flavoured drinks, including punches and Ades

Include water-based flavoured drinks without added carbon dioxide, fruit and vegetable juice-based drinks(e.g. almond, aniseed, coconut-based drinks, and ginseng drink), fruit flavoured ades (e.g. lemonade, orangeade), fruit based soft drinks, capile groselha, lactic acid beverage, ready-to-drink coffee and tea drinks with or without milk or milk solids, and herbal-based drinks (e.g. iced tea, fruit-flavoured iced tea, chilled canned cappuccino drinks) and "sports" drinks containing electrolytes. These beverages may be clear or contain particulated matter (e.g. fruit pieces), and may be unsweetened or sweetened with sugar ora non-nutritive high-intensity sweetener. Includes so-called "energy" drinks that are non-carbonated and contain high levels of nutrients and other ingredients.

14.1.4.3 Concentrates (liquid or solid) for water-based flavoured drinks

Include powder, syrup, liquid and frozen concentrates for the preparation of carbonated or non-carbonated water-based non-alcoholic beverages by addition of water or carbonated water. Examples include squashes, fountain syrups (e.g. cola

syrup), fruit syrups for soft drinks, frozen or powdered concentrate for lemonade and iced tea mixes.

14.1.5 Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa

Includes the ready-to-drink products (e.g. canned), and their mixes and concentrates such as chicory-based hot beverages (postum), rice tea, mate tea, and mixes for hot coffee and tea beverages (e.g. instant coffee, powder for hot cappuccino beverages). Treated coffee beans for the manufacture of coffee products are also included. Ready-to-drink cocoa is included in category 1.1.2, and cocoa mixes in 5.1.1.

14.2 Alcoholic beverages, including alcohol-free and low-alcoholic counterparts

The alcohol-free and low-alcoholic counterparts are included in the same category as the alcoholic beverage.

14.2.1 Beer and malt beverages

Alcoholic beverages brewed from germinated barley (malt), hops, yeast, and water such as ale, lager, pilsner, brown beer, weiss beer, oud bruin beer, Obergariges Einfachbier, light beer, table beer, malt liquor, porter, stout, and barley wine.

14.2.2 Cider and Perry

Fruit wines made from apples (cider) and pears (Perry). Also includes cider bouche.

14.2.3 Grape wines

Alcoholic beverage obtained exclusively from the partial or complete alcoholic fermentation of fresh grapes, whether crushed or not, or of grape must (juice).

14.2.3.1 Still grape wine

Grape wine (white, red, rosé, or blush, dry or sweet) that may contain up to a maximum 0.4g/100 ml (4000mg/kg) carbon dioxide at 20^{o}C.

14.2.3.2 Sparkling and semi-sparkling grape wines

Grape wines in which carbonation is produced during the fermentation process, either by bottle fermentation or closed tank fermentation. Also includes carbonated wine whose carbon dioxide is partially or totally of exogenous origin such as spumante, and “cold duck” wine.

14.2.3.3 Fortified grape wine, grape liquor wine, and sweet grape wine

Grape wines produced either by: (i) the fermentation of grape must (juice) of high sugar concentration; or (ii) by the blending of concentrated grape juice with wine; or (iii) the mixture of fermented must with alcohol such as grape dessert wine.

14.2.4 Wines (other than grape)

Includes wines made from fruit other than grapes, apples and pears, and from other agricultural products, including grain (e.g. rice). These wines may be still or sparkling. Examples include rice wine (*sake*), and sparkling and still fruit wines.

14.2.5 Mead

Alcoholic liquor made from fermented honey, malt and spices, or just of honey. Includes honey wine.

14.2.6 Distilled spirituous beverages containing more than 15% alcohol

Includes all distilled spirituous beverages derived from grain (e.g. corn, barley, rye, wheat), tubers (e.g. potato), fruit (e.g. grapes, berries) or sugar cane that contain greater than 15% alcohol such as aperitifs, brandy (distilled wine), cordials, liqueurs (including emulsified liqueurs), tequila**,** whiskey, and vodka.

14.2.7 Aromatized alcoholic beverages

Includes all non-standardized alcoholic beverage products. Although most of these products contain less than 15% alcohol, some traditional non-standardized aromatized products may contain up to 24% alcoholsuch as aromatized wine, cider and perry; aperitif wines; and prepared cocktails (mixtures of liquors, liqueurs, wines, essences, fruit and plant extracts, etc. marketed as ready-to-drink products or mixes). Cooler-type beverages are composed of beer, malt beverage, wine or spirituous beverage, low-alcoholic refreshers, fruit juice(s), and soda water (if carbonated) etc.

15.0 Ready-to-Eat savouries

Includes all types of savoury snack foods.

15.1 Snacks - potato, cereal, flour or starch based (from roots and tubers, pulses and legumes)

Includes all savoury snacks, with or without added flavourings, [52][but excludes unsweetened crackers (category 7.1.2). Example includes potato chips], popcorn, pretzels, rice crackers, flavoured crackers (e.g. cheese-flavoured crackers), bhujia (namkeen; snack made of a mixture of flours, maize, potatoes, salt, dried fruit, peanuts, spices, colours, flavours, and antioxidants*)*, and papads(prepared from soaked rice flour or from black gram or cow pea flour, mixed with salt and spices, and formed into balls or flat cakes), khari, kara, murukku, namakpara, chiwda, palakayalu, ribbon or thattupakoda, dalmoth or mixtures, soya nuts, nimki, fali (e.g. cholafali), other fried or baked snacks or savouries, uppuseedai, appam, bhel-mix, sev, gathiya, shankarpali, farsan, kurmura, murmura, papadi, crisps, chakli, etc. Also includes sweet snacks e.g. chikki, gajak, murrunda, gudchana, sugar coated dals and other sweet dal snacks (dals coated with jaggery, sugar, honey and other ingredients).

15.2 Processed nuts, including coated nuts and nut mixtures

Includes all types of whole nuts processed by, e.g. dry-roasting, roasting, marinating or boiling, either in-shellor shelled, salted or unsalted. Yoghurt-, cereal-, and honey-covered nuts, and dried fruit-nut-and-cereal snacks are classified here. [52][Chocolate-covered nuts are classified in 5.1.3, and nuts covered in imitation chocolate are included in 5.1.4.]

15.3 Snacks - fish based

This describes savoury crackers with fish, fish products or fish flavouring. Dried fish per sethat may be consumed as a snack is assigned to food category 9.2.5, and dried meat snacks are assigned to food category 8.3.1.2.

16.0 Prepared foods

These foods are not included in the other food categories (1-15) and shall be considered on a case-bycasebasis. Prepared foods are mixtures of multiple components (e.g. meat, sauce, grain, cheese, vegetables); the components are included in other food categories. Prepared foods require minimal preparation by the consumer (e.g. heating, thawing, rehydrating).e.g. pav- bhaji, ready-to-eat dishes, biryani,curried rice, sandwiches (filling with egg /chicken/vegetarian sandwiches etc.), burgers, fish burgers, pizza etc. Provisions for additives will be listed in this food category in these regulations only if the additive is needed: (i) solely to have a technological function in the prepared food as sold to the consumer; or (ii) at a use

level that has an intentional technological function in the prepared food that exceeds the use level that can be accounted for by carry-over from the individual components

III FUNCTIONAL CLASSES, DEFINITIONS AND TECHNOLOGICAL PURPOSES

Reno.	Functional Classes	Definition	Technological purpose
1	Acidity regulator	A food additive, which controls the acidity or alkalinity of a food.	Adjusting pH, acidity, alkalinity, and buffering activity.
2	Anti caking agent	A food additive, which reduces the tendency of components of food to adhere to one another.	Anticaking, anti-sticking, drying and dusting.
3	Antifoaming agent	A food additive, which prevents or reduces foaming.	Antifoaming and de-foaming.
4	Antioxidant	A food additive, which prolongs the shelf-life of foods by protecting against deterioration caused by oxidation.	Antioxidant, antioxidant synergist, and antibrowning.
5	Bleaching	A food additive	Decolorising, and bleaching.

Reno.	Functional Classes	Definition	Technological purpose
	agent	(non-flour use) used to decolorize food. Bleaching agents do not include pigments.	
6	Bulking agent	A food additive, which contributes to the bulk of a food without contributing significantly to its available energy value.	Bulkingand filling.
7	Carbonating agent	A food additive used to provide carbonation in a food.	Providing carbon dioxide gas.
8	Carrier	A food additive used to dissolve, dilute, disperse or otherwise physically modify a food additive or nutrient without altering its function (and without	Carrier, diluent and encapsulation.

Reno.	Functional Classes	Definition	Technological purpose
		exerting any technological effect itself) in order to facilitate its handling, application or use of the food additive or nutrient.	
9	Colour	A food additive, which adds or restores colour in a food.	Colour, decorative pigment, surface colourant for eye appeal
10	Colour retention agent	A food additive, which stabilizes, retains or intensifies the colour of a food	Colour fixation/retention/ stabilization
11	Emulsifier	A food additive, which forms or maintains a uniform emulsion of two or more phases in a food.	Emulsification,plasticization,dispersion, surface action,inhibition of crystallization, density adjustment (flavouring oils in beverages), suspensionand clouding.
12	Emulsifying salt	A food additive, which, in the manufacture of processed food, rearranges	Prevention of fat separation, improving dispersion and blending/melding.

Reno.	Functional Classes	Definition	Technological purpose
		proteins in order to prevent fat separation.	
13	Firming agent	A food additive, which makes or keeps tissues of fruit or vegetables firm and crisp, or interacts with gelling agents to produce or strengthen a gel.	Texture retention and strengthening.
14	Flavour enhancer	A food additive, which enhances the existing taste and/or odour of a food.	Enhancement or potentiation of flavours.
15	Flour reatment agent	A food additive, which is added to flour or dough to improve its baking quality or colour.	Flour bleaching, improving, dough conditioning, and strengthening.
16	Foaming agent	A food additive, which makes it possible to form or maintain a uniform dispersion of a	Increased foaming, and aeration,

Reno.	Functional Classes	Definition	Technological purpose
		gaseous phase in a liquid or solid food.	
17	Gelling agent	A food additive, which gives a food texture through formation of a gel.	Gel formation
18	Glazing agent	A food additive, which when applied to the external surface of a food, imparts a shiny appearance or provides a protective coating.	Glazing, sealing, coating, surface-finishing, polishing, andfilm-forming.
19	Humectant	A food additive, which prevents food from drying out by counteracting the effect of a dry atmosphere.	Moisture retentionand wetting.
20	Packaging gas	A food additive gas, which is introduced into a container before, during or after filling	Providing inert gaseous atmosphere in packages.

Reno.	Functional Classes	Definition	Technological purpose
		with food with the intention to protect the food, for example, from oxidation or spoilage.	
21	Preservative	A food additive, which prolongs the shelf-life of a food by protecting against deterioration caused by microorganisms.	Shelf life extension through antimicrobial action.
22	Propellant	A food additive gas, which expels a food from a container	Expulsion of food from a container
23	Raising agent	A food additive or a combination of food additives, which liberate(s) gas and thereby increase(s) the volume of a dough or batter.	Providing volume and body/texture.

Reno.	Functional Classes	Definition	Technological purpose
24	Sequestrant	A food additive, which controls the availability of a cation.	Chelation of ions.
25	Stabilizer	A food additive, which makes it possible to maintain a uniform dispersion of two or more components.	Stabilizing of foams/ colloids/ emulsions.
26	Sweetener	A food additive (other than a mono- or disaccharide sugar), which imparts a sweet taste to a food.	Reduction of energy as a substitute to mono or disaccharide sugars
27	Thickener	A food additive, which increases the viscosity of a food.	Providing body and texture and binding

IV. USE OF FOOD ADDITIVES IN FOOD PRODUCTS

Food products may contain additives as specified in these regulations and in the following Tables. (All capital and bold additives in the Tables 1 to 15 refer to the Group of Additives listed with their INS Numbers in Annex-1)

Table 1

Dairy products and analogues, excluding products of category 2.0

Food Category System (1)	Food Category Name (2)	Food Additive (3)	INS No. (4)	Recommended Maximum Level (5)	Note (6)
1.0	**Dairy products and analogues, excluding products of food category 2.0**				
1.1	**Milk and dairy-based drinks**				
1.1.1	**Milk and buttermilk (plain)**	No additives permitted			
1.1.1.1	**Milk (plain)**	**PHOSPHATES**		1,500 mg/kg	33, 227
1.1.1.2	**Buttermilk (plain)**	**PHOSPHATES**		1,500 mg/kg	33
1.1.2	**Dairy-based drinks - flavoured milk and/or fermented**	Acesulfame potassium	950	350 mg/kg	188
		[75][Omitted]			
		Allura red AC	129	100 mg/kg	52
		Aspartame	951	600 mg/kg	191
		Aspartame-Acesulfame salt	962	350 mg/kg	113
		Brilliant blue FCF	133	100 mg/kg	52
		CAROTENOIDS		150 mg/kg	52
		Curcumin	100	100 mg/kg	
		Canthaxanthin	161g	15 mg/kg	52, 170
		Caramel color (plain)	150a	GMP	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Caramel III - ammonia caramel	150c	2,000 mg/kg	52
		Caramel IV - sulfite ammonia caramel	150d	2,000 mg/kg	52
		Annatto	160b(i), (ii)	100 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	52
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		50 mg/kg	190, 52
		Diacetyltartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		Fast green FCF	143	100 mg/kg	52
		Grape skin extract	163(ii)	150 mg/kg	181, 52
		IRON OXIDES		20 mg/kg	52
		Indigotine (Indigo carmine)	132	100 mg/kg	52
		Neotame	961	20 mg/kg	
		PHOSPHATES		1,320 mg/kg	33
		POLYSORBATES		3,000 mg/kg	
		Ponceau 4R	124	100 mg/kg	52
		Carmoisine	122	100 mg/kg	
		Erythrosine	127	50 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Tartrazine	102	100 mg/kg	
		Propylene glycol esters of fatty acids	477	5,000 mg/kg	
		RIBOFLAVINS		300 mg/kg	52
		SACCHARINS		80 mg/kg	
		SORBATES		1,000 mg/kg	220, 42
		Steviol glycosides	960	200 mg/kg	26, 201
		Sucralose (Trichlorogalactosucrose)	955	300 mg/kg	
		Sucroglycerides	474	5,000 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	52
		Sodium aluminosilicate	554	60 mg/kg	6, 253
		Hydroxy propyl methyl cellulose	464	7.5 g/kg	For flavoured milk only
1.2	**Fermented and renneted milk products (plain), excluding food category 01.1.2 (dairy-based drinks), fermented**	**PHOSPHATES**		1,000 mg/kg	33

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
	milk products,yoghurt, flavoured yoghurt, dahi, flavoured dahi,mishti dahi				
1.2.1	**Fermented milks (plain)***	Caramel IV - sulfite ammonia caramel	150d	150 mg/kg	12
		*No additives permitted in Dahi [81][Omitted]			
1.2.1.1	**Fermented milks (plain) not heat treated after fermentation**	No additives permitted			
1.2.1.2	**Fermented milks (plain) heat treated after fermentation**	Diacetyltartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		Acetic and fatty acid esters of glycerol	472a	GMP	234
		Acid treated starch	1401	GMP	234
		Alkaline treated starch	1402	GMP	234
		Bleached starch	1403	GMP	234

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Gellan gum	418	GMP	234
		Glucono delta-lactone	575	GMP	
		Guar gum	412	GMP	234
		Gum arabic (Acacia gum)	414	GMP	234
		Hydroxypropyl cellulose	463	GMP	234
		Hydroxypropyl methyl cellulose	464	GMP	234
		Hydroxypropyl starch	1440	GMP	234
		Karaya gum	416	GMP	234
		Konjac flour	425	GMP	234
		Lactic and fatty acid esters of glycerol	472b	GMP	234
		Magnesium carbonate	504(i)	GMP	
		Magnesium chloride	511	GMP	234
		Magnesium hydroxide	528	GMP	
		Magnesium hydroxide carbonate	504(ii)	GMP	
		Malic acid, DL-	296	GMP	
		Methyl cellulose	461	GMP	234
		Methyl ethyl	465	GMP	234

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		cellulose			
		Microcrystalline cellulose (Cellulose gel)	460(i)	GMP	234
		Mono and di glycerides of fatty acids	471	GMP	234
		Nitrogen	941	GMP	59
		Nitrous oxide	942	GMP	59
		Pectins	440	GMP	234
		Alginic acid	400	GMP	234
		Ammonium alginate	403	GMP	234
		Ammonium hydroxide	527	GMP	
		Calcium alginate	404	GMP	234
		Calcium carbonate	170(i)	GMP	
		Calcium hydroxide	526	GMP	
		Calcium lactate	327	GMP	
		Calcium oxide	529	GMP	
		Carbon dioxide	290	GMP	59
		Carob bean gum	410	GMP	234
		Citric acid	330	GMP	
		Citric and fatty acid esters of glycerol	472c	GMP	234
		Potassium	402	GMP	234

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		alginate			
		Potassium carbonate	501(i)	GMP	234
		Potassium dihydrogen citrate	332(i)	GMP	234
		Potassium lactate	326	GMP	
		Powdered cellulose	460(ii)	GMP	
		Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	470(i)	GMP	234
		Salts of oleic acid with calcium, potassium and sodium	470(ii)	GMP	234
		Sodium alginate	401	GMP	234
		Sodium carbonate	500(i)	GMP	
		Carboxymethyl cellulose	466	GMP	234
		Sodium dihydrogen citrate	331(i)	GMP	234
		Sodium hydrogen carbonate	500(ii)	GMP	
		Sodium hydroxide	524	GMP	
		Sodium lactate	325	GMP	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Tara gum	417	GMP	234
		Tragacanth gum	413	GMP	234
		Tripotassium citrate	332(ii)	GMP	234
		Xanthan gum	415	GMP	234
		Curcumin	100	100 mg/kg	
		RIBOFLAVINS		GMP	
		Caramel colour (Plain) Caramel I	150a	150 mg/kg	
		Annatto	160b(i), (ii)	100 mg/kg	
		CAROTENOIDS		100 mg/kg	INS 160f only in flavoured and fruit yoghurt
		Canthaxanthin	161g	100 mg/kg	
		Tartrazine	102	100 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	
		Carmoisine	122	100 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		Erythrosine	127	50 mg/kg	
		Indigotine (Indigocarmine)	132	100 mg/kg	3
		Brilliant blue FCF	133	100 mg/kg	
		Fast green FCF	143	100 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
1.2.2	**Renneted milk (plain)**	Caramel IV - sulfite ammonia caramel	150d	GMP	
		Diacetyltartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		SORBATES		1,000 mg/kg	42
		Calcium carbonate	170(i)	GMP	
		Carbon dioxide	290	GMP	59
		Lecithins	322(i),(ii)	GMP	
		Carob bean gum	410	GMP	
		Guar gum	412	GMP	
		Gum arabic (Acacia gum)	414	GMP	
		Mannitol	421	GMP	
		Glycerol	422	GMP	
		Microcrystalline cellulose (Cellulose gel)	460(i)	GMP	
		Methyl cellulose	461	GMP	
		Hydroxypropyl cellulose	463	GMP	
		Hydroxypropyl methyl cellulose	464	GMP	
		Methyl ethyl cellulose	465	GMP	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Acetic and fatty acid esters of glycerol	472a	GMP	
		Lactic and fatty acid esters of glycerol	472b	GMP	
		Citric and fatty acid esters of glycerol	472c	GMP	
		Magnesium chloride	511	GMP	
		Nitrogen	941	GMP	
		Dextrins, roasted starch	1400	GMP	
		Acid-treated starch	1401	GMP	
		Alkaline treated starch	1402	GMP	
		Bleached starch	1403	GMP	
		Oxidized starch	1404	GMP	
		Monostarch phosphate	1410	GMP	
		Distarch phosphate	1412	GMP	
		Acetylated distarch phosphate	1414	GMP	
		Acetylated distarch adipate	1422	GMP	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Hydroxypropyl starch	1440	GMP	
		Hydroxypropyl distarch phosphate	1442	GMP	
		Pectins	440	GMP	
		Phosphated distarch phosphate	1413	GMP	
		Potassium dihydrogen citrate	332(i)	GMP	
		Powdered cellulose	460(ii)	GMP	
		Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	470(i)	GMP	
		Salts of oleic acid with calcium, potassium and sodium	470(ii)	GMP	
		Carboxymethyl cellulose	466	GMP	
		Sodium dihydrogen citrate	331(i)	GMP	
		Starch acetate	1420	GMP	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Starch sodium octenyl succinate	1450	GMP	
		Starches, enzyme treated	1405	GMP	
		Tara gum	417	GMP	
		Tragacanth gum	413	GMP	
		Tripotassium citrate	332(ii)	GMP	
		Trisodium citrate	331(iii)	GMP	
1.3	**Condensed /evaporated milk and analogues (plain)**				
1.3.1	**Condensed milk (plain), evaporated milk(s), sweetened condensed milk(s)**	Calcium carbonate	170(i)	2,000 mg/kg singly or 3,000 mg/kg in combination	Total salt content shall not exceed 3,000 mg/kg calculated as phosphorus/carbonates /citrate/ chloride
		Sodium citrates	331		
		Potassium citrates	332		
		Calcium citrates	333		
		PHOSPHATES			
		Sodium carbonate	500(i)		
		Potassium carbonate	501(i)		
		Potassium chloride	508		
		Calcium chloride	509		
		Glucono delta	575	GMP	Permitte

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		lactone			d in khoya only
		Propionic acid; sodium and calcium propionate expressed as propionic acid (singly or in combination)	280, 281, 282	2,000 mg/kg	Permitted in khoya only
		SORBATES		2,000 mg/kg	Permitted in khoya only
		Nisin	234	12.5 mg/kg	Permitted in khoya only
		Carrageenan	407	150 mg/kg	
1.3.2	**Beverage whitener**				
1.3.2.1	**Non dairy based beverage whitener**	**ASCORBYL ESTERS**		80 mg/kg	10
		Acesulfame potassium	950	2,000 mg/kg	188
		Aspartame	951	6,000 mg/kg	191
		CAROTENOIDS		100 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Caramel III - ammonia caramel	150c	1,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	1,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyl tartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		Neotame	961	65 mg/kg	
		PHOSPHATES		13,000 mg/kg	33
		POLYSORBATES		4,000 mg/kg	
		Propylene glycol esters of fatty acids	477	1,000 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SORBATES		200 mg/kg	42
		Sodium alumino silicate	554	570 mg/kg	260, 6
		Sucralose (Trichlorogalactosucrose)	955	580 mg/kg	
		Sucroglycerides	474	20,000 mg/kg	
		Tertiary butylhydroquinon	319	100 mg/kg	15, 195

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		e (TBHQ)			
1.4	**Cream (plain) and the like cream and malai**				
1.4.1	**Pasteurized cream (plain), cream and malai**	No additives permitted			
1.4.2	**Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain)**	**PHOSPHATES**		2,200 mg/kg	33
		POLYSORBATES		1,000 mg/kg	
		Acetic and fatty acid esters of glycerol	472a	GMP	
		Acetylated distarch adipate	1422	GMP	
		Acetylated distarch phosphate	1414	GMP	
		Acid-treated starch	1401	GMP	236
		Agar	406	GMP	
		Alginic acid	400	GMP	
		Ammonium alginate	403	GMP	
		Bleached starch	1403	GMP	236
		Calcium alginate	404	GMP	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Calcium carbonate	170(i)	GMP	
		Calcium chloride	509	GMP	
		Calcium lactate	327	GMP	
		Calcium sulfate	516	GMP	
		Carbon dioxide	290	GMP	278, 59
		Carob bean gum	410	GMP	
		Carrageenan	407	GMP	
		Citric acid	330	GMP	
		Citric and fatty acid esters of glycerol	472c	GMP	
		Dextrins, roasted starch	1400	GMP	236
		Diacetyltarteric and fatty acid esters of glycerol	472e	6,000 mg/kg	
		Distarch phosphate	1412	GMP	
		Gellan gum	418	GMP	
		Guar gum	412	GMP	
		Gum arabic (Acacia gum)	414	GMP	
		Hydroxypropyl cellulose	463	GMP	
		Hydroxypropyl distarch phosphate	1442	GMP	
		Hydroxypropyl	464	GMP	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		methyl cellulose			
		Hydroxypropyl starch	1440	GMP	
		Konjac flour	425	GMP	236
		Lactic acid, L-, D- and DL-	270	GMP	
		Lactic and fatty acid esters of glycerol	472b	GMP	
		Lecithins	322(i), (ii)	GMP	
		Methyl cellulose	461	GMP	
		Methyl ethyl cellulose	465	GMP	
		Microcrystalline cellulose (Cellulose gel)	460(i)	GMP	
		Mono- and di-glycerides of fatty acids	471	GMP	
		Monostarch phosphate	1410	GMP	
		Nitrogen	941	GMP	278, 59
		Nitrous oxide	942	GMP	278, 59
		Oxidized starch	1404	GMP	236
		Pectins	440	GMP	
		Phosphated distarch phosphate	1413	GMP	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Polydextroses	1200	GMP	236
		Potassium alginate	402	GMP	
		Potassium carbonate	501(i)	GMP	
		Potassium chloride	508	GMP	
		Potassium dihydrogen citrate	332(i)	GMP	
		Potassium hydrogen carbonate	501(ii)	GMP	
		Potassium lactate	326	GMP	
		Powdered cellulose	460(ii)	GMP	
		Processed eucheuma seaweed	407a	GMP	
		Sodium alginate	401	GMP	
		Sodium carbonate	500(i)	GMP	
		Carboxymethyl cellulose	466	GMP	
		Sodium dihydrogen citrate	331(i)	GMP	
		Sodium hydrogen carbonate	500(ii)	GMP	
		Sodium lactate	325	GMP	
		Sodium sesquicarbonate	500(iii)	GMP	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Starch acetate	1420	GMP	
		Starch sodium octenyl succinate	1450	GMP	
		Tara gum	417	GMP	236
		Tragacanth gum	413	GMP	236
		Tricalcium citrate	333(iii)	GMP	
		Tripotassium citrate	332(ii)	GMP	
		Trisodium citrate	331(iii)	GMP	
		Xanthan gum	415	GMP	
1.4.3	**Clotted cream (plain)**	Diacetyltartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		Nisin	234	10 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		POLYSORBATES		1,000 mg/kg	
1.4.4	**Cream analogues**	Acesulfame potassium	950	1,000 mg/kg	188
		Aspartame	951	1,000 mg/kg	191
		CAROTENOIDS		20 mg/kg	
		Caramel III - ammonia caramel	150c	5,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	5,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	20 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Diacetyltartaric and fatty acid esters of glycerol	472e	6,000 mg/kg	
		Grape skin extract	163(ii)	150 mg/kg	181, 201
		Neotame	961	33 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		POLYSORBATES		5,000 mg/kg	
		Propylene glycol esters of fatty acids	477	5,000 mg/kg	86
		Sucralose (Trichlorogalactosucrose)	955	580 mg/kg	
1.5	**Milk powder and cream powder and powder analogues (plain)**				
1.5.1	**Milk powder and cream powder (plain)**	**ASCORBYL ESTERS**		500mg/kg	10
		Butylated hydroxyanisole (BHA)	320	100mg/kg	15, 196
		Butylated hydroxytoluene (BHT)	321	200mg/kg	15, 196

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Calcium aluminium silicate	556	265 mg/kg	6, 259
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/Kg	
		PHOSPHATES		3,000 mg/kg	33
		Polydimethylsiloxane	900a	10 mg/kg	
		Propyl gallate	310	200 mg/kg	
		Sodium alumino silicate	554	265 mg/kg	
		Sucroglycerides	474	10,000 mg/kg	
1.5.1.1	**Dairy baseddairy whitener**				
1.5.2	**Powder analogues**	**ASCORBYL ESTERS**		80 mg/kg	10
		Acesulfame potassium	950	1,000 mg/kg	188
		Aspartame	951	2,000 mg/kg	191
		CAROTENOIDS		100 mg/kg	209
		Calcium aluminium silicate	556	570 mg/kg	6, 259
		Caramel III - ammonia caramel	150c	5,000 mg/kg	
		Caramel IV - sulfite ammonia	150d	5,000 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		caramel			
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		Grape skin extract	163(ii)	150 mg/kg	201, 209, 181
		Neotame	961	65 mg/kg	
		PHOSPHATES		4,400 mg/kg	[52][88, 33]
		POLYSORBATES		4,000 mg/kg	
		Propylene glycol esters of fatty acids	477	GMP	
		RIBOFLAVINS		300 mg/kg	
		Sodium alumino silicate	554	570 mg/kg	6, 259
		Steviol glycosides	960	330 mg/kg	26, 201
1.6	**Cheese and analogues**				
1.6.1	**Unripened cheese**	Aspartame	951	1,000 mg/kg	191
		CAROTENOIDS		100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLIN, COPPER		50 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		COMPLEXES			
		Canthaxanthin	161g	15 mg/kg	201
		Caramel III - ammonia caramel	150c	15,000 mg/kg	201
		Caramel IV - sulfite ammonia caramel	150d	50,000 mg/kg	201
		Indigotine (Indigo carmine)	132	200 mg/kg	3
		Lauric arginate ethyl ester	243	200 mg/kg	
		Natamycin (Pimaricin)	235	40 mg/kg	80, 3
		PHOSPHATES		4,400 mg/kg	33
		POLYSORBATES		80 mg/kg	38
		Ponceau 4R	124	100 mg/kg	3
		RIBOFLAVINS		300 mg/kg	
		SORBATES		2,000 mg/kg	42, 223 **82**[Omitted]
		Nisin	234	12.5 mg/kg	**82**[233]

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Propionic acid, sodium propionate, calcium propionate,	280, 281, 282, 283	3,000 mg/kg	[82][Omitted] (singly or in combination, expressed as propionic acid)
		Glucono delta lactone	575	GMP	(for channa and paneer only)
		Sunset yellow FCF	110	100 mg/kg	3
		Calcium chloride	509	200 mg/kg	Except cream cheese
		beta-Carotenes, vegetable	160a(ii)	600 mg/kg	Except coulommiers
		Carrageenan	407	5,000 mg/kg	For cream cheese only

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Alginate of sodium/potassium /calcium	401,402, 404	5,000 mg/kg	For cream cheese only
		Propylene glycol alginate	405	5000 mg/kg	
		Paprika extract	160c	GMP	
		Curcumin	100	GMP	
		Annatto	[52][160b (i) and (ii)]	GMP	
1.6.2	**Ripened cheese, (Cheddar,Danbo,Edam,Gouda,Havarti, Tilisiter,Camembert, Brie,St Paulin, Samsoe,Emmentaler, Provolone,extra hard grating /sliced/cut/shreded cheese)**	Canthaxanthin	161g	15 mg/kg	201
		Lysozyme	1105	GMP	
		Natamycin (Pimaricin)	235	40 mg/kg	3, 80
		Nisin	234	12 mg/kg	
		SORBATES		3,000 mg/kg	42
		Calcium chloride	509	200 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		Sodium salts of mono/di/poly phosphoric acid	339, 450(i, ii, iii) 451(i),452(i)	9,000 mg/kg	Total salt content should not exceed 9000 mg/kg calculated as
		Potassium salts of mono/di/poly phosphoric acid	340, 450 (iv), (v), 451(ii),		

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
			452(ii)		phosphorus/carbonates/citrate/chloride
		Curcumin	100	100 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	100 mg/kg	
		Annatto extracts, norbixin-based	160b(ii)	100 mg/kg	
		Annatto extracts, bixin-based	160b(i)	50 mg/kg	Normal to orange colour
		Propionic acid, sodium propionate, calcium propionate,	280, 281, 282, 283	3,000 mg/kg	Singly or in combination, expressed as propionic acid
		[69][****]			
		Paprika extract	160c	GMP	
1.6.2.1	**Ripened cheese includes rind**	**ASCORBYL ESTERS**		500 mg/kg	
		CAROTENOIDS		100 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		CHLOROPHYLLS AND CHLOROPHYLLIN, COPPER COMPLEXES		15 mg/kg	
		Canthaxanthin	161g	15 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	50,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	600 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		Hexamethylene tetramine	239	25 mg/kg	[52][66, 298]
		Lauric arginate ethyl ester	243	200 mg/kg	
		Lysozyme	1105	GMP	
		Natamycin (Pimaricin)	235	40 mg/kg	
		Nisin	234	12 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SORBATES		3,000 mg/kg	
1.6.2.2	**Rind of ripened cheese**	Allura red AC	129	100 mg/kg	
		Brilliant blue FCF	133	100 mg/kg	
		CAROTENOIDS		500 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		CHLOROPHYLLS AND CHLOROPHYLLIN, COPPER COMPLEXES		75 mg/kg	
		Canthaxanthin	161g	15 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	50,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Grape skin extract	163(ii)	1,000 mg/kg	
		IRON OXIDES		100 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Lysozyme	1105	GMP	
		Microcrystalline wax	905c(i)	30,000 mg/kg	
		Natamycin (Pimaricin)	235	40 mg/kg	
		Nisin	234	12 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SORBATES		3,000 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	
1.6.2.3	**Cheese**	**CAROTENOID**		100 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
	powder	**CHLOROPHYLLS AND CHLOROPHYLLIN, COPPER COMPLEXES**		50 mg/kg	
		Canthaxanthin	161g	15 mg/kg	201
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Lysozyme	1105	GMP	
		Natamycin (Pimaricin)	235	40 mg/kg	3, 80
		Nisin	234	12 mg/kg	
		SORBATES		3,000 mg/kg	42
1.6.3	**Whey cheese**	Lauric arginate ethyl ester	243	200 mg/kg	
		SORBATES		1,000 mg/kg	42
1.6.4	**Processed cheese**				
1.6.4.1	**Plain processed cheese/ processed cheese, processed cheese spreads**	Allura red AC	129	100 mg/kg	
		CAROTENOIDS		100 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		HYDROXYBENZOATES, PARA-		300 mg/kg	27

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		IRON OXIDES		50 mg/kg	
		Lauric arginate ethyl ester	243	200 mg/kg	80,3
		Natamycin (Pimaricin)	235	40 mg/kg	
		PHOSPHATES		9,000 mg/kg	[69][33]
		RIBOFLAVINS		300 mg/kg	
		SODIUM ALUMINIUM PHOSPHATES		1,600 mg/kg	251, 6
		SORBATES		3,000 mg/kg	42
		Sunset yellow FCF	110	100 mg/kg	3
		Curcumin	100	100 mg/kg	
		Chlorophyll	140	100 mg/kg	
		Annatto	160(b) (i), (ii)	50 mg/kg	
		Nisin	234	12.5 mg/kg	
1.6.4.2	**Flavoured processed cheese, including containing fruit, vegetables, meat etc.**	Allura red AC	129	100 mg/kg	
		CAROTENOIDS		100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLIN, COPPER COMPLEXES		50 mg/kg	
		Canthaxanthin	161g	15 mg/kg	
		Caramel III -	150c	50,000	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		ammonia caramel		mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	50,000 mg/kg	72
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		Grape skin extract	163(ii)	1,000 mg/kg	
		HYDROXYBENZOATES, PARA-		300 mg/kg	27
		IRON OXIDES		50 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Lauric arginate ethyl ester	243	200 mg/kg	
		Natamycin (Pimaricin)	235	40 mg/kg	3, 80
		PHOSPHATES		9,000 mg/kg	33
		Ponceau 4R	124	100 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SODIUM ALUMINIUM PHOSPHATES		1600 mg/kg	251, 6
		SORBATES		3,000 mg/kg	42
		Sunset yellow	110	100 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		FCF			
1.6.5	**Cheese analogues**	Acesulfame potassium	950	350 mg/kg	188
		Allura red AC	129	100 mg/kg	3
		Aspartame	951	1,000 mg/kg	191
		Brilliant blue FCF	133	100 mg/kg	3
		CAROTENOIDS		200 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLIN, COPPER COMPLEXES		50 mg/kg	
		Canthaxanthin	161g	15 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	50,000 mg/kg	201
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	3
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		Grape skin extract	163(ii)	1,000 mg/kg	
		HYDROXYBENZOATES, PARA-		500 mg/kg	27,
		Indigotine (Indigo	132	100 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		carmine)			
		Lauric arginate ethyl ester	243	200 mg/kg	
		Natamycin (Pimaricin)	235	40 mg/kg	3, 80
		Neotame	961	33 mg/kg	
		Nisin	234	12 mg/kg	
		PHOSPHATES		9,000 mg/kg	**82**[33]
		Ponceau 4R	124	100 mg/kg	3
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		100 mg/kg	
		SORBATES		3,000 mg/kg	42
		Sucralose (Trichlorogalactosucrose)	955	500 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	3
1.6.6	**Whey protein cheese**	Acetic acid, glacial	260	GMP	
		Calcium propionate	282	3,000 mg/kg	70
		Citric acid	330	GMP	
		Glucono delta-lactone	575	GMP	
		Lactic acid, L-, D- and DL-	270	GMP	
		Malic acid, DL-	296	GMP	
		Natamycin	235	40 mg/kg	80,3

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		(Pimaricin)			
		Nisin	234	12 mg/kg	
		Propionic acid	280	3,000 mg/kg	
		SORBATES		3,000 mg/kg	70, 42
		Sodium propionate	281	3,000 mg/kg	70
1.7	**Dairy based desserts**	**ASCORBYL ESTERS**		500 mg/kg	10, 2
		Acesulfame potassium	950	350 mg/kg	188
		[75][Omitted]			
		Allura red AC	129	100 mg/kg	
		Ammonium salts of phosphatidic acid	442	5,000 mg/kg	231
		Aspartame	951	1,000 mg/kg	191
		Aspartame-acesulfame salt	962	350 mg/kg	113
		BENZOATES		300 mg/kg	13
		Butylated hydroxyanisole (BHA)	320	200 mg/kg	Only for rasgulla dry mixes
		Brilliant blue FCF	133	100 mg/kg	
		CAROTENOIDS		100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYL		500 mg/kg	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		LIN, COPPER COMPLEXES			
		Caramel III - ammonia caramel	150c	2,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	3,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		Fast green FCF	143	100 mg/kg	2
		Grape skin extract	163(ii)	200 mg/kg	181
		HYDROXYBENZOATES, PARA-		120 mg/kg	27
		IRON OXIDES		100 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Lauric arginate ethyl ester	243	200 mg/kg	170
		Neotame	961	100 mg/kg	
		PHOSPHATES		1,500 mg/kg	
		POLYSORBATES		3,000 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		Propyl gallate	310	90 mg/kg	15, 2

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Propylene glycol esters of fatty acids	477	5,000 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		100 mg/kg	
		SORBATES		1,000 mg/kg	42
		Steviol glycosides	960	330 mg/kg	26
		Sucralose (Trichlorogalactosucrose)	955	400 mg/kg	
		Sucroglycerides	474	5,000 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	
		Propylene glycol alginate	405	GMP	
		Polyoxyethylene sorbitan tristearate	436	GMP	
		Poly glycerol esters of fatty acid	475	GMP	
		Polyoxyethylene sorbyton mono Laureate	432	GMP	
		Polyoxyethylene sorbyton monosterate	435	GMP	
		Distarch glycerol	1411	GMP	
		Distarch glycerol acetylated	1432	GMP	
		Distarch glycerol	1443	GMP	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		hydroxypropyl			
		Microcrystalline cellulose	460 (i)	10, 000 mg/kg	
		TARTRATES		1,000 mg/kg	
		Curcumin	100	100 mg/kg	
		Annatto	160 b(i), (ii)	100 mg/kg	
		Carmoisine	122	100 mg/kg	
		Erythrosine	127	50 mg/kg	
		Tartrazine	102	100 mg/kg	
		[73][TOCOPHEROLS		500 mg/kg	XS243]
1.8	**Whey and whey products excluding whey cheeses**				
1.8.1	**Liquid whey and whey products excluding whey cheeses**	Benzoyl peroxide	928	100 mg/kg	74
		PHOSPHATES		880 mg/kg	33, 228
1.8.2	[52]**[Dried whey and whey products, excluding whey cheeses]**	Benzoyl peroxide	928	100 mg/kg	147
		Calcium carbonate	170(i)	10,000 mg/kg	
		Calcium chloride	509	GMP	
		Calcium hydroxide	526	GMP	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		Calcium silicate	552	10,000 mg/kg	
		Hydroxypropyl distarch phosphate	1442	10,000 mg/kg	
		Magnesium carbonate	504(i)	10,000 mg/kg	
		Magnesium oxide	530	10,000 mg/kg	
		Magnesium silicate, synthetic	553(i)	10,000 mg/kg	
		Microcrystalline cellulose (Cellulose gel)	460(i)	10,000 mg/kg	
		PHOSPHATES		4,400 mg/kg	33
		Potassium carbonate	501(i)	GMP	
		Potassium chloride	508	GMP	
		Potassium dihydrogen citrate	332(i)	GMP	
		Potassium hydrogen carbonate	501(ii)	GMP	
		Potassium hydroxide	525	GMP	
		Powdered cellulose	460(ii)	10,000 mg/kg	
		Silicon dioxide,	551	10,000	

Table 1

Dairy products and analogues, excluding products of category 2.0					
Food Category System (1)	**Food Category Name (2)**	**Food Additive (3)**	**INS No. (4)**	**Recommended Maximum Level (5)**	**Note (6)**
		amorphous		mg/kg	
		Sodium aluminosilicate	554	1,140 mg/kg	6
		Sodium carbonate	500(i)	GMP	
		Sodium dihydrogen citrate	331(i)	GMP	
		Sodium hydrogen carbonate	500(ii)	GMP	
		Sodium hydroxide	524	GMP	
		Sodium sesquicarbonate	500(iii)	GMP	
		Talc	553(iii)	10,000 mg/kg	
		Tripotassium citrate	332(ii)	GMP	
		Trisodium citrate	331(iii)	GMP	

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
2.0	**Fats and oils, and fat emulsions**				

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
2.1	**Fats and oils essentially free from water**				
2.1.1	**Butter oil, anhydrous milk fat and ghee (no additives in case of ghee)**	**ASCORBYL ESTERS**		500 mg/kg	10,171
		Butylated hydroxyanisole (BHA)	320	175mg/kg	15, 171, 133
		Butylated hydroxytoluene (BHT)	321	75mg/kg	15, 171, 133
		Propyl gallate	310	100 mg/kg	15, 133, 171
		Gallate(octyl/ ethyl/dodecyl)	311, 313, 312	100 mg/kg	
		Citric acid	330	GMP	171
2.1.2	**[69][Vegetable oils, fats and bakery shortenings]**	Lecithins	[69][322 (i), 322 (ii)]	GMP	
		Ascorbic acid	300	GMP	
		Propyl gallate	310	200 mg/kg	15, 130
		[52][**TOCOPHEROLS**		GMP	
		ASCORBYL ESTERS		500mg/kg]	

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Butylated hydroxyanisole (BHA)	320	200mg/kg	130, 15
		Butylated hydroxytoluene (BHT)	321	200mg/kg	130, 15
		Citric acid	330,	GMP	15, 277
		Tartric acid	334	GMP	15, 277
		Guaiac resin	314	1,000 mg/kg	
		TBHQ	319	200 mg/kg	15 ,130
		Sodium citrate	[69][331(i)]	GMP	
		Isopropyl citrate mixture	384	200 mg/kg	
		[69][Citric and fatty acid esters of glycerol]	472c	100 mg/kg	Singly or in combination
		Phosphoric acid	338	100 mg/kg	Singly or in combination
		Polydimethylsiloxane	900a	10 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		CAROTENOI		25 mg/kg	232

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		DS			
		Diacetyltartaric acid and fatty acid esters of glycerol	472e	10,000 mg/kg	
		POLYSORBATES		5,000 mg/kg	102
		Propylene glycol esters of fatty acids	477	10,000 mg/kg	
		Stearyl citrate	484	GMP	
		THIODIPROPIONATES		200 mg/kg	46
		[69][Lactic and fatty acid esters of glycerol	472b	10,000 mg/kg	408
		Mono and diglycerides of fatty acids	471	GMP	408
		Polyglycerol esters of fatty acid	475	5,000 mg/kg	408]
2.1.3	**Lard, tallow, fish oil, and other animal fats (edible fats)**	Lecithins	322(i), (ii)	GMP	
		Ascorbic acid	300	GMP	
		Propyl gallate	310	200 mg/kg	15, 130
		TOCOPHEROLS		[81][300 mg/kg	358]
		ASCORBYL		500 mg/kg	10

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		ESTERS			
		Butylated hydroxyanisole (BHA)	320	200 mg/kg	130, 15
		Butylated hydroxytoluene (BHT)	321	200 mg/kg	130, 15
		Citric acid	330	GMP	
		Tartric acid	334	GMP	
		Guaiac resin	314	1,000 mg/kg	
		TBHQ	319	200 mg/kg	15,130
		Sodium citrate	331(iii)	GMP	
		Phosphoric acid	338	100 mg/kg	
		Dimethyl polysiloxane	900a	10 mg/kg	Singly or in combination with silicon dioxide
		Silicon dioxide	551		
		beta-Carotenes, vegetable	161a(ii)	1,000 mg/kg	
		CAROTENOIDS		25 mg/kg	
		Diacetyl tartaric acid and fatty acid	472e	10,000 mg/kg	

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		esters of glycerol			
		Fast green FCF	143	100 mg/kg	
		Indigotine	132	100 mg/kg	
		Isopropyl citrate mixture	384	200 mg/kg	
		POLYSORBATES		5,000 mg/kg	102
		Propylene glycol esters of fatty acids	477	10,000 mg/kg	
		Stearyl citrate	484	GMP	
		Sunset yellow FCF	110	100 mg/kg	
		THIODIPROPIONATES		200 mg/kg	46
2.2	**Fat emulsions mainly of type water-in-oil**				
2.2.1	**Butter (Butter and Milk Fat)**	Curcumin	100	100 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	600 mg/kg	
		Annatto	160b(i), (ii)	20 mg/kg	8
		CAROTENOIDS		35 mg/kg	146, 291
		Sodium hydroxide	524	GMP	
		Calcium	526		

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		hydroxide			
		PHOPHATES		880 mg/kg	33, 34
		Sodium carbonate	500(i)	GMP	
		Sodium hydrogen carbonate	500(ii)	GMP	
2.2.2	**[69][Fat spreads, dairy fat spreads and blended spreads (margarine and fat spreads)]**	Lecithins	322(i), (ii)	GMP	
		Propyl gallate	310	200 mg/kg	15, 130
		Tocopherols	307a,b,c	GMP	
		ASCORBYL ESTERS		500 mg/kg	10
		Butylated hydroxyanisole (BHA)	320	200mg/kg	130, 15
		Butylated hydroxytoluene (BHT)	321	200mg/kg	130, 15
		Tartric acid	334	GMP	
		Guaiac resin	314	1,000 mg/kg	
		TBHQ	319	200 mg/kg	15, 130
		Isopropyl citrate mixture	384	100 mg/kg	

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Diacetyltartaric and fatty acid esters of glycerol	472e	10 g/kg	
		1,2 -propylene glycol esters of fatty acids	477	20g/kg	
		[52]**[SORBITAN ESTERS OF FATTY ACIDS**		10,000 mg/kg	359]
		Sucroglycerides	474	10,000mg/kg	102
		SORBATES		[69][1,000 mg/kg]	42
		beta-Carotenes, vegetable	160a(ii)	1,000mg/kg	
		Annatto	160b	20 mg/kg	
		Curcumin	100	5 mg/kg	
		CAROTENOIDS		35 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		[69][50 mg/kg]	21
		BENZOATES		1,000mg/kg	13
		Canthaxanthin	161g	15 mg/kg	214, 215
		Caramel III - Ammonia	150c	500 mg/kg	

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		caramel			
		Caramel IV-Sulfite ammonia caramel	150d	500 mg/kg	214
		HYDROXY BENZOATES, PARA		300 mg/kg	27
		Lauric alginate ethyl ester	243	200 mg/kg	214, 215
		PHOSPHATES		2,200 mg/kg	33
		Polydimethylsiloxane	900a	10 mg/kg	152
		POLYSORBATES		5,000 mg/kg	102
		RIBOFLAVINS		300 mg/kg	
		Stearyl citrate	484	100 mg/kg	15
		STEAROYL LACTYLATES	481(i), 482(i)	10,000 mg/kg	
		Thermally oxidized soya bean oil interacted with mono- and diglycerides of fatty acids	479	5,000 mg/kg	
		THIODIPROPIONATES		200 mg/kg	46

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		[52][Sucrose oligoesters, Type I and Type II	473a	10,000 mg/kg	348, 360
		Sucrose esters of fatty acids	473	10,000 mg/kg	348, 360
		Poly glycerol esters of fatty acid	475	5,000 mg/kg	359]
2.3	**Fat emulsions mainly of type oil-in-water, including mixed and/or flavoured products based on fat emulsions**	Acesulfame potassium	950	1,000 mg/kg	188
		ASCORBYL ESTERS		500 mg/kg	10
		Aspartame	951	1,000 mg/kg	191
		BENZOATES		1,000 mg/kg	13
		Brilliant blue FCF	133	100 mg/kg	
		Butylated hydroxyanisole (BHA)	320	200mg/kg	130, 15
		Butylated hydroxytoluene (BHT)	321	200mg/kg	130, 15
		Canthaxanthhin	161g	15 mg/kg	
		Caramel III - ammonia caramel	150c	20,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		CAROTENOIDS		200 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		HYDROXYBENZOATES, PARA -		300 mg/kg	27
		Indigotine (indigo caramine)	132	100 mg/kg	
		Neotame	961	10 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		POLYSORBATES		5,000 mg/kg	102
		Propyl gallate	310	200 mg/kg	15, 130
		Propylene glycol esters of fatty acids	477	30,000 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SORBATES		1,000 mg/kg	42
		[52][Poly glycerol esters of fatty acid	475	20,000 mg/kg	363
		Propylene glycol alginate	405	3,000 mg/kg	
		STEAROYL		3,000 mg/kg	

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		LACTYLATES			
		SORBITAN ESTERS OF FATTY ACIDS		5,000 mg/kg	363
		Sucrose esters of fatty acids	473	5,000 mg/kg	363, 102]
		Sucroglycerides	474	10,000 mg/kg	102
		Tertiary butylhydroquinone	319	200 mg/kg	15, 130
2.4	**Fat-based desserts excluding dairy-based dessert products of food category 1.7 (frozen desserts/frozen confections)**	Propylene glycol alginate	405	10 g/kg	
		Polyglycerol esters of fatty acids	475	10 g/kg	
		Polyoxethylene sorbitian monolaureate	432	10 g/kg	
		Polyoxethylene sorbitian tristearate	436	10 g/kg	
		Polyoxethylene sorbitian monolstearate	435	10 g/kg	
		Aspartame	951	1,000 mg/kg	191
		Sucralose	955	400 mg/kg	
		Curcumin	100	100 mg/kg	

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		Annatto	160b	100 mg/kg	
		Beta apo -8-carotenal	160e	100 mg/kg	
		Methyl ester of beta apo- 8-carotenal	160f		
		Caramel color - ammonium sulphite process	150d	3 g/kg	
		TARTRATES		1 g/kg	
		Acesulfame potassium	950	350 mg/kg	188
		Allura red AC	129	100 mg/kg	
		ASCORBYL ESTERS	304, 305	80 mg/kg	10
		Aspartame-acesulfame salt	962	350 mg/kg	113
		BENZOATES		1,000 mg/kg	13
		Brilliant blue FCF	133	100 mg/kg	
		Butylated hydroxyanisole (BHA)	320	200 mg/kg	130, 15

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Butylated hydroxytoluene (BHT)	321	200 mg/kg	130, 15
		Canthaxanthin	161g	100 mg/kg	
		Caramel III - ammonia caramel	150c	20,000 mg/kg	
		CAROTENOIDS		150 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEX		500 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		Fast green FCF	143	100 mg/kg	
		Grape skin estract	163(ii)	200 mg/kg	181
		Indigotine (indigo caramine)	132	100 mg/kg	
		IRON OXIDES		350 mg/kg	
		Neotame	961	100 mg/kg	
		PHOSPHATES		1,500 mg/kg	33
		POLYSORBA		3,000 mg/kg	102

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		TES			
		Ponceau 4R	124	50 mg/kg	
		Propyl gallate	310	200 mg/kg	15, 130
		Propylene glycol esters of fatty acids	477	40,000 mg/kg	
		SACCHARINS		100 mg/kg	
		SORBATES		1,000 mg/kg	42
		Sucroglycerides	474	5,000 mg/kg	
		Sunset yellow FCF	110	50 mg/kg	
		Tertiary butylhydroquinone	319	200 mg/kg	15, 130
2.4.1	**Cocoa based spreads including fillings**	Acesulfame potassium	950	1,000 mg/kg	188
		[75][Omitted]			
		Aspartame	951	3,000 mg/kg	191
		BENZOATES		1,500 mg/kg	13
		Propyl gallate	310	200 mg/kg	15, 130
		ACSCORBYL ESTERS		500 mg/kg	10, 15,114
		Mineral oil, high viscosity	905d	2,000 mg/kg	3
		Mineral oil, medium and	905e	2,000 mg/kg	3

Table 2

Fats and oils, and fat emulsions					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		low viscosity, class I			
		ETHYLENE DIAMINE TETRA ACETATES		50 mg/kg	21
		HYDROXYBENZOATES, PARA-		300 mg/kg	27
		Lauric arginate ethyl ester	243	200 mg/kg	
		PHOSPHATES		880 mg/kg	33
		POLYSORBATES		1,000 mg/kg	
		SACCHARINS		200 mg/kg	
		Sucralose (Trichlorogalacto sucrose)	955	400 mg/kg	169

Table 3

Edible ice, including sorbet					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum level**	**Notes**
3.0	**Edible ices, including sorbet (ice**	**ASCORBYL ESTERS**		200 mg/kg	10,15
		Acesulfame	950	800 mg/kg	188

Table 3

Edible ice, including sorbet					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum level**	**Notes**
	candy)	potassium			
		[75][Omitted]			
		Allura red AC	129	100 mg/kg	
		Aspartame	951	1,000 mg/kg	191
		Brilliant blue FCF	133	100 mg/kg	
		Butylated hydroxyanisole (BHA)	320	200mg/kg	195, 15
		Butylated hydroxytoluene (BHT)	321	100mg/kg	195, 15
		CAROTENOIDS		200mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		500 mg/kg	
		Caramel III - ammonia caramel	150c	GMP	
		Caramel IV - sulfite ammonia caramel	150d	3,000 mg/kg	
		beta-Carotenes,	160a(ii)	1,000 mg/kg	

Table 3

Edible ice, including sorbet					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum level**	**Notes**
		vegetable			
		Diacetyltartaric and fatty acid esters of glycerol	472e	1,000 mg/kg	
		Fast green FCF	143	100 mg/kg	
		Grape skin extract	163(ii)	100 mg/kg	181
		IRON OXIDES		300 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Neotame	961	100 mg/kg	
		PHOSPHATES		7,500 mg/kg	33
		POLYSORBATES		1,000 mg/kg	
		Ponceau 4R	124	100mg/kg	
		Propylene glycol esters of fatty acids	477	[52][5,000 mg/Kg]	
		RIBOFLAVINS		500 mg/kg	
		SACCHARINS		100 mg/kg	
		Sucralose (Trichlorogalactosucrose)	955	320 mg/kg	
		Sucroglyceride	474	5,000 mg/kg	15 , 195

Table 3

Edible ice, including sorbet					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum level**	**Notes**
		s			
		Sunset yellow FCF	110	100 mg/kg	
		Tertiary butylhydroquinone (TBHQ)	319	200 mg/kg	
		Propylene glycol alginate	405	10,000 mg/kg	
		Polyglycerol esters of fattty acids	475	10,000 mg/kg	
		Polyoxyethylene sorbitan monolaureate	432	10,000 mg/kg	
		Polyoxyethylene sorbitan tristearate	436	10,000 mg/kg	
		Polyoxyethylene sorbitan monostearate	435	10,000 mg/kg	
		Curcumin	100	100 mg/kg	
		Annatto	160b	100 mg/kg	
		Canthaxanthin	161g	100mg/kg	
		Carmoisine	122	100mg/kg	
		Erythrosine	127	50mg/kg	
		Tartrazine	102	100mg/kg	
		Indigotine (Indigo carmine)	132	100mg/kg	

Table 3

Edible ice, including sorbet					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum level**	**Notes**
		TARTRATES		1 g/kg	
		Steviol glycosides	960	170 mg/kg	26

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
4.0	**Fruits and vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes and aloe vera), sea weeds, nuts and seeds**				
4.1	**Fruits**				
4.1.1	**Fresh fruits**	No additives permitted			
4.1.1.1	**Untreated fresh fruits**	No additives permitted			
4.1.1.2	**Surface-treated fresh fruits**	Beeswax	901	GMP	
		Candelilla wax	902	GMP	
		Carnauba wax	903	GMP	
		Glycerol ester of wood rosin	445(iii)	110 mg/kg	
		IRON OXIDE		1,000 mg/kg	4
		Microcrystalline wax	905c(i)	50 mg/kg	
		ortho-Phenylphenol	231	12 mg/kg	49
		Sodium ortho-phenylphenol	232		
		Polyethylene glycol	1521	GMP	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Polyvinylpyrrolidone	1201	GMP	
		SULFITES		30 mg/kg	
		Shellac, bleached	904	GMP	
		Sucroglycerides	474	GMP	
4.1.1.3	[52]**[Peeled or cut minimally processed fruits]**	Calcium ascorbate	302	GMP	
		Carbon dioxide	290	GMP	59
		Nitrogen	941	GMP	59
		Nitrous oxide	942	GMP	
		Potassium ascorbate	303	GMP	
		Sodium ascorbate	301	GMP	
		Calcium chloride,	509	350 mg/kg	
		Calcium lactate	327		
		Calcium gluconate	578		
		Calcium carbonate	170(i)		
		[52][Citric acid	330	GMP	
		Ascorbic acid	300	GMP	
		Potassium carbonate	501	GMP]	
4.1.2	**Processed fruits**	Carnauba wax	903	GMP	
		SULFITES		500 mg/kg	
4.1.2.1	**Frozen fruits**	**SULFITES**		500 mg/kg	44, 155

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
4.1.2.2	**Dried fruits, nuts and seeds**	**ASCORBYL ESTERS**		80 mg/kg	10
		BENZOATES		800 mg/kg	13
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		265 mg/kg	21
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		HYDROXYBENZOATES, PARA		800 mg/kg	27
		Lauric arginate ethyl ester	243	200 mg/kg	
		Mineral oil, high viscosity	905d	5,000 mg/kg	
		Mineral oil, medium viscosity, class I	905e	5,000 mg/kg	
		Calcium phosphate	341(i)	20,000 mg/kg	
		Magnesium phosphate	343(ii)	20,000 mg/kg	
		SORBATES		500 mg/kg	42
		SULFITES		1,000 mg/kg	44, 135, 218
		Tartaric acid, L	334	GMP	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		(+)			
4.1.2.3	**Fruit in vinegar, oil, or brine**	Acesulfame potassium	950	200 mg/kg	188
		Aspartame	951	300 mg/kg	144, 191
		BENZOATES		250 mg/kg	13
		CAROTENOIDS		1,000 mg/kg	
		CHLOROPHYLLS and CHLOROPHYLLINS, COPPER COMPLEXES		100 mg/kg	
		Caramel III - ammonia caramel	150c	200 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	7,500 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	1,000 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES		250 mg/kg	21

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		(EDTA)			
		Grape skin extract	163(ii)	1,500 mg/kg	
		HYDROXYBENZOATES, PARA		250 mg/kg	27
		Neotame	961	100 mg/kg	
		PHOSPHATES		2,200 mg/kg	
		Polydimethylsiloxane	900a	10 mg/kg	
		SACCHARINS		160 mg/kg	144
		SORBATES		1,000 mg/kg	42
		SULFITES		100 mg/kg	44
		Sucralose (Trichlorogalactosucrose)	955	180 mg/kg	144
4.1.2.4	**Canned or bottled (pasteurized) fruit**	Acesulfame potassium	950	350 mg/kg	188
		Annatto	160b	200 mg/kg	
		Aspartame	951	1,000 mg/kg	191
		Aspartame-acesulfame salt	962	350 mg/kg	113
		Canthaxanthin	161g	200 mg/kg	
		Brilliant blue FCF	133	200 mg/kg	
		Carmoisine	122	200 mg/kg	
		CAROTENOIDS		200 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		100 mg/kg	
		Caramel III - ammonia caramel	150c	200 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	7,500 mg/kg	
		Curcumin	100	200 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Dimethyl polysiloxane	900a	10 mg/kg	
		Erythrosine	127	100 mg/kg	
		Fast green FCF	143	200 mg/kg	
		Grape skin extract	163(ii)	1,500 mg/kg	
		IRON OXIDES		300 mg/kg	
		Indigotine (Indigo carmine)	132	200 mg/kg	
		Neotame	961	33 mg/kg	
		Ponceau 4R	124	200 mg/kg	
		RIBOFLAVI		300 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		NS			
		SACCHARINS		200 mg/kg	
		Stannous chloride	512	20 mg/kg	43
		Tartrazine	102	200 mg/kg	
		Sunset yellow FCF	110	200 mg/kg	
		Sucralose (Trichlorogalactosucrose)	955	400 mg/kg	
		Steviol glycosides	960	100 mg/kg	26
		Saffron		GMP	
4.1.2.5	**Jams, jellies, marmalades**	Acesulfame potassium	950	1,000 mg/kg	188
		[75][Omitted]			
		Allura red AC	129	100 mg/kg	
		Annatto	160b	GMP	
		Aspartame	951	1,000 mg/kg	191
		Aspartame-acesulfame salt	962	1,000 mg/kg	113
		Brilliant blue FCF	133	200 mg/kg	
		BENZOATES		1,000 mg/kg	13
		CAROTENOIDS		200 mg/kg	
		CHLOROPHYLLS AND CHLOROPH		200 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		YLLINS, COPPER COMPLEXES			
		Canthaxanthin	161g	200 mg/kg	
		Caramel III - ammonia caramel	150c	200 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	1,500 mg/kg	
		Carmoisine	122	200 mg/kg	
		Carnauba wax	903	400 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Curcumin	100	GMP	
		Dimethylpolysiloxane	900a	10 mg/kg.	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		130 mg/kg	21
		Erythrosine	127	100 mg/kg	
		Fast green FCF	143	200 mg/kg	
		Grape skin extract	163(ii)	500 mg/kg	
		HYDROXYBENZOATES PARA-		250 mg/kg	27

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		IRON OXIDES		200 mg/kg	
		Indigotine (Indigo carmine)	132	200 mg/kg	
		Neotame	961	70 mg/kg	
		Polydimethylsiloxane	900a	30 mg/kg	
		Ponceau 4R	124	200 mg/kg	
		RIBOFLAVINS		200 mg/kg	
		SACCHARINS		200 mg/kg	
		SORBATES		1,000 mg/kg	42
		SULFITES		100 mg/kg	44
		Steviol glycosides	960	360 mg/kg	26
		Sucralose (Trichlorogalactosucrose)	955	400 mg/kg	
		Tartaric acid, L (+)	334	GMP	
		Tartrazine	102	200 mg/kg	
		Sunset yellow FCF	110		
4.1.2.6	**Fruit-based spreads (e.g. chutney) excluding products of**	Annatto	160b	GMP	
		Aspartame	951	1,000 mg/kg	191
		BENZOATES		250 mg/kg	13
		Brilliant blue FCF	133	100 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	food category 4.1.2.5	**CAROTENOIDS**		500 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLIN,COPPER COMPLEXES		150 mg/kg	
		Canthaxanthin	161g	15 mg/kg	
		Caramel III - ammonia caramel	150c	500 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	500 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	500 mg/kg	
		Curcumin	100	GMP	
		Diacetyltartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		100 mg/kg	21
		Fast green FCF	143	100 mg/kg	
		Grape skin	163(ii)	500 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		extract			
		HYDROXYBENZOATE PARA-		1,000 mg/kg	27
		IRON OXIDES		500 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Neotame	961	70 mg/kg	
		PHOSPHATES		1,100 mg/kg	33
		Polydimethylsiloxane	900a	10 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		Propylene glycol alginate	405	GMP	
		RIBOFLAVINS		500 mg/kg	
		SACCHARINS		200 mg/kg	
		SORBATES		1,000 mg/kg	42
		Sucralose (Trichlorogalactosucrose)	955	400 mg/kg	
		Tartaric acid, L (+)	334	GMP	
		Ascorbyl Palmitate	304	200 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		TBHQ	319	200 mg/kg	
		TOCOPHEROLS		GMP	
		Steviol glycosides	960	330 mg/kg	26
		Acesulfame potassium	950	500 mg/kg	188
4.1.2.7	**Candied / glazed / crystallised fruit including murrabba***	Allura red AC	129	100 mg/kg	
		Annatto	160b	200 mg/kg	
		Aspartame	951	2,000 mg/kg	191
		BENZOATES		1,000 mg/kg	13
		Brilliant blue FCF	133	200 mg/kg	
		Canthaxanthin	161g	200 mg/kg	
		CAROTENOIDS		200 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		250 mg/kg	
		Caramel III - ammonia caramel	150c	200 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	7,500 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Curcumin	100	200 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	1,000 mg/kg	
		Erythrosine	127	100 mg/kg	
		Fast green FCF	143	200 mg/kg	
		Grape skin extract	163(ii)	1,000 mg/kg	
		HYDROXYBENZOATES PARA		1,000 mg/kg	27
		IRON OXIDES		250 mg/kg	
		Indigotine (Indigo carmine)	132	200 mg/kg	
		Neotame	961	65 mg/kg	
		PHOSPHATES		10 mg/kg	33
		Ponceau 4R	124	200 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SORBATES		500 mg/kg	42
		SULFITES		100 mg/kg and 40 mg/kg (for murabba)	44

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Sucralose (Trichlorogalactosucrose)	955	800 mg/kg	
		Sunset yellow FCF	110	200 mg/kg	
		Tartrazine	102	200 mg/kg	
		Acesulfame potassium	950	500 mg/kg	188
		Tartaric acid	334	GMP	
		*No sweeteners and colours permitted in murrabba			
4.1.2.8	**Fruit preparations, including fruit pulp, purees, fruit toppings and coconut milk**	Acesulfame potassium	950	350 mg/kg	188
		Allura red AC	129	100 mg/kg	
		Aspartame-acesulfame salt	962	350 mg/kg	113
		Aspartame	951	1,000 mg/kg	191
		Annatto	160b(i), (ii)	GMP	
		BENZOATES		1,000 mg/kg	13
		Brilliant blue FCF	133	100 mg/kg	
		CAROTENOIDS		100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXE		100 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		S			
		beta-Carotenes, vegetable	160a(ii)	100 mg/kg	182
		Caramel III - ammonia caramel	150c	7,500 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	7,500 mg/kg	
		Curcumin	100	GMP	
		Diacetyltartaric and fatty acid esters of glycerol	472e	2,500 mg/kg	
		Fast green FCF	143	100 mg/kg	
		Grape skin extract	163(ii)	500 mg/kg	
		HYDROXYBENZOATES PARA-		800 mg/kg	27
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Neotame	961	100 mg/kg	
		PHOSPHATES		350 mg/kg	33
		Paprika oleoresin	160c(i)	GMP	
		SORBATES		1,000 mg/kg	42

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Ponceau 4R	124	50 mg/kg	
		Propylene glycol esters of fatty acids	477	40,000 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		200 mg/kg	
		SORBATES		1,000 mg/kg	42
		POLYSORBATES		1,000 mg/kg	154
		SULFITES		100 mg/kg	206, 44
		Steviol glycosides	960	330 mg/kg	26
		Sucralose (Trichlorogalactosucrose)	955	400 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	
		52[**SORBITAN ESTERS OF FATTY ACIDS**		5,000 mg/kg	XS314R, XS240
		Sucrose esters of fatty acids	473	1,500 mg/kg	348, XS314R]
4.1.2.9	**Fruit-based desserts including fruit-flavoured**	Tartaric acid, L (+)	334	GMP	
		ASCORBYL ESTERS		500 mg/kg	2, 10
		Acesulfame	950	350 mg/kg	188

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	water-based desserts	potassium			
		Allura red AC	129	100 mg/kg	
		Aspartame	951	1,000 mg/kg	191
		Aspartame-acesulfame salt	962	350 mg/kg	113
		Brilliant blue FCF	133	100 mg/kg	
		CAROTENOIDS		150 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		150 mg/kg	
		Canthaxanthin	161g	15 mg/kg	
		Caramel III - ammonia caramel	150c	200 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	7,500 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	2,500 mg/kg	
		Fast green FCF	143	100 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Grape skin extract	163(ii)	500 mg/kg	
		HYDROXYBENZOATES PARA-		800 mg/kg	27
		IRON OXIDES		200 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Neotame	961	100 mg/kg	
		PHOSPAHTES		1,500 mg/kg	33
		SORBATES		3,000 mg/kg	
		Polydimethylsiloxane	900a	110 mg/kg	
		Ponceau 4R	124	50 mg/kg	
		Propyl gallate	310	90 mg/kg	2, 15
		Propylene glycol esters of fatty acids	477	40,000 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		100 mg/kg	
		SORBATES		1,000 mg/kg	42
		SULFITES		100 mg/kg	44
		Sucralose (Trichlorogalactosucrose)	955	400 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Sucroglycerides	474	5,000 mg/kg	
		Sunset yellow FCF	110	50 mg/kg	
		Steviol glycoside	960	350 mg/kg	26
4.1.2.10	**Fermented fruit products**	Acesulfame potassium	950	350 mg/kg	188
		Aspartame	951	1,000 mg/kg	191
		BENZOATES		1,000 mg/kg	13
		CAROTENOIDS		500 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINSCOPPER COMPLEXES		100 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	200 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	2,500 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		250 mg/kg	21
		Grape skin	163(ii)	500 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		extract			
		HYDROXYBENZOATES, PARA-		800 mg/kg	27
		Neotame	961	65 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		RIBOFLAVINS		500 mg/kg	
		Polydimethysiloxane	900a	10 mg/kg	
		SACCHARINS		160 mg/kg	
		SORBATES		1,000 mg/kg	42
		SULFITES		100 mg/kg	44
		Steviol glycosides	960	115 mg/kg	26
		Sucralose (Trichlorogalactosucrose)	955	150 mg/kg	
4.1.2.11	**Fruit fillings for pastries**	Acesulfame potassium	950	350 mg/kg	188
		Allura red AC	129	100 mg/kg	
		Aspartame	951	1,000 mg/kg	191
		BENZOATES		1,000 mg/kg	13
		Brilliant blue FCF	133	100 mg/kg	
		CAROTENOI		500 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		DS			
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		100 mg/kg	
		Canthaxanthin	161g	15 mg/kg	
		Caramel III - ammonia caramel	150c	7,500 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	7,500 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	100 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		650 mg/kg	21
		Fast green FCF	143	100 mg/kg	
		Grape skin extract	163(ii)	500 mg/kg	
		HYDROXYBENZOATES PARA-		800 mg/kg	27
		Indigotine (Indigo	132	100 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		carmine)			
		Lauric arginate ethyl ester	243	200 mg/kg	
		Neotame	961	100 mg/kg	
		PHOSPHATES		1,500 mg/kg	33
		SORBATES		3,000 mg/kg	
		Ponceau 4R	124	50 mg/kg	
		Propylene glycol esters of fatty acids	477	40,000 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SORBATES		1,000 mg/kg	42
		SULFITES		100 mg/kg	44
		Sucralose (Trichlorogalactosucrose)	955	400 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	
		Steviol glycoside	960	330 mg/kg	26
4.1.2.12	**Cooked fruit**	Acesulfame potassium	950	500 mg/kg	188
		Aspartame	951	1,000 mg/kg	191
		BENZOATES		1,000 mg/kg	13
		CHLOROPHYLLS AND		100 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		CHLOROPHYLLINS, COPPER COMPLEXES			
		Neotame	961	65 mg/kg	
		SORBATES		1,200 mg/kg	42
		Sucralose (Trichlorogalactosucrose)	955	150 mg/kg	
4.2	**Vegetables, sea weeds, nuts and seeds**				
4.2.1	**Fresh vegetables, sea weeds, nuts and seeds**	No additives permitted			
4.2.1.1	**Untreated fresh vegetables ((including mushrooms and fungi, roots and tubers, fresh pulses and legumes (including soybean), and aloe vera) sea weeds, nuts**	No additives permitted			

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	and seeds))				
4.2.1.2	**Surface treated fresh vegetables (including mushrooms and fungi, roots and tubers, fresh pulses and legumes, and aloe vera) sea weeds, nuts and seeds**	Candelilla wax	902	GMP	79
		Beeswax	901	GMP	79
		Carnauba wax	903	GMP	79
		Glycerol ester of wood rosin	445(iii)	110 mg/kg	
		Lauric arginate ethyl ester	243	200 mg/kg	
		Microcrystalline wax	905c(i)	50 mg/kg	
		PHOSPHATES		1,760 mg/kg	33
		Shellac, bleached	904	GMP	79
4.2.1.3	[52]**[Peeled, cut or shredded minimally processed vegetables [(including**	Lauric arginate ethyl ester	243	200 mg/kg	
		PHOSPHATES		5,600 mg/kg	33,76
		Sodium ascorbate	301	GMP	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	mushrooms and fungi, roots and tubers, fresh pulses and legumes, and aloe vera) sea weeds, nuts and seeds)]]	**SULFITES**		50 mg/kg	44,76,136
		Calcium chloride	509	350 mg/kg	
		Calcium lactate	327		
		Calcium gluconate	578		
		Calcium carbonate	170(i)		
		[52][Citric acid	330	GMP	
		Ascorbic acid	300	GMP	
		Calcium ascorbate	302	GMP	
		Potassium carbonate	501	GMP]	
4.2.2	**Processed vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) sea weeds, nuts and seeds**	Acetic acid, glacial	260	GMP	
		Caramel IV - Sulfite Ammonia Caramel	150d	50,000 mg/kg	92
		Ascorbic acid, L-	300	GMP	110
		Citric acid	330	GMP	242, 262, 264, 265
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		100 mg/kg	21, 110

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Lactic acid, L-, D- and DL-	270	GMP	262, 264
		Malic acid, dl-	296	GMP	265
		PHOSPHATES		5,000 mg/kg	33, 76
		Polydimethylsiloxane	900a	10 mg/kg	15
		SULFITES		50 mg/kg	44, 76, 136, 137
4.2.2.1	**Frozen vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) sea weeds, nuts and seeds**	Ascorbic acid, L-	300	GMP	110
		Citric acid	330	GMP	242, 262, 264, 265
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		100 mg/kg	21, 110
		Lactic acid, L-, D- and DL-	270	GMP	262, 264
		Malic acid, dl-	296	GMP	265
		PHOSPHATES		5,000 mg/kg	33, 76
		Polydimethylsiloxane	900a	10 mg/kg	15
		SULFITES		50 mg/kg	44, 76, 136, 137
		[52][Calcium chloride	509	GMP	323

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Calcium sulphate	516	GMP	323]
4.2.2.2	**Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) sea weeds, nuts and seeds**	**ASCORBYL ESTERS**		80 mg/kg	10
		BENZOATES		1,000 mg/kg	13
		Butylated hydroxyanisole (BHA)	320	200 mg/kg	196, 15, 76
		Butylated hydroxytoluene (BHT)	321	200 mg/kg	196, 15, 76
		Canthaxanthin	161g	10 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerols	472e	10,000 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		800 mg/kg	21, 64, 297
		PHOSPHATES		5,000 mg/kg	33, 76
		Propyl gallate	310	50 mg/kg	15, 76,196
		SULFITES		500 mg/kg	44, 105
4.2.2.3	**Vegetables**	Allura red AC	129	100 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	(including mushrooms and fungi, roots and tubers, fresh pulses and legumes, and aloe vera) sea weeds in vinegar, oil, brine or soybean sauce	Acesulfame potassium	950	200 mg/kg	144, 188
		Aluminium ammonium sulfate	523	520 mg/kg	6, 245,296
		Aspartame	951	300 mg/kg	144, 191
		Aspartame-acesulfame salt	962	200 mg/kg	113
		BENZOATES		2,000 mg/kg	13
		Brilliant blue FCF	133	100 mg/kg	
		Caramel III - ammonia caramel	150c	500 mg/kg	
		beta - Carotenes, , vegetable	160a(ii)	1,320 mg/kg	
		CAROTENOIDS		50 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerols	472e	2,500 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		250 mg/kg	21
		Fast green FCF	143	100 mg/kg	
		Grape skin extract	163(ii)	100 mg/kg	179, 181

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		HYDROXYBENZOATES, PARA-		1,000 mg/kg	27
		Indigotine (indigo carmine)	132	100 mg/kg	
		Lauric arginate ethyl ester	243	200 mg/kg	
		Neotame	961	10 mg/kg	144
		PHOSPHATES		2,200 mg/kg	33
		Polydimethylsiloxane	900a	10 mg/kg	
		RIBOFLAVINS		500 mg/kg	
		SACCHARINS		160 mg/kg	144
		SORBATES		1000 mg/kg	42
		Sucralose (trichlorogalactosucrose)	955	400 mg/kg	
		SULFITES		100 mg/kg	44
		[52][Ferrous gluconate	579	150 mg/kg	48,23
		Ferrous lactate	585	150 mg/kg	48,23]
4.2.2.4	**Canned or bottled (pasteurised) or retort pouched**	Acesulfame potassium	950	200 mg/kg	188
		Allura red AC	129	200 mg/kg	
		Acesulfame potassium	950	350 mg/kg	188

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	vegetables (including mushrooms and fungi, roots and tubers, fresh pulses and legumes, and aloe vera) sea weeds	Aspartame	951	1,000 mg/kg	191
		Brilliant blue FCF	133	200 mg/kg	
		Caramel III - ammonia caramel	150c	200 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	200 mg/kg	
		CAROTENOIDS		200 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		365 mg/kg	21
		Fast green FCF	143	200 mg/kg	
		Neotame	961	33 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		Polydimethylsiloxane	900a	10 mg/kg	
		SACCHARINS		160 mg/kg	144
		Ascorbic acid		GMP	
		Stannous chloride	512	25 mg/kg	43
		Steviol glycosides	960	70 mg/kg	26
		Sucralose (trichlorogalact	955	580 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		osucrose)			
		SULFITES		50 mg/kg	44
4.2.2.5	**Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) sea weeds, nuts and seeds, purees and spreads (peanut butter)**	Aspartame	951	1,000 mg/kg	191
		Acesulfame potassium	950	1,000 mg/kg	188
		BENZOATES		1,000 mg/kg	13
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		CAROTENOIDS		50 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLINS,COPPER COMPLEXES		100 mg/kg	62
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		250 mg/kg	21
		Grape skin extract	163(ii)	100 mg/kg	179, 181
		HYDROXYBENZOATES,		1,000 mg/kg	27

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		PARA-			
		Neotame	961	33 mg/kg	
		PHOSPHATES		2,200 mg/kg	33, 76
		Polydimethylsiloxane	900a	10 mg/kg	
		SACCHARINS		160 mg/kg	
		SORBATES		1,000 mg/kg	42
		Steviol glycosides	960	330 mg/kg	26
		Sucralose (trichlorogalactosucrose)	955	400 mg/kg	169
		SULFITES		500 mg/kg	44, 138
4.2.2.6	**Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) sea weeds, nuts and seeds-pulps and preparations (e.g vegetable desserts and**	Allura red AC	129	100 mg/kg	92
		Acesulfame potassium	950	350 mg/kg	188
		Aspartame	951	1,000 mg/kg	191
		Aspartame-acesulfame salt	962	350 mg/kg	113
		BENZOATES		3,000 mg/kg	13
		Brilliant blue FCF	133	100 mg/kg	92
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		beta - Carotenes, vegetable	160a(ii)	1,000 mg/kg	92

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	sauces, candied vegetables) other than food category 4.2.2.5	**CAROTENOIDS**		50 mg/kg	92
		Chlorophylls And Chlorophylins ,Copper Complexes		100 mg/kg	62, 92
		Diacetyltartaric and fatty acid esters of glycerols	472e	2,500 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		80 mg/kg	21
		Grape skin extract	163(ii)	100 mg/kg	92, 181
		HYDROXYBENZOATES PARA-		1,000 mg/kg	27
		Indigotine (indigo carmine)	132	100 mg/kg	92
		Neotame	961	33 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		Polydimethylsiloxane	900a	50 mg/kg	
		POLYSORBATES		3,000 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Propylene glycol esters of fatty acids	477	5,000 mg/kg	
		RIBOFLAVINS		300 mg/kg	92
		SACCHARINS		200 mg/kg	
		SORBATES		1,000 mg/kg	42
		Steviol glycosides	960	165 mg/kg	26
		Sucralose (trichlorogalactosucrose)	955	400 mg/kg	
		Sucroglycerides	474	5,000 mg/kg	
		SULFITES		300 mg/kg	44, 205
		Sunset yellow FCF	110	50 mg/kg	92
4.2.2.7	**Fermented vegetables(including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweed products, excluding**	Aspartame	951	2,500 mg/kg	191
		Acesulfame Potassium	950	1,000 mg/kg	188
		BENZOATES		1,000 mg/kg	13
		Brilliant blue FCF	133	100 mg/kg	92
		CAROTENOIDS		50 mg/kg	92
		Calcium 5'-ribonucleotides	634	GMP	279
		Calcium carbonate	170(i)	GMP	279

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	fermented soybean products of food categories 6.8.6, 6.8.7, 12.9.1, 12.9.2.1 and 12.9.2.3	Calcium chloride	509	GMP	279
		Calcium lactate	327	10,000 mg/kg	
		Calcium carbonate	170	GMP	
		Calcium bisulphite	227	500 mg/kg	
		Citric acid	330	GMP	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		100 mg/kg	62
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	2,500 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		250 mg/kg	21
		Erythrosine	127	30 mg/kg	
		Fast green FCF	143	100 mg/kg	

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Grape skin extract	163(ii)	100 mg/kg	181
		HYDROXYBENZOATES PARA-		300 mg/kg	27
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Malic acid	296	GMP	
		Neotame	961	33 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		Polydimethylsiloxane	900a	10 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		RIBOFLAVINS		500 mg/kg	
		SACCHARINS		200 mg/kg	
		SORBATES		1,000 mg/kg	42
		SULFITES		500 mg/kg	44
		Sucralose (Trichlorogalactosucrose)	955	580 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	92
		Steviol glycoside	960	200 mg/kg	26
4.2.2.8	**Cooked or fried**	Aspartame	951	1,000 mg/kg	
		Benzoates		1,000 mg/kg	13

Table 4

Fruits and vegetables					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds	L-Tartaric acid	334	GMP	
		Chlorophylls and Chlorophyllins, copper complexes		100 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Curcumin	100	GMP	
		Diacetyltartaric and fatty acid esters of glycerol	472e	2,500 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		250 mg/kg	21
		Neotame	961	33 mg/Kg	
		PHOSPHATES		2,200 mg/kg	33, 76
		SACCHARINS		160 mg/kg	144
		SORBATES		1,000 mg/kg	42,221
		Sucralose (Trichlorogalactosucrose)	955	150 mg/kg	141
		Steviol glycoside	960	40 mg/kg	26

Table 5

Confectionary					
Food Category System	**Food Category Name**	**Food Additive**	**INS Number**	**Recommended Maximum level**	**Note**
5.0	**Confectionery**	**ASCORBYL ESTERS**		500 mg/kg	10, 15,114
		Mineral oil, medium viscosity	905e	2,000 mg/kg	3
		Polydimethylsiloxane	900a	10 mg/kg	
5.1	[52]**[Cocoa products and chocolate products including imitations and chocolate substitutes]**	Mineral oil, high viscosity	905d	2,000 mg/kg	3
		Propyl gallate	310	200 mg/kg	15, 130
5.1.1	**Cocoa mixes (powders) and cocoa mass/cake**	Acesulfame potassium	950	350 mg/kg	188
		Ammonium salts of phosphatidic acid	442	GMP	97
		Aspartame	951	3,000 mg/kg	191
		BENZOATES		15,00 mg/kg	
		SORBATES		1,500 mg/kg	
		PHOSPHATES		1,100 mg/kg	33
		Propylene glycol esters of fatty acids	477	5,000 mg/kg	97

		SACCHARINS		100 mg/kg	97
		Sucrose esters of fatty acids	473	10 g/kg	
		Sucralose (Trichlorogalactosucrose)	955	580 mg/kg	97
		L-Tartaric acid	334	5 g/kg	
		[52][Polyglycerol esters of fatty acid	475	5,000 mg/kg	XS141, 97
		Polyglycerol esters of interesterified ricinoleic acid	476	5,000 mg/kg	XS141, 97
		SORBITAN ESTERS OF FATTY ACIDS		2,000 mg/kg	XS141, 97, 123]
5.1.2	**Cocoa mixes (syrups)**	Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	50,000 mg/kg	
		Acesulfame potassium	950	350 mg/kg	97,188
		[75][Omitted]			
		Aspartame	951	1,000 mg/kg	191
		Neotame	961	33 mg/kg	97
		POLYSORBATES		500 mg/kg	
		SACCHARINS		80 mg/kg	97

		SORBATES		1,000 mg/kg	42
		Sucralose (Trichlorogalactosucrose)	955	400 mg/kg	97
		[52]**[TARTRATES**		2,000 mg/kg	45
		TOCOPHEROLS		500 mg/kg	15]
5.1.3	**Cocoa and chocolate products**	Acesulfame potassium	950	1,000 mg/kg	188
		Annatto	160b(i),(ii)	100 mg/kg	
		Grape skin extract	163(ii)	200 mg/kg	
		[52][omitted		]	
		Allura red AC	129	100 mg/kg	183
		[75][Omitted]			
		Ammonium salts of phosphatidic acid	442	GMP	
		Aspartame	951	3,000 mg/kg	191
		Beeswax	901	GMP	3
		Brilliant blue FCF	133	100 mg/kg	183
		Butylated hydroxyanisole (BHA)	320	200 mg/kg	130, 141, 15
		Butylated hydroxytoluene (BHT)	321	200 mg/kg	130, 141, 15
		TBHQ	319	200 mg/kg	[52][15,130,141]
		CAROTENO		100 mg/kg	183

		IDS			
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		[52][700 mg/kg]	62
		Curcumin	100	100 mg/kg	
		Candelilla wax	902	GMP	
		Canthaxanthin	161g	100 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	50,000 mg/kg	
		Carmoisine	122	100 mg/kg	
		Carnauba wax	903	GMP	
		beta-Carotenes, vegetable	160a(ii)	100 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		50 mg/kg	21
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Lauric arginate ethyl ester	243	200 mg/kg	
		SORBATES		1,000 mg/kg	
		Mono and di glycerides of	471	GMP	

		edible fatty acids			
		Neotame	961	100 mg/kg	
		HYDROXYBENZOATES, PARA-		300 mg/kg	27
		PHOSPHATES		2,500 mg/kg	33
		Tartrazine	102	100 mg/kg	
		POLYSORBATES		[52][5,000 mg/kg]	101
		Ponceau 4R	124	100 mg/kg	183
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		500 mg/kg	
		Erythrosine	127	50 mg/kg	
		Shellac, bleached	904	GMP	3
		[52][omit		]	
		Carmoisine	122	100 mg/kg	
		Fast green FCF	143	100 mg/kg	
		Sucralose (Trichlorogalactosucrose)	955	800 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	
		[52][omit			]
		BENZOATES		1,500 mg/kg	
		[52][Polyglycerol esters of fatty acid	475	2,000 mg/kg	By weight in chocolat

					es
		Polyglycerol esters of interesterified ricinoleic acid	476	5,000 mg/kg	101]
		[52]**[SORBITAN ESTERS OF FATTY ACIDS**		10,000 mg/kg	101]
		Saffron		GMP	
		L - Tartaric acid	334	3 g/kg	
		[52][Castor Oil	1503	350 mg/kg	
		TOCOPHEROLS		750 mg/kg	15,168]
5.1.4	[52]**[Imitation Chocolate, Chocolate substitute products]**	Acesulfame potassium	950	500 mg/kg	188
		[75][Omitted]			
		Ammonium salts of phosphatidic acid	442	GMP	
		Aspartame	951	3,000 mg/kg	
		Aspartame-acesulfame salt	962	500 mg/kg	191
		BENZOATES		1,500 mg/kg	13
		[52][omit			]
		Butylated hydroxytoluene (BHT)	321	200 mg/kg	141, 15, 197
		Beeswax	901	GMP	3
		Candelilla wax	902	GMP	3
		Carnauba wax	903	GMP	3

		HYDROXYBENZOATES, PARA-		300 mg/kg	
		Neotame	961	100 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		POLYSORBATES		5,000 mg/kg	
		SACCHARINS		500 mg/kg	
		SORBATES		1,500 mg/kg	
		Shellac, bleached	904	GMP	
		Sucralose	955	800 mg/kg	
		TOCOPHEROLS		750 mg/kg	
		Tartaric acid	334	5 g/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		700 mg/kg	
		CAROTENOIDS		100 mg/kg	
		beta – Carotenes, vegetable	160a(ii)	100 mg/kg	
		Canthaxanthin	161g	100 mg/kg	
		Sulfur dioxide	220	150 mg/kg	
		Sorbitan monostearate	491	10 g/kg	
		Annatto	160b(i), (ii)	100 mg/kg	
		[52][Polyglycerol	476	5,000 mg/kg	366]

		esters of interesterified ricinoleic acid			
		Caramel III	150c	50,000 mg/kg	
		Caramel IV	150d	50,000 mg/kg	
		Saffron		GMP	
		[52][Polydimethyl-siloxane	900a	10mg/kg	
		Polyglycerol esters of fatty acid	475	2,000mg/kg	366
		Sucroglycerides	474	6,000mg/kg	348
		Sucrose Oligoesters, Type-I and Type -II	473a	6,000mg/kg	348
		Sucrose esters of fatty acid	473	6,000mg/kg	348
		TARTRATES		5,000mg/kg	45
		TOCOPHEROLS		500 mg/kg	15
		SORBITAN ESTERS OF FATTY ACIDS		10,000 mg/kg	]
5.2	**Confectionery including hard and soft candy, nougats etc. other than food categories 5.1, 5.3, and 5.4**	Allura red AC	129	200 mg/kg	
		[75][Omitted]			
		Butylated hydroxyanisole (BHA)	320	200mg/kg	130, 15
		Butylated hydroxytoluene (BHT)	321	200mg/kg	130, 15
		IRON		200 mg/kg	

		OXIDES			
		Sucroglycerides	474	5,000 mg/kg	
		Propylene glycol esters of fatty acids	477	5,000 mg/kg	
		Propyl gallate	310	200 mg/kg	15, 130
		BENZOATES		1,500 mg/kg	13
		Diacetyltartaric and fatty acid esters of glycerol	472e	GMP	
		CAROTENOIDS		GMP	
		beta – Carotenes,vegetable	160a(ii)	500 mg/kg	
		Canthaxanthin	161g	GMP	
		Castor oil	1503	500 mg/kg	
		Candelilla wax	902	GMP	3
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		GMP	
		Tartrazine	102	100 mg/kg	
		Erythrosine	127	50 mg/kg	
		Fast green FCF	143	100 mg/kg	
		Curcumin	100	GMP	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV -	150d	50,000 mg/kg	

		sulfite ammonia caramel			
		Neotame	961	330 mg/kg	1, 61, 158
		HYDROXYBENZOATES , PARA-		1,000 mg/kg	27
		L-Tartaric acid	334	2,000 mg/kg	
		Tocopherol	307a,b,c	500 mg/kg	
		[70][Liquid paraffin	905e	GMP]	
		[82][Omitted			]
		Ammonium salts of phosphatidic acids	442	GMP	
		Ponceau 4R	124	100 mg/kg	
		Microcrystalline wax	905c(i)	GMP	3
		Beeswax	901	GMP	3
		RIBOFLAVINS		300 mg/kg	
		Carmoisine	122	100 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		SACCHARINS		500 mg/kg	163
		Sucralose (Trichlorogalactosucrose)	955	1,800 mg/kg	
		Steviol glycosides	960	700 mg/kg	26, 199
		Sulfur dioxide	220	2,000 mg/kg	

		[52][omit		]	
		Tertiary butylhydroquinone (TBHQ)	319	200 mg/kg	15, 130
		SORBATES		1,500 mg/kg	42
		POLYSORBATES		1,000 mg/kg	
		Annatto	160b(i), (ii)	200 mg/kg	
		Brilliant blue FCF	133	100 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	
		Tartrazine	102	100 mg.kg	
		Indogotine (Indigo carmine)	132	100 mg/kg	
		Mineral oil, high viscosity	905d	2,000 mg/kg	3
		[52][Shellac, bleached	904	GMP	3
		Sucrose Oligoesters, Type-I and Type -II	473a	5,000mg/kg	348
		Sucrose esters of fatty acid	473	5,000mg/kg	348
		Polyglycerol esters of fatty acid	475	2,000mg/kg	367
		TARTRATES		2,000mg/kg	45
		Sodium di acetate	262 (ii)	1,000 mg/kg	
		STEROYL LACTILATES	481(i), 482(i)	5,000 mg/kg	]

5.2.1	**Hard candy**	Acesulfame potassium	950	3,500 mg/kg	188
		Carnauba wax	903	GMP	13
		Aspartame	951	10,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		700 mg/kg	
		Microcrystalline wax	905c(i)	GMP	3
		Neotame	961	330 mg/kg	
		Sucralose (Trichlorogalactosucrose)	955	1,500 mg/kg	164
		Annatto	160b(i), (ii)	GMP	
		Mono and di glycerides of edible fatty acids	471	GMP	
		Lecithins	322 (i)	GMP	
		L-Tartaric acid	334	GMP	
		[52][Polyglycerol esters of interesterified ricinoleic acid	476	3,000mg/kg	
		TOCOPHEROLS		500 mg/kg	15
		SORBITAN		10,000 mg/kg]	

		ESTERS OF FATTY ACIDS			
5.2.2	**Soft candy**	Acesulfame potassium	950	3500 mg/kg	157, 188
		Annatto	160b(i),(ii)	GMP	
		Aspartame	951	3,000 mg/kg	148
		Carnauba wax	903	GMP	3
		Sulfur dioxide	220	2,000 mg/kg	
		Grape skin extract	163(ii)	1,700 mg/kg	181
		Shellac, bleached	904	GMP	3
		52[Polyglycerol esters of interesterified ricinoleic acid	476	3,000 mg/kg	
		Propylene glycol	1520	4,500 mg/kg	
		SORBITAN ESTERS OF FATTY ACIDS		10,000 mg/kg	
		Hydrogenated poly-1-decenes	907	2,000 mg/kg	
		Sucrose esters of fatty acid	473	5,000mg/kg	348]
5.2.3	**Nougats and marzipans**	Acesulfame potassium	950	1000 mg/kg	
		Aspartame	951	3,000 mg/kg	
		Brilliant blue FCF	133	200 mg/kg	
		Indigotine (indigocarmine)	132	200 mg/kg	

		Fast green FCF	143	200 mg/kg	
		CAROTENOIDS		100 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		100 mg/kg	
		Ponceau 4R	124	200 mg/kg	
		Carnauba wax	903	GMP	
5.3	**Chewing gum**	Carmoisine	122	100 mg/kg	
		Tartrazine	102	100 mg/kg	
		Acesulfame potassium	950	5,000 mg/kg	
		Annatto	160b (i), (ii)	GMP	
		[75][Omitted]			
		Curcumin	100	GMP	
		Aspartame	951	10,000 mg/kg	
		BENZOATES		1,500 mg/kg	
		Calcium aluminium silicate	556	100 mg/kg	Expressed as Aluminium
		Castor Oil	1503	2,100 mg/kg	
		Beeswax	901	GMP	
		Brilliant blue FCF	133	100 mg/kg	
		CAROTENO		100 mg/kg	

		IDS			
		IRON OXIDES		10,000 mg/kg	
		Butylated hydroxyanisole (BHA)	320	400 mg/kg	130
		Butylated hydroxytoluene (BHT)	321	400 mg/kg	130
		Lecithins	322(i), (ii)	GMP	
		Grape skin extract	163(ii)	500 mg/kg	181
		Ammonium salts of phosphatidic acids	442	GMP	
		Sucrose esters of fatty acids	473	GMP	
		Polyglycerol polyricinoleate	476	GMP	
		L-Tartaric acid	334	3,000 mg/kg	
		Candelilla wax	902	GMP	
		[75][Omitted]			
		Caramel III - ammonia caramel	150c	20,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	20,000 mg/kg	
		Carnauba wax	903	GMP	
		beta – Carotenes,	160a(ii)	500 mg/kg	

		vegetable			
		Cyclodextrin, beta-	459	20,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	50,000 mg/kg	
		Erythrosine	127	25 mg/kg	
		Fast green FCF	143	200 mg/kg	
		Guaiac resin	314	1,500 mg/kg	
		HYDROXYBENZOATES, PARA-		1,500 mg/kg	
		RIBOFLAVINS		1,000 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Lauric arginate ethyl ester	243	225 mg/kg	
		Microcrystalline wax	905c(i)	[69][20,000 mg/kg	3]
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		GMP	
		Neotame	961	1,000 mg/kg	
		PHOSPHATES		44,000 mg/kg	33
		POLYSORBATES		5,000 mg/kg	
		Polyethylene	1521	20,000 mg/kg	

		glycol			
		Polyvinylpyrrolidone	1201	10,000 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		Sucroglycerides	474	20,000 mg/kg	
		Propylene glycol esters of fatty acids	477	20,000 mg/kg	
		Sodium aluminosilicate	554	100 mg/kg	
		Aluminium silicate	559	100 mg/kg	
		SACCHARINS		2,500 mg/kg	
		SORBATES		1,500 mg/kg	42
		Canthaxanthin	161g	GMP	
		Shellac, bleached	904	GMP	
		Stearoyl citrate	484	15,000 mg/kg	
		Steviol glycosides	960	3,500 mg/kg	26
		Sucralose (Trichlorogalactosucrose)	955	5,000 mg/kg	
		Propyl gallate	310	1,000 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	
		TOCOPHEROLS		1,500 mg/kg	
		Tertiary butylhydroquinone (TBHQ)	319	400 mg/kg	130
		Mineral oil, high viscosity	905d	20,000 mg/kg	3
5.4	**Decorations**	Acesulfame	950	500 mg/kg	

	(e.g. for fine bakery wares), toppings (non-fruit) and sweet sauces	potassium			
		[75][Omitted]			
		Aspartame	951	1,000 mg/kg	
		BENZOATES		1,500 mg/kg	
		Beeswax	901	GMP	
		Brilliant blue FCF	133	100 mg/kg	
		Butylated hydroxyanisole (BHA)	320	200mg/kg	130, 15
		Butylated hydroxytoluene (BHT)	321	200mg/kg	130, 15
		CAROTENOIDS		100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		100 mg/kg	
		Candelilla wax	902	GMP	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	50,000 mg/kg	
		Carnauba wax	903	GMP	
		beta-Carotenes, vegetable	160a(ii)	20,000 mg/kg	

		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		Erythrosine	127	50 mg/kg	
		Fast green FCF	143	100 mg/kg	
		HYDROXYBENZOATES, PARA-		300 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Propyl gallate	310	1,000 mg/kg	
		SORBATES-		1,000 mg/kg	
		Neotame	961	100 mg/kg	
		PHOSPHATES		1,500 mg/kg	33
		POLYSORBATES		3,000 mg/kg	
		Ponceau 4R	124	50 mg/kg	
		Propylene glycol esters of fatty acids	477	40,000 mg/kg	
		RIBOFLAVINS		3,000 mg/kg	
		SACCHARINS		500 mg/kg	
		Shellac, bleached	904	GMP	
		Sucralose (Trichlorogalactosucrose)	955	1,000 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	

		Tertiary butylhydroquinone (TBHQ)	319	200 mg/kg	
		Mineral oil, high viscosity	905d	2000 mg/kg	3
		52[Allura Red	129	100 mg/kg	
		Grape skin extract	163(ii)	500 mg/kg	181
		Mineral oil, medium viscosity	905e	2,000 mg/kg	XS 86, XS 105, 3, XS 141, XS 87
		Poly glycerol esters of fatty acid	475	2,000 mg/kg	368
		Polyglycerol esters of interesterified ricinoleic acid	476	5,000 mg/kg	
		Propylene glycol alginate	405	5,000 mg/kg	
		SORBITAN ESTERS OF FATTY ACIDS		10,000 mg/kg	
		STEAROYL LACTYLATES		2,000 mg/kg	
		Sucroglycerides	474	5,000 mg/kg	348

		Sucrose oligoesters, Type I and Type II	473a	5,000 mg/kg	348
		Sucrose esters of fatty acids	473	5,000 mg/kg	348
		TARTRATES		8,000 mg/kg	45
		TOCOPHEROLS		500 mg/kg	15]

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
6.0	**Cereals and cereal products derived from cereal grains, from roots and tubers, pulses, legumes (fresh pulses and legumes are covered in category 4.2) and pith or soft core of palm tree, excluding bakery wares of food category 7.0: including**				

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
	unprocessed (6.1) and various processed forms of cereals and cereal based products				
6.1	**Whole, broken, or flaked grain, including rice**	No additives permitted			
6.2	**Flours and starches (including soybean powder)**				
6.2.1 and 6.2.2	**Flours and starches***	Protease	1101(i)	GMP	
		Pullulan	1204	GMP	25
		SULFITES		200 mg/kg	44
		Benzoyl peroxide	928	75 mg/kg	
		Chlorine	925	2,500 mg/kg	87
		L-Ascorbic acid	300	300 mg/kg	
		Azodicarbonamide	927a	45 mg/kg	
		PHOSPHATES		2,500 mg/kg	225, 33

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Sodium ascorbate	301	300 mg/kg	
		SODIUM ALUMINIUM PHOSPHATES		1,600 mg/kg	6, 252
		alpha-Amylase from Aspergillus oryzae var.	1100 (i)	100 mg/kg	On flour mass basis
		alpha-Amylase from Bacillus subtilis	1100 (iii)	GMP	
		Carbohydrase from Bacillus licheniformis	1100 (vi)	GMP	
		Diacetyltartaric and fatty acid esters of glycerol	472e	3,000 mg/kg	186
		Lecithins	322(i), (ii)	GMP	28, 25
		Amylases and other enzymes	1100	GMP	
		Ammonium persulfate	923	2,500 mg/kg	On flour mass basis
		Calcium carbonate	170(i)	5,000 mg/kg	On flour mass basis

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		[69][****]			
		Ammonium chloride	510	500 mg/kg	On flour mass basis
		L-cysteine mono hydrochloride	920	90 mg/kg	On flour mass basis
		Soduim bisulphite	222	GMP	
		Sodium metabisulfite	223	GMP	
		Trisodium citrate	331(iii)	GMP	
	Maida	Only following additives permitted in maida (if the flour is used for baking purpose)			
		Benzoyl peroxide	928	40 mg/kg	
		Ascorbic acid	300	200 mg/kg	
	Corn flour	Only following additives permitted in corn flour (Maize starch)			
		SULFITES		100 mg/kg	44
		*No additives permitted in Atta			
6.3	**Ready -to -eat cereals, breakfast cereals, including rolled oats**	**ASCORBYL ESTERS**		200 mg/kg	10
		Acesulfame potassium	950	1,200 mg/kg	188
		Allura red AC	129	100 mg/kg	-
		Aspartame	951	1,000 mg/kg	191
		Curcumin	100	GMP	

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Paprika oleoresin	160c(i)	GMP	
		Brilliant blue FCF	133	100 mg/kg	
		Butylated hydroxyanisole (BHA)	320	200 mg/kg	196, 15
		Butylated hydroxytoluene (BHT)	321	100 mg/kg	196, 15
		CAROTENOIDS		200 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	189
		Caramel IV - sulfite ammonia caramel	150d	2,500 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	400 mg/kg	
		Grape skin extract	163(ii)	200 mg/kg	
		IRON OXIDES		75 mg/kg	
		Neotame	961	160 mg/kg	
		Propyl gallate	310	200 mg/kg	196
		PHOSPHATES		2,200 mg/kg	33

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		100 mg/kg	
		Steviol glycosides	960	350 mg/kg	26
		Sucralose (Trichlorogalactosucrose)	955	1,000 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	
		[52]**[TOCOPHEROLS**		**200 mg/kg]**	
6.4	**Pastas and noodles and like products**				
6.4.1	**Fresh pastas and noodles and like products**	Agar	406	GMP	211
		Alginic acid	400	GMP	211
		Aluminium ammonium sulphate	523	300 mg/kg	247,6
		Ascorbic acid	300	200 mg/kg	
		Calcium carbonate	170(i)	GMP	
		Carbon dioxide	290	GMP	211,59
		Carob bean gum	410	GMP	211
		Carrageenan	407	GMP	211
		Citric acid	330	GMP	
		Curdlan	424	GMP	211

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Distarch phosphate	1412	GMP	211
		Fumaric acid	297	700 mg/kg	
		Gellan gum	418	GMP	211
		Glucono delta-lactone	575	GMP	
		Glycerol	422	GMP	211
		Guargum	412	GMP	211
		Gumarabic	414	GMP	211
		Karaya gum	416	GMP	211
		Konjac flour	425	GMP	211
		Lactic acid L-, -D-and DL-	270	GMP	
		Lecithins	322(i), (ii)	GMP	
		Microcrystalline cellulose	460(i)	GMP	211
		Mono- and di-glycerides of fatty acids	471	GMP	
		Pectins	440	GMP	211
		Phosphated distarch phosphate	1413	GMP	211
		PHOSPHATES		2,500 mg/kg	211,33
		Potassium carbonate	501(i)	11,000 mg/kg	
		Processed eucheuma	407a	GMP	211

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		seaweed			
		Pullulan	1204	GMP	211
		Sodium acetate	262(i)	600 mg/kg	
		Sodium alginate	401	GMP	211
		Sodium ascorbate	301	GMP	
		Sodium carbonate	500 (i)	10,000 mg/kg	
		Carboxymethyl cellulose	466	GMP	
		Sodium DL-malate	350(ii)	GMP	
		Sodium hydrogen carbonate	500(ii)	GMP	
		Sodium lactate	325	GMP	
		Tragacanth gum	413	GMP	211
		Xanthan gum	415	GMP	211
6.4.2	**Dried pastas and noodles and like products**	Canthaxanthin	161g	15 mg/kg	211
		Caramel IV - Sulfite Ammonia caramel	150d	50,000 mg/kg	211
		Diacetyl tartaric acid and fatty acid esters of glycerol	472e	5,000 mg/kg	

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		PHOSPHATES		900 mg/kg	211,33
		Agar	406	GMP	256
		Alginic acid	400	GMP	256
		Ammonium alginate	403	GMP	256
		Ascorbic acid, L-	300	GMP	256
		Calcium 5'-ribonucleotide	634	GMP	256
		Calcium alginate	404	GMP	256
		Calcium ascorbate	302	200 mg/kg	256
		Calcium carbonate	170(i)	GMP	256
		Calcium sulfate	516	GMP	256
		Carob bean gum	410	GMP	256
		beta – Carotenes, vegetable	160a (ii)	1,000 mg/kg	211
		Carrageenan	407	GMP	256
		Citric acid	330	GMP	256
		Disodium 5'-guanylate	627	GMP	256
		Disodium 5'-Inosinate	631	GMP	256
		Disodium 5'-ribonucleotide	635	GMP	256

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Distarch phosphate	1412	GMP	256
		Fumaric acid	297	GMP	256
		Gellan gum	418	GMP	256
		Guar gum	412	GMP	256
		Gum arabic	414	GMP	256
		Karaya gum	416	GMP	256
		Konjac flour	425	GMP	256
		Lactic acid L-, D-and DL-	270	GMP	256
		Lecithins	322 (i)	GMP	256
		Malic acid	296	GMP	256
		Mannitol	421	GMP	256
		Microcrystalline cellulose	460 (i)	GMP	256
		Mono- and di-glycerides of fatty acids	471	GMP	256
		Monosodium L-glutamate	621	GMP	256
		Nitrous oxide	942	GMP	256
		Pectins	440	GMP	256
		Phosphated distarch phosphate	1413	GMP	256
		POLYSORBATES		5,000 mg/kg	
		Potassium alginate	402	GMP	256
		Potassium	501 (i)	GMP	256

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		carbonate			
		Potassium chloride	508	GMP	256
		Processed eucheuma seaweed	407a	GMP	256
		Pullulan	1204	GMP	256
		Salts of myristic, palmitic and stearic acids with ammonia,calcium,potassium and sodium	470 (i)	GMP	256
		Sodium acetate	262 (i)	GMP	256
		Sodium alginate	401	GMP	256
		Sodium ascorbate	301	200 mg/kg	256
		Sodium carbonate	500 (i)	GMP	256
		Carboxymethyl cellulose	466	GMP	256
		Sodium gluconate	576	GMP	256
		Sodium hydrogen carbonate	500 (ii)	GMP	256
		Sodium lactate	325	GMP	256

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Tara gum	417	GMP	256
		Tragacanth gum	413	GMP	256
		Xanthan gum	415	GMP	256
6.4.3	**Pre-cooked pastas and noodles and like products**	**ASCORBYL ESTERS**		500 mg/kg	211, 10
		BENZOATES		1,000 mg/kg	13
		Butylated hydroxyanisole (BHA)	320	200mg/kg	130, 15
		Butylated hydroxytoluene (BHT)	321	200mg/kg	130, 15
		CAROTENOIDS		1,200 mg/kg	153
		CHLOROPHYLLS AND CHLOROPYLLINS, COPPER COMPLEXES		100 mg/kg	153
		Canthaxanthin	161g	15 mg/kg	153
		Caramel III - Ammonia carmel	150c	50,000 mg/kg	153,173
		Caramel IV- Sulfite ammonia carmel	150d	50,000 mg/kg	153

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		beta – Carotenes, vegetable	160a(ii)	1,000 mg/kg	153
		Cyclodextrin, beta	459	1,000 mg/kg	153
		Diacetyl tartaric acid and fatty acid esters of glycerol	472e	10,000 mg/kg	
		Fast green FCF	143	100 mg/kg	194
		PHOSPHATES		2,500 mg/kg	33,211
		POLYSORBATES		5,000 mg/kg	
		Polydimethylsiloxane	900a	50 mg/kg	153
		Propyl gallate	310	200 mg/kg	
		Propylene glycol esters of fatty acids	477	5,000 mg/kg	153,2
		RIBOFLAVINS		300 mg/kg	153
		SORBATES		2,000 mg/kg	42,211
		SULFITES		20 mg/kg	44
		Sunset yellow FCF	110	100 mg/kg	153
		Tertiary butylhydroquinone (TBHQ)	319	200 mg/kg	130,15

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Paprika oleoresin	160c(i)	GMP	
		Annatto	160b(i),(ii)	GMP	
		Tartaric acid	334	GMP	
6.5	**Cereals/pulses and starch based desserts**	**ASCORBYL ESTERS**		500 mg/kg	10, 2
		Acesulfame potassium	950	350 mg/kg	188
		Allura red AC	129	100 mg/kg	
		Aspartame	951	200 mg/kg	191
		BENZOATES		1,000 mg/kg	13
		CAROTENOIDS		150 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		75 mg/kg	
		Canthaxanthin	161g	15 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	2,500 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Diacetyl tartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES		315 mg/kg	21
		Grape skin extract	163(ii)	200 mg/kg	181
		IRON OXIDES		75 mg/kg	
		Lauric arginate ethyl ester	243	200 mg/kg	
		Neotame	961	33 mg/kg	
		Nisin	234	3 mg/kg	
		PHOSPHATES		7,000 mg/kg	33
		POLYSORBATES		3,000 mg/kg	
		Propyl gallate	310	90 mg/kg	2, 15
		Propylene glycol esters of fatty acids	477	40,000 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		100 mg/kg	
		SORBATES		1,000 mg/kg	42
		Steviol	960	165 mg/kg	26

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		glycosides			
		Sucralose (Trichlorogalactosucrose)	955	400 mg/kg	
		Sucroglycerides	474	5,000 mg/kg	
		Tocopherol	307	GMP	
		TBHQ	319	200 mg/kg	
		[52][Sodium carboxymethyl cellulose (Cellulose gum), Sodium carboxymethyl cellulose, enzymatically hydrolysed (Cellulose gum, enzymatically hydrolyzed)]	466, 469	5 g/kg	
		Ponceau 4R	124	100 mg/kg	
		Carmoisine	122	100 mg/kg	
		Erythrosine	127	50 mg/kg	
		Tartrazine	102	100 mg/kg	
		Indogotine (Indigo carmine)	132	100 mg/kg	
		Brilliant blue FCF	133	100 mg/kg	

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Sunset yellow FCF	110	100 mg/kg	
		Fast green FCF	[52][143]	100 mg/kg	
6.6	**Batters**	Butylated hydroxyanisole (BHA)	320	200 mg/kg	Only for vada dry mixes
		CAROTENOIDS		500 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	2,500 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyl tartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		PHOSPHATES		5,600 mg/kg	33
		POLYSORBATES		5,000 mg/kg	2
		Polydimethylsiloxane	900a	10 mg/kg	
		RIBOFLAVINS		300 mg/kg	

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		SODIUM ALUMINIUM PHOSPHATES		1,000 mg/kg	6
		SORBATES		2,000 mg/kg	42
		Tartaric acid	334	[52][GMP]	
6.7	**Pre-cooked or processed cereal/grain/legume products**	Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV - sulfite ammonia caramel	150d	2,500 mg/kg	
		Sucralose (Trichlorogalactosucrose)	955	200 mg/kg	72
6.8	**Soybean products (excluding soybean-based seasonings and condiments of food category 12.9)**				
6.8.1	**Soybean based beverages**	Caramel III - ammonia caramel	150c	1,500 mg/kg	
		PHOSPHATES		1,300 mg/kg	33
		RIBOFLAVI		50 mg/kg	

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		NS			
		Steviol glycosides	960	200 mg/kg	26
		Sucralose (Trichlorogalactosucrose)	955	400 mg/kg	
6.8.2	**Soybean-based beverage film**				
6.8.3	**Soybean curd (tofu)**	**PHOSPHATES**		100 mg/kg	33
6.8.4	**Semi-dehydrated soybean curd**				
6.8.4.1	**Thick gravy-stewed semi-dehydrated soybean curd**				
6.8.4.2	**Deep fried semi-dehydrated soybean curd**				
6.8.4.3	**Semi-dehydrated soybean curd, other than food categories 6.8.4.1 and 6.8.4.2**				
6.8.5	**Dehydrated soybean curd**				

Table 6

Cereals and cereal products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
6.8.6	**Fermented soybeans**				
6.8.7	**Fermented soybean curd**				
6.8.8	**Other soybean protein products**	Caramel III Ammonia process	150c	20,000 mg/kg	
		Caramel IV - Sulfite ammonia Process	150d	20,000 mg/kg	

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
7.0	**Bakery products**	**ASCORBYL ESTERS**		1,000 mg/kg	15,10
		Benzoic acid	210	1,000 mg/kg	13
		Butylated hydroxyanisole (BHA)	320	200mg/kg	180, 15
		Butylated hydroxytoluene (BHT)	321	200mg/kg	180, 15
		Carnauba wax	903	GMP	3

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Fast green FCF	143	100 mg/kg	
		Mineral oil, high viscosity	905d	3,000 mg/kg	125
		Propylene glycol esters of fatty acids	477	15,000 mg/kg	72, 11
		SORBATES		1,000 mg/kg	42
7.1	**Bread and ordinary bakery wares and mixes**	Acesulfame potassium	950	1,000 mg/kg	188
		Aspartame	951	4,000 mg/kg	191
		Ammonium persulfate	923	2,500 mg/kg	
		Brilliant blue FCF	133	100 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	6,000 mg/kg	
		Neotame	961	70 mg/kg	
		Sucralose (Trichlorogalactosucrose)	955	650 mg/kg	
		Tartaric acid	334	GMP	
		Sucrose esters of fatty acid	473	GMP	
		Sodium stearoyl-2-lactylate	481(i),	5,000 mg/kg	Singly or in combinati

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Calcium stearoyl-2-lactyalate	482(ii)	5,000 mg/kg	on
		Polyglycerol esters of interesterified ricinoleic acid	476	2,000 mg/kg	
		Acid calcium phosphate	341	10,000 mg/kg	
		Sodium diacetate	262 (ii)	4,000 mg/kg	
		Acid sodium pyrophosphate	450 (i)	5,000 mg/kg	
		L- Cysteine monohydrochloride	920	90 mg/kg	
		Curcumin	100	GMP	
		Benzoyl peroxide	928	80 mg/kg	
		Acid calcium phosphate	341	10,000 mg/kg	
7.1.1	**Bread and rolls including yeast leavened breads, specialty breads and soda breads**	Mineral oil, medium viscosity	905e	3,000 mg/kg	36, 126
		Xylanase		GMP	Only for breads, FS03
		POLYSORBATES		3,000 mg/kg	

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Tertiary butylhydroquinone (TBHQ)	319	200 mg/kg	195, 15
		PHOSPHATES		9,300 mg/kg	229,33
		[82][Propylene glycol alginate	405	4,000 mg/kg	Except for use in soda breads]
7.1.2	**Crackers**	Allura red AC	129	100 mg/kg	
		Aluminium ammonium sulfate	523	100 mg/kg	246, 6
		CAROTENOIDS		1,000 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV – sulfite ammonia caramel	150d	50,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Grape skin extract	163(ii)	200 mg/kg	181
		PHOSPHATES		9,300 mg/kg	229,33
		POLYSORBA		5,000 mg/kg	11

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		TES			
		SODIUM ALUMINIUM PHOSPHATES		100 mg/kg	246, 6
		Tertiary butylhydroquinone (TBHQ)	319	200 mg/kg	15, 195
		[70]**[SORBITAN ESTERS OF FATTY ACIDS**		10,000 mg/kg	11]
		[82][Propylene glycol alginate	405	2,000 mg/kg]	
7.1.3	**Other ordinary bakery products**	Allura red AC	129	100 mg/kg	
		Aluminium ammonium sulfate	523	100 mg/kg	6, 244, 246
		CAROTENOIDS		100 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV – sulfite ammonia caramel	150d	50,000 mg/kg	
		PHOSPHATES		9,300 mg/kg	229,33

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		POLYSORBATES		3,000 mg/kg	11
		Propyl gallate	310	100 mg/kg	15, 130
		SODIUM ALUMINIUM PHOSPHATES		100 mg/kg	6, 244, 246
		Tertiary butylhydroquinone (TBHQ)	319	200 mg/kg	15, 130
		[70][SORBITAN ESTERS OF FATTY ACIDS		10,000 mg/kg	11]
7.1.4	**Bread-type products, including bread stuffing and bread crumbs**	**CAROTENOIDS**		200 mg/kg	116
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		6 mg/kg	62
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Grape skin extract	163(ii)	200 mg/kg	181

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		PHOSPHATES		9,300 mg/kg	[52][229,33]
		POLYSORBATES		3,000 mg/kg	11
		[52][Poly glycerol esters of fatty acid	475	10,000 mg/kg]	
		Tertiary butylhydroquinone (TBHQ)	319	200 mg/kg	15, 195
		[70][SORBITAN ESTERS OF FATTY ACIDS		10,000 mg/kg	11]
7.1.5	**Steamed breads and buns**	Aluminium ammonium sulfate	523	40 mg/kg	246, 6, 248
		CAROTENOIDS		100 mg/kg	216
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		PHOSPHATES		9,300 mg/kg	229,33
		POLYSORBATES		3,000 mg/kg	11
		Propylene glycol esters of fatty acids	477	15,000 mg/kg	11, 72

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		SODIUM ALUMINIUM PHOSPHATES		40 mg/kg	246, 6, 248
		[70][SORBITAN ESTERS OF FATTY ACIDS		10,000 mg/kg	11]
		[82][Propylene glycol alginate	405	500 mg/kg]	
7.1.6	**Mixes for bread and ordinary bakery wares**	Aluminium ammonium sulfate	523	40 mg/kg	246, 6, 249
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		PHOSPHATES		9,300 mg/kg	229,33
		POLYSORBATES		3,000 mg/kg	11
		SODIUM ALUMINIUM PHOSPHATES		40 mg/kg	248, 246, 6
		[70][SORBITAN ESTERS OF FATTY ACIDS		10,000 mg/kg	11]

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		[82][Propylene glycol alginate	405	20,000 mg/kg	11]
7.2	**Fine bakery wares (sweet, salty, savoury) and mixes**	[52][**STEAROYL LACTYLATES**		5,000 mg/kg	
		SORBITAN ESTERS OF FATTY ACIDS		10,000 mg/kg	
		Nisin	234	6.25 mg/kg	233
		POLYOXYETHYLENE STEARATES		3,000 mg/kg	
		Propylene glycol	1520	1,500 mg/kg	
		Sucrose oligoesters, Type I and Type II	473a	10,000 mg/kg	348
		Ponceau 4R	124	50 mg/kg	
		Sunset yellow FCF	110	50 mg/kg]	
7.2.1	**Cakes, cookies, biscuit, cracker and**	Acesulfame potassium	950	1,000 mg/kg	165,188
		Allura red AC	129	100 mg/kg	
		Aspartame	951	1,700 mg/kg	191,165

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
	pies	Aspartame-acesulfame salt	962	1,000 mg/kg	77, 113
		BENZOATES		1,000 mg/kg	13
		Beeswax	901	GMP	3
		Brilliant blue FCF	133	100 mg/kg	
		CAROTENOIDS		100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		75 mg/kg	
		Candelilla wax	902	GMP	3
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV – sulfite ammonia caramel	150d	1,200 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	20,000 mg/kg	

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		HYDROXYBENZOATES, PARA-		300 mg/kg	27
		IRON OXIDES		100 mg/kg	-
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Neotame	961	80 mg/kg	165
		PHOSPHATES		9,300 mg/kg	229,33
		[52][omit		]	
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		170 mg/kg	165
		SULFITES		50 mg/kg	44
		Shellac, bleached	904	GMP	3
		Sucralose (Trichlorogalactosucrose)	955	700 mg/kg	165
		Sucroglycerides	474	10,000 mg/kg	
		[52][Omit		]	
		Sucrose esters of Fatty acids	473	GMP	
		Tartaric acid	334	GMP	
		Benzoyl	928	40 mg/kg	

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		peroxide			
		Curcurmin	100(i)	GMP	
		Canthaxanthin	161g	GMP	
		Annatto	160(b)	GMP	
		Carmoisine	122	100 mg/kg	
		Erythrosine	127	50 mg/kg	
		POLYSORBATES		3,000 mg/kg	
		Tartarazine	102	100 mg/kg	
		[69][****]			
		[52][Poly glycerol esters of fatty acid	475	10,000 mg/kg	
		TOCOPHEROLS		200 mg/kg	389
		TARTRATES		5,000 mg/kg	45
		Propylene glycol alginates	405	3,000 mg/kg]	
7.2.2	**Other fine bakery products**	Acesulfame potassium	950	1,000 mg/kg	165,188
		Allura red AC	129	100 mg/kg	
		Aspartame	951	1,700 mg/kg	191,165
		Aspartame-acesulfame salt	962	1,000 mg/kg	77,113
		BENZOATES		1,000 mg/kg	13
		Beeswax	901	GMP	3
		Brilliant blue FCF	133	200 mg/kg	
		CAROTENOI		100 mg/kg	

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		DS			
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		75 mg/kg	
		Candelilla wax	902	GMP	3
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV – sulfite ammonia caramel	150d	1,200 mg/kg	
		POLYSORBATES		3,000 mg/kg	
		[52][omit		]	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	20,000 mg/kg	
		HYDROXYBENZOATES, PARA-		300 mg/kg	27
		IRON OXIDES		100 mg/kg	

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Indigotine (Indigo carmine)	132	200 mg/kg	
		Neotame	961	80 mg/kg	165
		PHOSPHATES		9,300 mg/kg	229, 33
		[52][Omit		]	
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		170 mg/kg	165
		SULFITES		50 mg/kg	44
		Shellac, bleached	904	GMP	3
		Sucralose	955	700 mg/kg	165
		Sucroglycerides	474	10,000 mg/kg	
		[52][Poly glycerol esters of fatty acid	475	10,000 mg/kg]	
		[82][Propylene glycol alginate	405	2000 mg/kg]	
7.2.3	**Mixes for fine bakery wares**	Acesulfame potassium	950	1,000 mg/kg	165,188
		Allura red AC	129	100 mg/kg	
		Aspartame	951	1,700 mg/kg	191,165
		Aspartame-acesulfame salt	962	1,000 mg/kg	77,113
		Beeswax	901	GMP	3

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Brilliant blue FCF	133	200 mg/kg	
		CAROTENOIDS		100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		75 mg/kg	
		Candelilla wax	902	GMP	3
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV – sulfite ammonia caramel	150d	1,200 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	20,000 mg/kg	
		HYDROXYBENZOATES, PARA-		300 mg/kg	27
		IRON OXIDES		100 mg/kg	

Table 7

Bakery products					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended maximum level**	**Note**
		Indigotine (Indigo carmine)	132	200 mg/kg	
		Neotame	961	80 mg/kg	165,
		PHOSPHATES		9,300 mg/kg	229,33
		[52][omit		]	
		Propyl gallate	310	200 mg/kg	196,15
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		170 mg/kg	165
		SULFITES		50 mg/kg	44
		Shellac, bleached	904	GMP	3
		Sucralose (Trichlorogalactosucrose)	955	700 mg/kg	165
		Sucroglycerides	474	10,000 mg/kg	
		POLYSORBATES		3,000 mg/kg	
		[52][Poly glycerol esters of fatty acid	475	15,000 mg/kg	11]
		[82][Propylene glycol alginate	405	10,000 mg/kg	11]

Table 8

Meat and meat products including poultry					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
8.0	**Fresh / frozen / chilled / ground meat, poultry (frozen mutton, chicken, goat and buffalomeat)**				
8.1	**Fresh / frozen / chilled / ground meat and poultry**	No additives permitted			
8.1.1	**Fresh / frozen / chilled meat, poultry, whole pieces or cuts**	No additives permitted			
8.1.2	**Fresh / frozen / chilled meat, poultry, comminuted**	No additives permitted			
8.2	**Processed meat and poultry products in whole pieces or cuts**	Paprika oleoresin	160c(i)	GMP	
		POLYSORBATES		5,000 mg/kg	XS97, XS96
		Propyl gallate	310	200 mg/kg	XS97, XS96, 130, 15
		Tertiary butylhydroquinon	319	100 mg/kg	XS97, XS96,15,

Table 8

Meat and meat products including poultry					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		e (TBHQ)			167,130
		Brilliant Blue FCF	133	100 mg/kg	XS97, XS96, 4, XS98, XS89
		Butylated hydroxyanisole (BHA)	320	200mg/kg	15, 130, XS96, XS97
		Butylated hydroxytoluene (BHT)	321	100mg/kg	15, 130, 167, XS96, XS97
		Caramel III - ammonia caramel	150c	GMP	XS97, XS96,XS98, XS89, 4, 3
		Caramel IV – sulfite ammonia caramel	150d	GMP	XS97, XS96,XS98, XS89, 4, 3
		beta-Carotenes, vegetable	160a(ii)	5,000 mg/kg	XS97, XS96,
		Erythrosine	127	30 mg/kg	XS97, XS96, 4
		Fast green FCF	143	100 mg/kg	XS97, XS96, 3, 4

Table 8

Meat and meat products including poultry					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		RIBOFLAVINS		300 mg/kg	XS96 XS97
		Sunset yellow FCF	110	100 mg/kg	XS 97, XS 96
8.2.1	**Non-heat treated processed meat and poultry products in whole pieces or cuts**	**PHOSPHATES**		2,200 mg/kg	33
		Grape skin extract	163(ii)	5,000 mg/kg	XS96, XS97
8.2.1.1	**Cured (including salted) non-heat treated processed meat and poultry products in whole pieces or cuts**				
8.2.1.2	**Cured (including salted) and dried processed meat and poultry products in whole pieces or cuts**	**BENZOATES**		1,000 mg/kg	3, 13
		Isopropyl citrates	384	200 mg/kg	
		Natamycin (Pimaricin)	235	6 mg/kg	

Table 8

Meat and meat products including poultry					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
8.2.1.3	**Fermented non-heated treated processed meat and poultry products in whole pieces or cuts**	Sucroglycerides	474	5,000 mg/kg	
		NITRITES		80 mg/kg	32,288
8.2.2	**Heat-treated processed meat and poultryproducts in whole pieces or cuts (canned chicken, canned mutton and goat meat)**	Added colour, flavour and meat tenderizer not permitted.			
		Nisin	234	25 mg/kg	330, XS97, XS96, 233
		NITRITES		80 mg/kg	32, 288
		PHOSPHATES		2,200 mg/kg	33
		SACCHARINS		500 mg/kg	XS97, XS96
		Sucroglycerides	474	5,000 mg/kg	XS97, XS96, 15
		[52][**TOCOPHEROLS**		500 mg/kg	XS 96, XS 97]
8.2.3	[77][Frozen raw, flavoured/marinated, processed meat and poultry products in whole pieces or cuts]	[52][Mineral oil, High Viscosity	905d	950 mg/kg	3
		PHOSPHATES		2,200 mg/kg	33]
[52]**[8.3**	**Processed comminuted**	Brilliant blue FCF	133	100 mg/kg	XS96, XS89, XS98,

Table 8

Meat and meat products including poultry					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	meat and poultry products				XS97, 4, 16
		Butylatedhydroxyanisole (BHA)	320	200mg/kg	XS89, XS98, 130, 15
		Butylatedhydroxytoluene (BHT)	321	100mg/kg	XS89, XS98, 15, 130, 162
		Caramel III - ammonia caramel	150c	GMP	XS89, XS98 XS96, XS97, 3, 4 ,16
		Caramel IV - sulfite ammonia caramel	150d	GMP	XS89, XS98, XS96, XS97, 3, 4,16
		Erythrosine	127	30 mg/kg	4, 290
		Grape skin extract	163(ii)	5,000 mg/kg	XS89, XS98,16
		NITRITES		80 mg/kg	286, 32
		Paprika oleoresin	160c(i)	GMP	
		PHOSPHATES		2,200 mg/kg	33, 302
		POLYSORBATES		5,000 mg/kg	XS89, XS98
		RIBOFLAVINS		1,000 mg/kg	XS96, XS97, 16
		Propyl gallate	310	200 mg/kg	XS89, XS98, 15, 130
		Propylene glycol alginate	405	3,000 mg/kg	XS89, XS98
		SORBATES		1,500 mg/kg	XS89,

Table 8

Meat and meat products including poultry					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
					XS98, 42
		Sodium diacetate	262(ii)	1,000 mg/kg	XS89, XS98
		TOCOPHEROLS		500 mg/kg	XS 89, XS 98
		Tertiary butylhydroquinone (TBHQ)	319	100 mg/kg	XS 89, XS 98, 15, 130, 162]
8.3.1	**Non-heat treated processed comminuted meat and poultry products**	beta-Carotenes, vegetable	160a(ii)	20 mg/kg	118
8.3.1.1	**Cured (including salted) non-heat treated processed comminuted meat and poultry products**	Canthaxanthin	161g	100 mg/kg	118,4
8.3.1.2	**Cured (including salted) and dried processed comminuted meat and poultry**	Isopropyl citrate	384	200 mg/kg	
		Natamycin (Pimaricin)	235	20 mg/kg	3, 81
		BENZOATES		1,000 mg/kg	3,13
		Sunset yellow FCF	110	100 mg/kg	

Table 8

Meat and meat products including poultry					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	products				
8.3.1.3	**Fermented non-heat treated processed comminuted meat and poultryproducts**	Sulphur dioxide	220	450 mg/kg	Sausages & sausage meat containing cereals and condiments
8.3.2	**Heat-treated processed comminuted meat and poultry products (canned cooked ham, canned luncheon meat, canned chopped meat)**	Sucroglycerides	474	5,000 mg/kg	
		Brilliant blue FCF	133	200 mg/kg	XS98, XS89, XS97, XS96, 4
		CAROTENOIDS		20 mg/kg	XS98, XS 89
		beta-Carotenes, vegetable	[52][160 a(ii)]	20 mg/kg	XS89, XS98
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		35 mg/kg	XS89, XS98, 21
		Sucroglycerides	474	5,000 mg/kg	XS89, , XS98, 15
		Sunset yellow FCF	110	200 mg/kg	XS89, XS98,

Table 8

Meat and meat products including poultry					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		[52]**[TOCOPHEROLS**		500 mg/kg	XS 89 , XS 98]
8.3.3	**Frozen processed comminuted meat and poultry products**	Mineral oil, high viscosity	905d	950 mg/kg	3
		Brilliant blue FCF	133	200 mg/kg	100 mg/kg in other than cooked. XS89, XS98 XS97, XS96, 4
		Sunset yellow FCF	110	200 mg/kg	100 mg/kg in other than cooked. XS89, XS98
8.4	**Edible casings**	Paprika oleoresin	160c(i)	GMP	
		ASCORBYL ESTERS		5,000 mg/kg	10
		Brilliant blue FCF	133	100 mg/kg	XS98, XS89, XS97, XS96, 4
		CAROTENOIDS		100 mg/kg	XS98, XS 89
		Fast green FCF	143	100 mg/kg	3

Table 8

Meat and meat products including poultry					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Grape skin extract	163 (ii)	5,000 mg/kg	
		HYDROXYBENZOATES, PARA-		36 mg/kg	27
		IRON OXIDES		1,000 mg/kg	72
		PHOSPHATES		1,100 mg/kg	33
		POLYSORBATES		1,500 mg/kg	XS97, XS96

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
9.0	**Fish and fish products, including molluscs, crustaceans, and echinoderms**				
9.1	**Fresh fish and fish products, including molluscs, crustaceans, and echinoderms**	No additives permitted			
9.1.1	**Fresh fish**	No additives permitted			
9.1.2	**Fresh molluscs, crustaceans, and echinoderms**	**SULFITES**		100mg/kg	~~44~~
9.2	**Processed fish and fish products, including molluscs, crustaceans, and echinoderms**	Acesulfame potassium	950	200 mg/kg	144 , 188
		Aspartame	951	300 mg/kg	144 , 191
		CAROTENOIDS		100 mg/kg	95
		Caramel III - ammonia caramel	150c	30,000 mg/kg	
		Caramel IV – sulfite	150d	30,000 mg/kg	95

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		ammonia caramel			
9.2.1	**Frozen fish, fish fillets, and fish products, including molluscs, crustaceans, and echinoderms(frozen shrimps or prawns, frozen lobsters,frozen squid , frozen fin fish and frozen fish fillets)**	**ASCORBYL ESTERS**		1,000 mg/kg	10
		Ascorbic acid	300	GMP	
		Butylated hydroxyanisole (BHA)	320	200mg/kg	15, 180
		Butylated hydroxytoluene (BHT)	321	200mg/kg	15, 180
		Calcium carbonate	170(i)	GMP	95
		Canthaxanthin	161g	35 mg/kg	95
		Citric acid	330	GMP	61 , 257
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		75 mg/kg	21
		PHOSPHATES		2,200 mg/kg	33
		RIBOFLAVINS		300 mg/kg	95
		SULFITES		100 mg/kg	44 ,139

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Sodium dihydrogen citrate	331(i)	GMP	61
		Tripotassium citrate	332(ii)	GMP	61
		Acetylated distarch phosphate	1414	GMP	29
		Agar	406	GMP	3, 53, 29
		Alginic acid	400	GMP	29
		Ammonium alginate	403	GMP	29
		Calcium alginate	404	GMP	29
		Carob bean gum	410	GMP	37
		Carrageenan	407	GMP	37
		Citric and fatty acid esters of glycerol	472c	GMP	29
		Dextrins, roasted starch	1400	GMP	3, 53, 29
		Gellan gum	418	GMP	29
		Guar gum	412	GMP	37, 73
		Gum arabic (acacia gum)	414	GMP	29
		Hydroxypropyl cellulose	463	GMP	29
		Hydroxypropy	464	GMP	29

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		l methyl cellulose			
		Hydroxypropyl starch	1440	GMP	29
		Acetic and fatty acid esters of glycero	472a	GMP	29
		Karaya gum	416	GMP	29
		Lactic and fatty acid esters of glycerol	472b	GMP	29
		Lecithins	322(i), (ii)	GMP	29
		Magnesium chloride	511	GMP	29
		Mannitol	421	GMP	29
		Methyl cellulose	461	GMP	37
		Methyl ethyl cellulose	465	GMP	29
		Oxidized starch	1404	GMP	29
		Pectins	440	GMP	16,37
		Polydextroses	1200	GMP	29
		Potassium alginate	402	GMP	29
		Potassium chloride	508	GMP	29

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Potassium dihydrogen citrate	332(i)	GMP	61
		Powdered cellulose	460(ii)	GMP	29
		Processed eucheumasea weed	407a	GMP	37
		Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	470(i)	GMP	71, 29
		Trisodium citrate	331(iii)	GMP	61
		Salts of oleic acid with calcium, potassium and sodium	470(ii)	GMP	29
		Sodium alginate	401	GMP	37
		Carboxymethyl cellulose	466	GMP	
		Tara gum	417	GMP	29, 73
		Tragacanth gum	413	GMP	29

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Tricalcium citrate	333(iii)	GMP	29
		Trisodium citrate	331(iii)	GMP	61
		Xanthan gum	415	GMP	37
9.2.2	**Frozen battered fish, fish fillets and fish products, including molluscs, crustaceans, and echinoderms**	Trisodium citrate	331(iii)	GMP	61
		ASCORBYL ESTERS		1,000 mg/kg	10
		Ammonium carbonate	503(i)	GMP	41
		Ascorbic acid, L-	300	GMP	
		Butylated hydroxyanisole (BHA)	320	200mg/kg	15, 180
		Butylated hydroxytoluene (BHT)	321	200mg/kg	15, 180
		Citric acid	330	GMP	61
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		75 mg/kg	21
		Fumaric acid	297	GMP	41
		Malic acid, DL-	296	GMP	41
		PHOSPHAT		2,200 mg/kg	33

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		ES			
		Potassium carbonate	501(i)	GMP	41
		Potassium dihydrogen citrate	332(i)	GMP	61
		Potassium hydrogen carbonate	501(ii)	GMP	41
		Sodium carbonate	500(i)	GMP	41
		Sodium dihydrogen citrate	331(i)	GMP	61
		Sodium fumarates	365	GMP	41
		Sodium hydrogen carbonate	500(ii)	GMP	41
		Sodium sesquicarbonate	500(iii)	GMP	41
		THIODIPROPIONATES		200 mg/kg	15, 46
		Acetylated distarch phosphate	1414	GMP	63
		Agar	406	GMP	29
		Carob bean gum	410	GMP	177

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Carrageenan	407	GMP	177
		Citric and fatty acid esters of glycerol	472c	GMP	129
		Dextrins, roasted starch	1400	GMP	29
		Gellan gum	418	GMP	29
		Guar gum	412	GMP	177
		Gum arabic (acacia gum)	414	GMP	29
		Hydroxypropyl cellulose	463	GMP	63
		Hydroxypropyl methyl cellulose	464	GMP	63
		Hydroxypropyl starch	1440	GMP	63
		Acetic and fatty acid esters of glycero	472a	GMP	29
		Karaya gum	416	GMP	29
		Lactic and fatty acid esters of glycerol	472b	GMP	29
		Magnesium chloride	511	GMP	29
		Mannitol	421	GMP	29

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Methyl cellulose	461	GMP	177
		Methyl ethyl cellulose	465	GMP	63
		Oxidized starch	1404	GMP	63
		Pectins	440	GMP	177
		Powdered cellulose	460(ii)	GMP	29
		Processed eucheumasea weed	407a	GMP	177
		Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	470(i)	GMP	71
		Salts of oleic acid with calcium, potassium and sodium	470(ii)	GMP	29
		Sodium alginate	401	GMP	210
		Carboxymethyl cellulose	466	GMP	177
		Tara gum	417	GMP	29, 73

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Tragacanth gum	413	GMP	29
		Xanthan gum	415	GMP	177
		Acetylated distarch adipate	1422	GMP	63
		Acid-treated starch	1401	GMP	63
		Alkaline treated starch	1402	GMP	63
		Hydroxypropyl distarch phosphate	1442	GMP	63
		Lecithins	322(i), (ii)	GMP	63
		Starch acetate	1420	GMP	63
		Monostarch phosphate	1410	GMP	63
		Tripotassium citrate	332(ii)	GMP	61
		Phosphated distarch phosphate	1413	GMP	63
9.2.3	**Frozen minced and creamed fish products including molluscs, crustaceans,**	**CHLOROPHYLLS, AND CHLOROPHYLLIN COPPER COMPLEXES**		40 mg/kg	95

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	and echinoderms	Grape skin extract	163(ii)	GMP	95
		PHOSPHATES		2,200 mg/kg	33
		Ponceau 4R	124	100 mg/kg	95
		Sunset yellow FCF	110	100 mg/kg	95
		Agar	406	GMP	
		Carob bean gum	410	GMP	
		Carrageenan	407	GMP	
		Dextrins, roasted starch	1400	GMP	
		Gellan gum	418	GMP	
		Guar gum	412	GMP	
		Karaya gum	416	GMP	
		Mannitol	421	GMP	
		Processed eucheumasea weed	407a	GMP	
		Sodium alginate	401	GMP	
		Tripotassium citrate	332(ii)	GMP	
		Trisodium citrate	331(iii)	GMP	
		Tara gum	417	GMP	
		Xanthan gum	415	GMP	
9.2.4	**Cooked and/or fried**	Ascorbic acid, L-	300	GMP	

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	fish and fish products, including molluscs, crustaceans, and echinoderms	Calcium carbonate	170(i)	GMP	
		Fumaric acid	297	GMP	
		Magnesium carbonate	504(i)	GMP	
		Magnesium hydroxide	528	GMP	
		Magnesium hydroxide carbonate	504(ii)	GMP	
		Malic acid, DL-	296	GMP	
		Potassium dihydrogen citrate	332(i)	GMP	
		Sodium dihydrogen citrate	331(i)	GMP	
		Sodium fumarates	365	GMP	
		Tricalcium citrate	333(iii)	GMP	
		Tripotassium citrate	332(ii)	GMP	
		Trisodium citrate	331(iii)	GMP	
9.2.4.1	**Cooked fish and fish products**	Acetylated distarch phosphate	1414	GMP	241
		Allura red AC	129	100 mg/kg	95

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Carob bean gum	410	GMP	241
		Brilliant blue FCF	133	200 mg/kg	95
		Dextrins, roasted starch	1400	GMP	241
		Hydroxypropyl starch	1440	GMP	241
		Gellan gum	418	GMP	241
		Karaya gum	416	GMP	241
		CHLOROPHYLLS, AND CHLOROPHYLLIN COPPER COMPLEXES		30 mg/kg	62 ,95
		Calcium carbonate	170(i)	GMP	
		Oxidized starch	1404	GMP	241
		Processed eucheuma seaweed	407a	GMP	241
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	95
		ETHYLENE DIAMINE TETRA		50 mg/kg	21

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		ACETATES (EDTA)			
		Fast green FCF	143	200 mg/kg	
		Grape skin extract	163(ii)	500 mg/kg	95
		Indigotine (Indigo carmine)	132	200 mg/kg	95
		PHOSPHATES		2,200 mg/kg	33
		Ponceau 4R	124	200 mg/kg	95
		RIBOFLAVINS		300 mg/kg	95
		Tragacanth gum	413	GMP	241
		SACCHARINS		500 mg/kg	
		SORBATES		2,000 mg/kg	42
		Sodium fumarate	365	GMP	
		Sunset yellow FCF	110	200 mg/kg	95
		Xanthan gum	415	GMP	241, 327
9.2.4.2	**Cooked molluscs, crustaceans, and echinoderms**	Allura red AC	129	100 mg/kg	
		Aluminium ammonium sulfate	523	200 mg/kg	6,250
		BENZOATE		2,000 mg/kg	13, 82

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		S			
		Brilliant blue FCF	133	200 mg/kg	95
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Grape skin extract	163(ii)	1,000 mg/kg	
		PHOSPHATES		2,200 mg/kg	
		Ponceau 4R	124	200 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SORBATES		2,000 mg/kg	42, 82
		SULFITES		150 mg/kg	44
		Sunset yellow FCF	110	200 mg/kg	
9.2.4.3	**Fried fish and fish products, including molluscs, crustaceans, and echinoderms**	Hydroxypropyl starch	1440	GMP	41
		Processed eucheuma seaweed	407a	GMP	41
		Acetylated distarch phosphate	1414	GMP	41
		Carob bean gum	410	GMP	41
		Dextrins, roasted starch	1400	GMP	41
		Gellan gum	418	GMP	41

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		CHLOROPHYLLS AND CHLOROPHYLLIN COPPER COMPLEXES		40 mg/kg	95,41
		Karaya gum	416	GMP	41
		Oxidized starch	1404	GMP	41
		Grape skin extract	163(ii)	1,000 mg/kg	95
		Tragacanth gum	413	GMP	41
		Xanthan gum	415	GMP	
9.2.5	**Smoked, dried, fermented, and/or salted fish and fish products, including molluscs, crustaceans, and echinoderms (Dried shark fins, Salted fish/ dried salted**	Allura red AC	129	100 mg/kg	22
		BENZOATES		200 mg/kg	
		Butylated hydroxyanisole (BHA)	320	200 mg/kg	15, 196
		Butylated hydroxytoluene (BHT)	321	200 mg/kg	15, 196
		CHLOROPHYLLS AND CHLOROPHYLLINCOPPER		200 mg/kg	

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	fish)	**COMPLEXES**			
		Calcium carbonate	170(i)	GMP	266, 267
		Canthaxanthin	161g	15 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Fast green FCF	143	100 mg/kg	
		Fumaric acid	297	GMP	
		Grape skin extract	163(ii)	1,000 mg/kg	266, 267
		IRON OXIDES		250 mg/kg	22
		Magnesium carbonate	504(i)	GMP	22
		Indigotine (Indigo carmine)	132	100 mg/kg	22
		Magnesium hydroxide	528	GMP	266, 267
		Magnesium hydroxide carbonate	504(ii)	GMP	266, 267
		Malic acid, DL-	296	GMP	266, 267
		Ponceau 4R	124	100 mg/kg	266, 267
		Potassium dihydrogen	332(i)	GMP	22

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		citrate			
		Propyl gallate	310	100 mg/kg	266, 267
		RIBOFLAVINS		300 mg/kg	15, 196
		SORBATES		[52][1000 mg/Kg]	42
		SULFITES		30 mg/kg	
		Sodium dihydrogen citrate	331(i)	GMP	44
		Sodium fumarate	365	GMP	266, 267
		Sunset yellow FCF	110	100 mg/kg	266, 267
		Acetylated distarch phosphate	1414	GMP	22
		Agar	406	GMP	300
		Carrageenan	407	GMP	300
		Citric and fatty acid esters of glycerol	472c	GMP	300
		Guar gum	412	GMP	300
		Gum arabic (acacia gum)	414	GMP	300
		Hydroxypropyl cellulose	463	GMP	300
		Hydroxypropyl methyl	464	GMP	300

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		cellulose			
		Hydroxypropyl starch	1440	GMP	300
		Lactic and fatty acid esters of glycerol	472b	GMP	300
		Magnesium chloride	511	GMP	300
		Mannitol	421	GMP	300
		Methyl cellulose	461	GMP	300
		Methyl ethyl cellulose	465	GMP	300
		Oxidized starch	1404	GMP	300
		Pectins	440	GMP	300
		Powdered cellulose	460(ii)	GMP	300
		Processed eucheuma seaweed	407a	GMP	300
		Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	470(i)	GMP	300

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Salts of oleic acid with calcium, potassium and sodium	470(ii)	GMP	300
		Sodium alginate	401	GMP	300
		Carboxymethyl cellulose	466	GMP	300
		Tara gum	417	GMP	300
		Tragacanth gum	413	GMP	300
		Xanthan gum	415	GMP	300
		Lecithins	322(i), (ii)	GMP	300
		Acetic and fatty acid esters of glycerol	472a	GMP	300
9. 3	**Semi preserved fish and fish products including molluscs, crustaceans, and echinoderms**	Acesulfame potassium	950	200 mg/kg	144, 188
		Aspartame	951	300 mg/kg	144, 191
		Aspartame-acesulfame salt	962	200 mg/kg	113
		BENZOATES		2,000 mg/kg	13, 120
		Butylated hydroxyanisole (BHA)	320	200 mg/kg	15, 180

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Butylated hydroxytoluene (BHT)	321	200 mg/kg	15, 180
		CAROTENOIDS		100 mg/kg	100, 95
		Caramel III - ammonia caramel	150c	30,000 mg/kg	95
		Sucralose (Trichlorogalactosucrose)	955	120 mg/kg	144
		Caramel IV – sulfite ammonia caramel	150d	30,000 mg/kg	95
		Neotame	961	10 mg/kg	
		HYDROXYBENZOATES, PARA-		1,000 mg/kg	27
		SORBATES		1,000 mg/kg	42
9.3.1	**Fish and fish products including molluscs, crustaceans, and echinoderms, marinated and/or in jelly**	**PHOSPHATES**		2,200 mg/kg	33
		SACCHARINS		160 mg/kg	144

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
9.3.2	**Fish and fish products including molluscs, crustaceans and echinoderms, pickled and/or in brine**	**ETHYLENE DIAMINE TETRA ACETATES (EDTA)**		250 mg/kg	21
		PHOSPHATES		2,200 mg/kg	33
		SACCHARINS		160 mg/kg	144
9.3.3	**Salmon substitutes, caviar and other fish roe products**	Allura red AC	129	100 mg/kg	
		Brilliant blue FCF	133	100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINCOPPER COMPLEXES		200 mg/kg	
		Canthaxanthin	161g	15 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Fast green FCF	143	100 mg/kg	
		Grape skin extract	163(ii)	1,500 mg/kg	
		IRON OXIDES		100 mg/kg	
		Indigotine	132	100 mg/kg	

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		(Indigo carmine)			
		PHOSPHATES		2,200 mg/kg	33
		Ponceau 4R	[52][124]	200 mg/kg	
		RIBOFLAVINS		300 mg/kg	
9.3.4	**Semi-preserved fish and fish products including molluscs, crustaceans and echinoderms (e.g. fish paste), excluding products of food categories 9.3.1 –9.3.3**	Sunset yellow FCF	110	100 mg/kg	
		Allura red AC	129	100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLIN COPPER COMPLEXES		75 mg/kg	95
		IRON OXIDES		50 mg/kg	95
		Indigotine (Indigo carmine)	132	100 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		Ponceau 4R	124	100 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		160 mg/kg	144
9.4	**Fully**	Acesulfame	950	200 mg/kg	144, 188

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	preserved including canned or fermented fish and fish products, and molluscs, crustaceans, and echinoderms(canned fin fish, canned shrimp, canned sardines, canned salmon, canned crab meat, canned tuna and bonito)	potassium			
		Aspartame	951	300 mg/kg	144, 191
		Aspartame-acesulfame salt	962	200 mg/kg	113
		CAROTENOIDS		100 mg/kg	95
		Butylated hydroxyanisole (BHA)	320	200 mg/kg	15, 180
		Butylated hydroxytoluene (BHT)	321	200 mg/kg	15, 180
		CHLOROPHYLLS AND CHLOROPHYLLIN COPPER COMPLEXES,		500 mg/kg	95
		Canthaxanthin	161g	15 mg/kg	
		Caramel III - ammonia caramel	150c	30,000 mg/kg	50
		Caramel IV – sulfite ammonia caramel	150d	30,000 mg/kg	95
		beta-	160a(ii)	500 mg/kg	

Table 9

Fish and fish products, including molluscs, crustaceans, and echinoderms					
Food Category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Carotenes, vegetable			
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		340 mg/kg	21
		IRON OXIDE		50 mg/kg	95
		Neotame	961	10 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		RIBOFLAVINS		500 mg/kg	95
		SACCHARINS		200 mg/kg	144
		SULFITES		150 mg/kg	44, 140
		Sucralose (Trichlorogalactosucrose)	955	120 mg/kg	144
		Carboxy methyl cellulose	466	GMP	

Table 10

Eggs and eggs products					
Food category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
10.0	**Eggs and egg products**				
10.1	**Fresh egg**	No additives permitted			
10.2	**Egg products**	Lauric arginate ethyl ester	243	200 mg/kg	
10.2.1	**Liquid egg products**	**BENZOATES**		5,000 mg/kg	13
		PHOSPHATES		4,400 mg/kg	67, 33
		SORBATES		5,000 mg/kg	42
		Triethyl citrate	1505	2,500 mg/kg	
		Acetic acid, glacial	260	GMP	
		Citric acid	330	GMP	
		Lactic acid L-, D- and DL-	270	GMP	
		Sodium acetate	262(i)	GMP	
		Sodium dihydrogen citrate	331(i)	GMP	
		Sodium lactate	325	GMP	
		Trisodium citrate	331(iii)	GMP	
		Agar	406	GMP	
		Calcium alginate	404	GMP	
		Carob bean gum	410	GMP	
		Carrageenan	407	GMP	
		Gellan gum	418	GMP	
		Guar gum	412	GMP	

Table 10

Eggs and eggs products					
Food category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
		Gum arabic(Acacia gum)	414	GMP	
		Karaya gum	416	GMP	
		Konjac flour	425	GMP	
		Lecithins	322(i), (ii)	GMP	
		Micro crystalline cellulose (cellulose gel)	460(i)	GMP	
		Pectins	440	GMP	
		Polydextroses	1200	GMP	
		Processed eucheuma seaweed	407a	GMP	
		Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	470(i)	GMP	
		Sodium alginate	401	GMP	
		Tara gum	417	GMP	
		[52][omit			]
		Xanthan gum	415	GMP	
		Carboxymethyl cellulose	466	GMP	
10.2.2	**Frozen egg**	**PHOSPHATES**		1,290 mg/kg	67, 33

Table 10

Eggs and eggs products					
Food category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
	products	**SORBATES**		1,000 mg/kg	42
		Acetic acid, glacial	260	GMP	
		Citric acid	330	GMP	
		Lactic acid L-, D- and DL	270	GMP	
		Sodium acetate	262(i)	GMP	
		Sodium dihydrogen citrate	331(i)	GMP	
		Sodium lactate	325	GMP	
		Trisodium citrate	331(iii)	GMP	
		Agar	406	GMP	
		Calcium alginate	404	GMP	
		Carob bean gum	410	GMP	
		Carrageenan	407	GMP	
		Gellan gum	418	GMP	
		Guar gum	412	GMP	
		Gum arabic(Acacia gum)	414	GMP	
		Karaya gum	416	GMP	
		Konjac flour	425	GMP	
		Lecithins	322(i), (ii)	GMP	
		Micro crystalline cellulose (cellulose gel)	460(i)	GMP	

Table 10

Eggs and eggs products					
Food category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
		Mannitol	421	GMP	
		Mono- and di-glycerides of fatty acids	471	GMP	
		Pectins	440	GMP	
		Polydextrose	1200	GMP	
		Processed eucheuma seaweed	407a	GMP	
		Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	470(i)	GMP	
		Sodium alginate	401	GMP	
		Tara gum	417	GMP	
		Carboxymethyl cellulose	466	GMP	
		Xanthan gum	415	GMP	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		200 mg/kg	21, 47
		[52]**[**omit			]
		Triethyl citrate	1505	2,500 mg/kg	47
10.2.3	**Dried and/or**	Diacetyltartaric	472e	5,000 mg/kg	

Table 10

Eggs and eggs products					
Food category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
	heat coagulated egg products	and fatty acid esters of glycerol			
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		200 mg/kg	21, 47
		SORBATES		1,000 mg/kg	42
		Triethyl citrate	1505	2,500 mg/kg	47
10.3	**Preserved eggs**	**PHOSPHATES**		1,000 mg/kg	33
10.4	**Egg based deserts e.g. custard**	Acesulfame potassium	950	350 mg/kg	188
		ASCORBYL ESTERS		500 mg/kg	10, 2
		Aspartame	951	1,000 mg/kg	191
		BENZOATES		1,000 mg/kg	13
		Lauric arginate ethyl ester	243	200 mg/kg	
		Neotame	961	100 mg/kg	
		PHOSPHATES		1,400 mg/kg	33
		POLYSORBATES		3,000 mg/kg	
		Propyl gallate	310	90 mg/kg	15, 2
		Propylene glycol esters of fatty acids	477	40,000 mg/kg	
		SACCHARINS		100 mg/kg	144
		SORBATES		1,000 mg/kg	42

Table 10

Eggs and eggs products					
Food category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
		Steviol glycosides	960	330 mg/kg	26
		Sucralose (trichlorogalactosucrose)	955	400 mg/kg	
		Sucroglycerides	474	5,000 mg/kg	
		Allura red AC	129	100 mg/kg	
		Brilliant Blue FCF	133	100 mg/kg	
		CAROTENOIDS		150 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		300 mg/kg	
		Canthaxanthin	161g	15 mg/kg	
		Caramel IV-Sulfite ammonia Caramel	150d	20,000 mg/kg	
		Caramel III – ammonia caramel	[52][150c]	20,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Fast green FCF	143	100 mg/kg	
		Sunset yellow FCF	110	50 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	

Table 10

Eggs and eggs products					
Food category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
		Ponceau 4R	124	50 mg/kg	
		RIBOFLAVINS		200 mg/kg	

Table 11

Sweeteners including honey					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
11.0	**Sweeteners including honey**				
11.1	**Refined and raw sugars**	No additives permitted			
11.1.1	**White sugar, dextrose anhydrous, dextrose monohydrate, fructose (dextrose)**	**SULFITES**		15 mg/kg	44
	Refined Sugar	**SULFITES**		20 mg/kg	
11.1.2	**Powdered sugar, powdered dextrose (icing sugar)**	Calcium silicate	552	15,000 mg/kg	56
		Magnesium carbonate	504(i)	15,000 mg/kg	56
		carbonates of calcium	170(i)	15,000 mg/kg	
		Magnesium silicate, synthetic	553(i)	15,000 mg/kg	56
		Silicates of aluminium or sodium (aluminium silicate, sodium alluminosilicate, calcium aluminium silicate)	559, 554, 556	15,000 mg/kg	
		PHOSPHATES		6,600 mg/kg	56,33
		SULFITES		20 mg/kg	44

Table 11

Sweeteners including honey					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
		Silicon dioxide, amorphous	551	15,000 mg/kg	56
11.1.3	**Soft white sugar, soft brown sugar, glucose syrup, dried glucose syrup, raw cane sugar, khandsarisugar (sulphur sugar), bura sugar**	**SULFITES**		150 mg/kg	44, 111
	Khandsari sugar (desi)	No additives permitted			
11.1.3.1	**Dried glucose syrup for manufacture of sugar confectionery (dried glucose syrup)**	**SULFITES**		20 mg/kg	111,44
11.1.3.2	**Glucose syrup for manufacture of sugar confectionery (golden syrup)**	**SULFITES**		20 mg/kg	111,44
11.1.4	**Lactose**	No additives permitted			
11.1.5	**Plantation or mill white**	**SULFITES**		70 mg/kg	44

Table 11

Sweeteners including honey					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
	sugar (plantation white sugar, cube sugar, misri)				
[52]**[11.1.6**	**Gur or Jaggery**	Sulfites		50 mg/Kg	Residue not to exceed 50mg/Kg in the end product]
[52]**[11.1.6.1**	**Cane Jaggery/Gur**				
11.1.6.2	**Palm Jaggery/Gur**				
11.1.6.3	**Date Jaggery/Gur]**				
11.2	**Brown sugar excluding products of food category 11.1.3**	**SULFITES**		40 mg/kg	44
11.3	**Sugar solutions and syrups, also (partially) inverted, including treacle and molasses, excluding**	**RIBOFLAVINS**		300 mg/Kg	
		SULFITES		70 mg/kg	44

Table 11

Sweeteners including honey					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
	products of food category 11.1.3				
11.4	**Other sugars and syrups (e.g. xylose, maple syrup, sugar toppings)**	**ASCORBYL ESTERS**		200 mg/kg	10
		Acesulfame potassium	950	1,000 mg/kg	159, 188
		Acetic and fatty acid esters of glycerol	472a	GMP	258
		Acetylated distarch adipate	1422	GMP	258
		Acetylated distarch phosphate	1414	GMP	258
		Acid-treated starch	1401	GMP	258
		Agar	406	GMP	258
		Alginic acid	400	GMP	258
		[75][Omitted]			
		Alkaline treated starch	1402	GMP	258
		Allura red AC	129	200 mg/kg	
		Ammonium alginate	403	GMP	258
		Aspartame	951	3,000 mg/kg	159, 191
		BENZOATES		1,000 mg/kg	13
		Bleached starch		GMP	258
		CAROTENOIDS		50 mg/kg	217

Table 11

Sweeteners including honey					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		64 mg/kg	62
		Calcium acetate	263	GMP	258
		Calcium alginate	404	GMP	259
		Canthaxanthin	161g	15 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	100
		Carob bean gum	410	GMP	258
		beta-Carotenes, vegetable	160a(ii)	50 mg/kg	
		Carrageenan	407	GMP	258
		Citric and fatty acid esters of glycerol	472c	GMP	258
		Distarch phosphate	1412	GMP	258
		Gellan gum	418	GMP	258
		Guar gum	412	GMP	258
		Gum arabic (Acacia gum)	414	GMP	258
		HYDROXYBENZOATES, PARA-		100 mg/kg	27
		Hydroxypropyl cellulose	463	GMP	258
		Hydroxypropyl distarch phosphate	1442	GMP	258

Table 11

Sweeteners including honey					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
		Hydroxypropyl methyl cellulose	464	GMP	258
		Hydroxypropyl starch	1440	GMP	258
		Indigotine (Indigo carmine)	132	300 mg/kg	
		Karaya gum	416	GMP	258
		Konjac flour	425	GMP	258
		Lactic and fatty acid esters of glycerol	472b	GMP	258
		Lecithins	322(i), (ii)	GMP	258
		Magnesium carbonate	504(i)	GMP	258
		Magnesium chloride	511	GMP	258
		Magnesium hydroxide	528	GMP	258
		Magnesium hydroxide carbonate	504(ii)	GMP	258
		Mannitol	421	GMP	258
		Methyl cellulose	461	GMP	258
		Methyl ethyl cellulose	465	GMP	258
		Microcrystalline cellulose (cellulose gel)	460(i)	GMP	258
		Mono- and di-glycerides of	471	GMP	258

Table 11

Sweeteners including honey					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
		fatty acids			
		Monostarch phosphate	1410	GMP	258
		Neotame	961	70 mg/kg	159
		Oxidized starch	1404	GMP	258
		PHOSPHATES		1,320 mg/kg	56,33
		Pectins	440	GMP	258
		Phosphated distarch phosphate	1413	GMP	258
		Polydextrose	1200	GMP	258
		Ponceau 4R	124	300 mg/kg	159
		Potassium alginate	402	GMP	258
		Potassium dihydrogen citrate	332(i)	GMP	
		Powdered cellulose	460(ii)	GMP	258
		Processed eucheuma seaweed	407a	GMP	258
		Propylene glycol esters of fatty acids	477	5,000 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		300 mg/kg	159
		SORBATES		1,000 mg/kg	42
		SULFITES		40 mg/kg	44

Table 11

Sweeteners including honey					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
		Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	470(i)	GMP	71, 258
		Salts of oleic acid with calcium, potassium and sodium	470(ii)	GMP	258
		Sodium alginate	401	GMP	258
		Carboxymethyl cellulose	466	GMP	258
		Sodium dihydrogen citrate	331(i)	GMP	258
		Starches, enzyme treated	1405	GMP	258
		Sucralose (Trichlorogalacto sucrose)	955	1,500 mg/kg	159,
		Tragacanth gum	413	GMP	258
		Tripotassium citrate	332(ii)	GMP	258
		Trisodium citrate	331(iii)	GMP	258
		Xanthan gum	415	GMP	258
11.5	**Honey**	No additives permitted			

Table 11

Sweeteners including honey					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
11.6	**Table-top sweeteners including those containing high-intensity sweeteners (saccharin sodium, aspartame, acesulfame potassium, sucralose)**	Steviol glycosides	960	7 mg/ 100 mg	In tablet /liquid and powder forms, 26
		Sucralose (Trichlorogalacto sucrose)	955	GMP	
		Acesulfame potassium	950	GMP	188
		[75][Omitted]			
		Aspartame	951	GMP	191
		Aspartame-acesulfame salt	962	GMP	
		BENZOATES		2,000 mg/kg	13
		Caramel IV – sulfite ammonia caramel	150d	1,200 mg/kg	213
		ETHYLENE DIAMINE TETRA ACETATES		1,000 mg/kg	96,21
		Neotame	961	GMP	
		PHOSPHATES		1,000 mg/kg	56 ,33
		Polyethylene glycol	1521	10,000 mg/kg	
		Polyvinylpyrrolidone	1201	3,000 mg/kg	
		SACCHARINS		GMP	

Table 11

Sweeteners including honey					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Notes**
		SORBATES		1,000 mg/kg	42,192

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
12.0	**Salts, spices, soups, sauces, salads and protein products**				
12.1	**Salt and salt substitutes**	No additives permitted			
12.1.1	**Salt (including edible common salt, iron fortified salt, iodized**	Calcium carbonate	170(i)	20 g/kg	
		Calcium silicate	552	20 g/kg	
		FERROCYANIDES		10 mg/kg	24, 107
		Magnesium	504(i)	20 g/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	salt)*	carbonate			
		Magnesium oxide	530	GMP	
		Magnesium silicate, synthetic	553(i)	20 g/kg	
		PHOSPHATES		8,800 mg/kg	33
		POLYSORBATES		10 mg/kg	
		Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	470(i)	20 g/kg	71
		Silicon dioxide amorphous	551	GMP	
		52[Sodium aluminosilicate]	554	1,000 mg/kg	6,254
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		50 mg/kg	
		Adipic acid	355	250 mg/kg	
		*Only the following additives permitted in double fortified salt			
		Hydroxy propyl methyl cellulose	464	GMP	
		Titanium dioxide	171	GMP	
12.1.2	**Salt**	Diacetyl tartaric	472e	16,000 mg/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	substitutes	and fatty acid esters of glycerol			
		FERROCYANIDES		20 mg/kg	24
		PHOSPHATES		4,400 mg/kg	
		Calcium lactate	327	GMP	
		Citric acid	330	GMP	
		Fumaric acid	297	GMP	
		Lactic acid, L-, D- and DL	270	GMP	
		Magnesium hydroxide	528	GMP	
		Magnesium hydroxide carbonate	504(ii)	GMP	
		Malic acid, dl-	296	GMP	
		Potassium dihydrogen citrate	332(i)	GMP	
		Sodium acetate	262(i)	GMP	
		Sodium carbonate	500(i)	GMP	
		Sodium dihydrogen citrate	331(i)	GMP	
		Sodium fumarates	365	GMP	
		Tripotassium citrate	332(i)	GMP	
		Trisodium citrate	331(iii)	GMP	
12.2	**Herbs, spices, seasonings**	**ASCORBYL ESTERS**		500 mg/kg	10
		Acesulfame K	950	2,000 mg/kg	188

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	and condiments (e.g. seasoning for instant noodles)	Butylated hydroxyanisole (BHA)	320	200mg/kg	15, 130
		Butylated hydroxytoluene (BHT)	321	200mg/kg	15, 130
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		70 mg/kg	21
		Neotame	961	32 mg/kg	
		Propyl gallate	310	200 mg/kg	15, 130
		SORBATES		1,000 mg/kg	42
		Tertiary butyl hydroquinone	319	200 mg/kg	
12.2.1	[52]**[Herbs, spices, masalas, spice mixtures including oleoresins or extracts/derivatives thereof]**	**POLYSORBATES**		2,000 mg/kg	
		SULFITES		150 mg/kg	
12.2.2	**Seasonings and**	**BENZOATES**		1,000 mg/kg	13
		Aspartame	951	2,000 mg/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	condiments	Curcumin	100	GMP	
		FERROCYANIDES		20 mg/kg	24
		Lauric arginate ethyl ester	243	200 mg/kg	
		PHOSPHATES		2,200 mg/kg	33 , [69][226]
		POLYSORBATES		5,000 mg/kg	
		SACCHARINS		1,500 mg/kg	
		Sucralose	955	700 mg/kg	
		SULFITES		200 mg/kg	44
		Tartaric acid	334	GMP	
		[52][Caramel IV – sulfite ammonia caramel	150d	10,000 mg/kg	
		Paprika oleoresin	160c(i)	GMP]	
12.3	**Vinegars**	**BENZOATES**	210	1,000 mg/kg	Only in brewed vinegar
		Caramel III - ammonia caramel	150c	GMP	
		Caramel IV – sulfiteammonia caramel	150d	GMP	
		HYDROXYBENZOATES,		100 mg/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		PARA-			
		Polyvinylpyrrolidone	1201	40 mg/kg	
		SULFITES		100 mg/kg	
12.4	**Mustards**	**ASCORBYL ESTERS**		500 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)	38	50 mg/kg	
		Acesulfame potassium	950	350 mg/kg	
		Allura red AC	129	100 mg/kg	
		Aspartame	951	350 mg/kg	191
		BENZOATES		1,000 mg/kg	
		Brilliant blue FCF	133	100 mg/kg	
		CAROTENOIDS		300 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		500 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV – sulfiteammonia	150d	50,000 mg/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		caramel			
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES		75 mg/kg	
		Grape skin extract	163(ii)	200 mg/kg	
		HYDROXYBENZOATES, PARA-		300 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Neotame	961	12 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		RIBOFLAVINS		300 mg/kg	
		SACCHARINS		320 mg/kg	
		SORBATES		1,000 mg/kg	
		SULFITES		250 mg/kg	
		Sucralose (Trichlorogalacto sucrose)	955	140 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	
		Tertiary	319	200 mg/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		butylhydroquinone (TBHQ)			
12.5	**Soups and broths**	**ASCORBYL ESTERS**		200 mg/kg	
		Acesulfame potassium	950	110 mg/kg	
		[75][Omitted]			
		Allura red AC	129	100 mg/kg	
		Aspartame	951	1,200 mg/kg	
		BENZOATES		500 mg/kg	
		Brilliant blue FCF		100 mg/kg	
		Butylated hydroxyanisole (BHA)	320	200mg/kg	15, 130
		Butylated hydroxytoluene (BHT)	321	100mg/kg	15, 130,340
		CAROTENOIDS		300 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLIN, COPPER COMPLEXES		400 mg/kg	
		Caramel III - ammonia caramel	150c	25,000 mg/kg	
		Caramel IV –	150d	25,000 mg/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		sulfiteammonia caramel			
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		Grape skin extract	163(ii)	500 mg/kg	
		IRON OXIDES		100 mg/kg	
		Indigotine (Indigo carmine)	132	100mg/kg	
		Neotame	961	20 mg/kg	
		PHOSPHATES		1,500 mg/kg	
		Propyl gallate	310	200 mg/kg	
		RIBOFLAVINS		GMP	
		SACCHARINS		110 mg/kg	
		SORBATES		1,000 mg/kg	
		Sucralose (Trichlorogalacto sucrose)	955	600 mg/kg	
		Sucroglycerides	474	2,000 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	
		Tertiary butylhydroquinone (TBHQ)	319	200 mg/kg	
		Polydimethylsiloxane	900a	10 mg/kg	
		POLYSORBAT		1,000 mg/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		ES			
		Ponceau 4R	124	50 mg/kg	
		Tartaric acid	334	GMP	
		Curcumin	100	GMP	
		Canthaxanthin	161g	GMP	
		Annatto	160b (i),(ii)	GMP	
		Saffron		GMP	
		Sulphur dioxide	220	150 mg/kg	
12.5.1	**Ready-to-eat soups and broths including canned, bottled, and frozen**	Brilliant blue FCF	133	50 mg/kg	
		Indigotine (Indigo carmine)	132	50 mg/kg	
		Lauric arginate ethyl ester	243	200 mg/kg	
		RIBOFLAVINS		200 mg/kg	
		Sunset yellow FCF	110	50 mg/kg	
12.5.2	**Mixes for soups and broths**	**CAROTENOIDS**		200 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		GMP	
		Canthaxanthin	161g	GMP	
		Steviol glycosides	960	50 mg/kg	
		Indigotine (Indigo carmine)	132	50 mg/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Lauric arginate ethyl ester	243	200 mg/kg	127
		[52][Sodium aluminosilicate]	554	570 mg/kg	6
		Sucralose (Trichlorogalacto sucrose)	955	50 mg/kg	
		Sulphur dioxide	220	350 mg/kg	Carry over from fruit products
		Tartaric acid	334	1,500 mg/kg	
		Curcumin	100	GMP	
12.6	**Sauces and like products**	Acesulfame potassium	950	1,000 mg/kg	
		Aspartame	951	350 mg /kg	
		Indigotine (indigo carmine)	132	100 mg/kg	
		Allura red AC	129	100 mg/kg	
		Butylated hydroxyanisole (BHA)	320	200 mg/kg	15, 130
		Butylated hydroxytoluene (BHT)	321	100 mg/kg	15, 130
		BENZOATES		1,000 mg/kg	
		Brilliant blue FCF	133	100 mg/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		CAROTENOIDS		500 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		100 mg/kg	
		Canthaxanthin	161g	30 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV – sulfiteammonia caramel	150d	30,000 mg/kg	
		Guaiac resin	314	600 mg/kg	
		HYDROXYBENZOATES, PARA-		1,000 mg/kg	
		IRON OXIDES		75 mg/kg	
		PHOSPHATES		300 mg/kg	
		Ponceau 4R	124	50 mg/kg	
		Propyl gallate	310	200 mg/kg	
		RIBOFLAVINS		350 mg/kg	
		SACCHARINS		160 mg/kg	
		SULFITES		300 mg/kg	
		Sucralose (Trichlorogalactosucrose)	955	450 mg/kg	
		Sucroglycerides	474	10,000 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Tertiary butylhydroquinone (TBHQ)	319	200 mg/kg	
		L-Tartaric acid		GMP	
		Dimethyl polysiloxane		GMP	
		[52][Propylene glycol alginate	405	200 mg/kg]	
12.6.1	**Emulsified sauces and dips (e.g. mayonnaise, sald dressings, onion dips)**	**ASCORBYL ESTERS**		500 mg/kg	10, 15
		beta-Carotenes, vegetable	160a(ii)	2,000 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES		100 mg/kg	
		Fast green FCF	143	100 mg/kg	
		Grape skin extract	163(ii)	300 mg/kg	
		Lauric arginate ethyl ester	243	200 mg/kg	-
		Neotame	961	65 mg/kg	
		PHOSPHATES		2,200 mg/kg	
		POLYSORBATES		3,000 mg/kg	
		SORBATES		1,000 mg/kg	
		Annatto	160b(i),(ii)	GMP	
		Steviol glycosides	960	350 mg/kg	
		Paprika oleoresin	160c(i	GMP	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
			)		
12.6.2	**Non emulsified sauces (e.g ketchup, cheese sauce, cream sauce, brown gravy)**	**ASCORBYL ESTERS**		500 mg/kg	10
		beta-Carotenes, vegetable	160a(ii)	2,000 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		75 mg/kg	21
		Grape skin extract	163(ii)	300 mg/kg	
		Annatto	160b(i),(ii)	GMP	
		Steviol glycosides	960	350 mg/kg	
		Paprika oleoresin	160c(i)	GMP	
		Lauric arginate ethyl ester	243	200 mg/kg	
		Neotame	961	70 mg/kg	
		PHOSPHATES		2,200 mg/kg	
		POLYSORBATES		5,000 mg/kg	
		SORBATES		1,000 mg/kg	42,127
12.6.3	**Mixes for sauces and gravies**	**ASCORBYL ESTERS**		200 mg/kg	10
		Curcumin	100	GMP	
		Annatto	160b(i),(ii)	GMP	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
		Steviol glycosides	960	350 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	2,000 mg/kg	
		Grape skin extract	163(ii)	300 mg/kg	
		Neotame	961	12 mg/kg	
		PHOSPHATES		2,200 mg/kg	
		POLYSORBATES		5,000 mg/kg	
		SORBATES		1,000 mg/kg	
		Sodium aluminosilicate	554	570 mg/kg	
12.6.4	**Clear sauces**	**ASCORBYL ESTERS**		200 mg/kg	10
		Aspartame	951	200 mg/kg	
		Neotame	961	12 mg/kg	
		PHOSPHATES		2,200 mg/kg	
		POLYSORBATES		5,000 mg/kg	
		SORBATES		1,000 mg/kg	
		Steviol glycosides	960	350 mg/kg	
12.7	**Salads (e.g. macaroni salad, potato salad) and sandwich spreads excluding cocoa-and**	Acesulfame potassium	950	350 mg/kg	
		ASCORBYL ESTERS		200 mg/kg	10
		Aspartame	951	350 mg/kg	
		BENZOATES		1,500 mg/kg	
		CAROTENOIDS		50 mg/kg	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
	nut-based spreads of food categories 4.2.2.5 and 5.1.3	Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV – sulfiteammonia caramel	150d	50,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	1,000 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES		100 mg/kg	
		Grape skin extract	163(ii)	1,500 mg/kg	
		Lauric arginate ethyl ester	243	200 mg/kg	
		Neotame	961	33 mg/kg	
		POLYSORBATES		2,000 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		SACCHARINS		200 mg/kg	
		SORBATES		1,500 mg/kg	
		Steviol glycosides	960	115 mg/kg	
		Sucralose (Trichlorogalacto sucrose)	955	1,250 mg/kg	
12.8	**Yeast and like products**	Butylated hydroxyanisole (BHA)	320	200 mg/kg	15
		[70][Sorbitan monostearate	491	10,000 mg/kg]	

Table 12

Salts, spices, soups, salads and protein products					
Food category System	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**Note**
12.9	**Soybean-based seasonings and condiments**	**PHOSPHATES**		1,200 mg/kg	
12.9.1	**Fermented soybean paste**	**RIBOFLAVINS**		30 mg/kg	
		SACCHARINS		200 mg/kg	
		SORBATES		1,000 mg/kg	
12.9.2	**Soybean sauce**	[82][BENZOATES		750 mg/kg]	
12.9.2.1	**Fermented soybean sauce**	Caramel III - ammonia caramel	150c	20,000 mg/kg	207
		Caramel IV – sulfiteammonia caramel	150d	60,000 mg/kg	
		SACCHARINS		500 mg/kg	
		SORBATES		1,000 mg/kg	42
		Steviol glycosides	960	30 mg/kg	26
12.9.2.2	**Non-fermented soybean sauce**	Caramel III - ammonia caramel	150c	1,500 mg/kg	
		Steviol glycosides	960	165 mg/kg	26
12.9.2.3	**Other soybean sauces**	Caramel III - ammonia caramel	150c	20,000 mg/kg	
		SORBATES		1,000 mg/kg	42
		Steviol glycosides	960	165 mg/kg	26
12.10	**Protein products other than from soybeans**				

Table 13

Foodstuffs intended for particular nutritional uses					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum level**	**Note**
13.0	**Food Stuffs intended for particular nutritional uses**	Food additive provisions for the products under these categories are provided in the relevant standards of Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 or Food Safety and Standards (Food or Health Supplements, Nutraceuticals, Foods for Special Dietary Uses, Foods for Special Medical Purpose, Functional Foods, and Novel Food) Regulations, 2016 as the case may be.			

Table 14

Beverages, excluding dairy products					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum level**	**Note**
14.0	**Beverages, excluding dairy products**				
14.1	**Non-alcoholic ("soft") beverages**				
14.1.1	**Waters**	No additives permitted			
14.1.1.1	**Natural mineral waters and source waters**	No additives permitted			

14.1.1.2	**Table waters and sold waters**	No additives permitted			
14.1.2	**Fruit and vegetable juices**				
14.1.2.1	**Fruit juices (fruit juices for industrial use, thermally processed fruits juices)**	Ascorbic acid, L-	300	GMP	
		Calcium ascorbate	302	GMP	
		Carbon dioxide	290	GMP	69
		BENZOATES		1,000 mg/kg	91,13
		Citric acid	330	GMP	
		Malic acid, DL-	296	GMP	115
		Nitrogen	941	GMP	
		PHOSPHATES		1,000 mg/kg	40, 33
		Pectins	440	GMP	35
		SORBATES		1,000 mg/kg	91,42
		SULFITES		50 mg/kg	44 [82][For industrial use at 1000 mg/kg maximum]
		Sodium ascorbate	301	GMP	
		TARTRATES		4,000 mg/kg	45
		Alginic acid	400	GMP	
		Sodium alginate	401	GMP	
		Calcium alginate	404	GMP	
		Propylene glycol alginate	405	GMP	
		Gum arabic	414	GMP	
		Potassium alginate	402	GMP	

		Pectins	440	GMP	
		[52][Glycerol ester of wood resin]	445(iii)	100 mg/kg	
		Alginic acid	400	GMP	
		Gellan gum	418	GMP	
		Acetic acid	260	GMP	
		Lactic acid	270	GMP	
		L-Tartaric acid	334	GMP	
		Nitrogen	918	GMP	
		Carbon dioxide	290	GMP	
		[70][Nisin	234	5,000 IU	FS04b]
14.1.2.2	**Vegetable juices(vegetable juices for industrial use, thermally processed vegetable juices, thermally processed tomato juice)**	Ascorbic acid, L-	300	GMP	
		Citric acid	330	GMP	
		Carbon dioxide	290	GMP	
		Malic acid, DL-	296	GMP	
		SULFITES		50 mg/kg	44 [82][For industrial use at 1000 mg/kg maximum]
		Lactic acid	270	GMP	
		Alginic acid	400	GMP	
		L-Tartaric acid	334	GMP	
		PHOSPHATES		GMP	33
		Sucralose	955	250 mg/kg	
		Nitrogen	941	GMP	
		TOCOPHEROLS		GMP	
		Acetic acid	260	GMP	
		BENZOATES		600 mg/kg	13
		Sulphur dioxide	220	1,000 mg/kg	

14.1.2.3	**Concentrates of fruitjuices (concentrated fruit juices for industrial use)**	Ascorbic acid, L-	300	GMP	127
		Acetic acid	260	GMP	
		BENZOATES		1,000 mg/kg	13, 127, 91
		Calcium ascorbate	302	GMP	127
		Carbon dioxide	290	GMP	69, 127
		Citric acid	330	GMP	127
		Malic acid, DL-	296	GMP	127
		Lactic acid	270	GMP	127
		PHOSPHATES		1,000 mg/kg	127, 33, 40
		Pectins	440	GMP	35, 127
		SORBATES		1,000 mg/kg	127, 91, 42
		SULFITES		50 mg/kg	44, 127 **[82]**[For industrial use at 1000 mg/kg maximum]
		Sodium ascorbate	301	GMP	127
		TARTRATES		4,000 mg/kg	129, 128, 127, 45
		Dimethyl polysiloxane	900a	10mg/kg	
		Mono-and diglycerides of fatty acids of edible oils	471	10mg/kg	
		Nitrogen	918	GMP	
		[52][omit		]	

		Alginic acid	400	GMP	
		Acetic acid	260	GMP	
14.1.2.4	**Concentrates of vegetable juices (concentrated vegetable Juices for industrial use)**	Ascorbic acid, L-	300	GMP	
		Citric acid	330	GMP	
		Sucralose	955	1,250 mg/kg	127
		Lactic acid	270	GMP	
		Dimethylpolysiloxane	900a	10 mg/kg	127
		[52][Mono-and diglycerides of fatty acids]	471	10mg/kg	127
		Nitrogen	[52][941]	GMP	
		Carbon dioxide	290	GMP	
		Malic acid – DL	296	GMP	
		SULFITES		50 mg/kg	**[82]**[44, 127, For industrial use at 1500 mg/kg maximum]
		Alginic acid	400	GMP	
		Acetic acid	260	GMP	
		BENZOATES		600 mg/kg	13
		SORBATES		100 mg/kg	42,127
14.1.3	**Fruit and vegetable nectars**	Steviol glycosides	960	200 mg/kg	26
14.1.3.1	**Fruit nectar**	Acesulfame potassium	950	350 mg/kg	188
		Ascorbic acid, L-	300	GMP	
		Aspartame	951	600 mg/kg	191

		Calcium ascorbate	302	GMP	
		BENZOATES		1,000 mg/kg	91, 13
		Carbon dioxide	290	GMP	69
		Citric acid	330	GMP	
		Malic acid, DL-	296	GMP	
		PHOSPHATES		1,000 mg/kg	40,33
		Pectins	440	GMP	
		SACCHARINS		80 mg/kg	
		Sodium ascorbate	301	GMP	
		SORBATES		1,000 mg/kg	42, 91
		SULFITES		70mg/kg	44
		Sucralose (Trichlorogalactosucrose)	955	300 mg/kg	
		TARTRATES		4,000 mg/kg	128, 45
		Alginic acid	400	GMP	
		Sodium alginate	401	GMP	
		Calcium alginate	404	GMP	
		Propylene glycol alginate	405	GMP	
		Chlorophylls	140	100 mg/kg	
		Caramel	150a	100 mg/kg	
		Curcumin	100	100 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	100 mg/kg	
		CAROTENOIDS		100 mg/kg	
		Canthaxanthin	161g	100 mg/kg	
		RIBOFLAVINS		100 mg/kg	
		Annatto	160b(i),(ii)	100 mg/kg	
		Saffron		GMP	

14.1.3.2	**Vegetable nectar**	Acesulfame potassium	950	350 mg/kg	188
		Ascorbic acid, L-	300	GMP	
		Aspartame	951	600 mg/kg	191
		BENZOATES		120 mg/kg	13
		Citric acid	330	GMP	
		Curcumin	100	100 mg/kg	
		Malic acid, DL-	296	GMP	
		Neotame	961	65 mg/kg	
		Pectins	440	GMP	
		SACCHARINS		80 mg/kg	
		Saffron		GMP	
		SORBATES		300 mg/kg	42
		Sucralose (Trichlorogalactosucrose)	955	300 mg/kg	
		Alginic acid	400	GMP	
		Chlorophylls	140	100 mg/kg	
		Caramel	150a	100 mg/kg	
		[52][Omit		]	
		beta-Carotenes, vegetable	160a(ii)	100 mg/kg	
		CAROTENOIDS		100 mg/kg	
		Canthaxanthin	161g	100 mg/kg	
		RIBOFLAVINS		100 mg/kg	
		Annatto	160(b)(i), (ii)	100 mg/kg	
		SULPHITES		70 mg/kg	44
		Sodium hexametaphosphate	452(i)	1,000 mg/kg	
		Tartaric acid	334	GMP	

14.1.3.3	**Concentrates of fruit nectar**	Acesulfame potassium	950	350 mg/kg	188, 127
		Ascorbic acid, L-	300	GMP	127
		Alginic acid	400	GMP	
		Sodium alginate	401	GMP	
		Calcium alginate	404	GMP	
		Propylene glycol alginate	405	GMP	
		Aspartame	951	600 mg/kg	191, 127
		BENZOATES		1,000 mg/kg	13,91,127
		Calcium ascorbate	302	GMP	127
		Carbon dioxide	290	GMP	69, 127
		Citric acid	330	5,000 mg/kg	127
		Malic acid, DL-	296	GMP	127
		Lecithins	322(i), (ii)	GMP	
		PHOSPHATES		1,000 mg/kg	40, 33, 127
		Pectins	440	GMP	127
		SACCHARINS		80 mg/kg	127
		SORBATES		1,000 mg/kg	127, 91, 42
		Sodium ascorbate	301	GMP	127
		Sucralose (Trichlorogalactosucrose)	955	300 mg/kg	127
		SULFITES		50 mg/kg	44, 127
		TARTRATES		4,000 mg/kg	45,127
14.1.3.4	**Concentrates of vegetable nectar**	Acesulfame potassium	950	350 mg/kg	127,188
		Ascorbic acid, L-	300	GMP	
		Aspartame	951	600 mg/kg	127

		BENZOATES		600 mg/kg	13,127
		Citric acid	330	GMP	
		Malic acid, DL-	296	GMP	
		Neotame	961	65 mg/kg	127
		Pectins	440	GMP	
		SULFITES		50 mg/kg	127, 44
		Sucralose (Trichlorogalactosucrose)	955	300 mg/kg	127
14.1.4	**Water-based flavoured drinks, including "sport,""energy," or "electrolyte" drinks and particulated drinks, includes carbonated fruit beverages, carbonated beverages with fruit**	**ASCORBYL ESTERS**		1,000 mg/kg	15, 10
		Acesulfame potassium	950	600 mg/kg	188
		[75][Omitted]			
		Allura red AC	129	100 mg/kg	127
		Anthocyanins	163(i), (iii)	GMP	
		Aspartame	951	600 mg/kg	191
		BENZOATES		600 mg/kg	13, 301,123
		Beeswax	901	200 mg/kg	131
		Brilliant blue FCF	133	100 mg/kg	
		CAROTENOIDS		100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		300 mg/kg	127
		Candelilla wax	902	200 mg/kg	131
		Caramel III - ammonia caramel	150c	5,000 mg/kg	9

		Caramel IV – sulfite ammonia caramel	150d	50,000 mg/kg	127
		Carnauba wax	903	200 mg/kg	131
		beta-Carotenes, vegetable	160a(ii)	2,000 mg/kg	
		Cyclodextrin, beta-	459	500 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	127
		ETHYLENE DIAMINE TETRA ACETATES		200 mg/kg	21
		Fast green FCF	143	100 mg/kg	
		Glycerol ester of wood rosin	445(iii)	150 mg/kg	100 mg/kg max for carbonated water
		Grape skin extract	163(ii)	300 mg/kg	181,127
		HYDROXYBENZOATES, PARA-		500 mg/kg	27
		IRON OXIDES		100 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Isopropyl citrates	384	200 mg/kg	
		Neotame	961	33 mg/kg	
		PHOSPHATES		1,000 mg/kg	33,127
		POLYSORBATES		500 mg/kg	127

		Polydimethylsiloxane	900a	20 mg/kg	127
		Polyethylene glycol	1521	1,000 mg/kg	
		Ponceau 4R	124	100 mg/kg	50 mg/kg max for carbonated water
		Propyl gallate	310	1,000 mg/kg	15
		Propylene glycol esters of fatty acids	477	500 mg/kg	
		QUILLAIA EXTRACTS		50 mg/kg	[52][293, 132]
		RIBOFLAVINS		100mg/kg	
		SORBATES		500 mg/kg	42, 127
		SULFITES		70 mg/kg	143, 44, 127
		Stannous chloride	512	20 mg/kg	43
		Stearyl citrate	484	500 mg/kg	
		Steviol glycosides	960	200 mg/kg	26
		Sucralose (Trichlorogalactosucrose)	955	300 mg/kg	127
		Annatto	160b(i), (ii)	100 mg/kg	
		Canthaxanthin	161g	100 mg/kg	
		Curcumin	100	100 mg/kg	
		Carmoisine	122	100 mg/kg	
		Erythrosine	127	50 mg/kg	
		Dimethyl dicarbonate	242	250 mg/kg	18 (subject to a

					maximum methanol content in final product as 200 mg/litre)
		Saffron		GMP	
		Tartrazine	102	100 mg/kg	
		Sucroglycerides	474	200 mg/kg	219
		Sucrose acetate isobutyrate	444	500 mg/kg	
		Sunset yellow FCF	110	100 mg/kg	127
		THIODIPROPIONATES		1,000 mg/kg	15, 46
		Triethyl citrate	1505	200 mg/kg	
		Quinine salts		100 mg/kg	
		[82][TARTRATES		800 mg/kg]	
14.1.4.1	**Carbonated water-based flavoured drinks (beverages non-alcoholic-cabonated, carbonated water)**	Canthaxanthin	161g	5 mg/kg	
		Lauric arginate ethyl ester	243	50 mg/kg	
		RIBOFLAVINS		50 mg/kg	
		SACCHARINS		300 mg/kg	
14.1.4.2	**Non-carbonated water-based flavoured drinks**	Lauric arginate ethyl ester	243	50 mg/kg	
		RIBOFLAVINS		50 mg/kg	
		SACCHARINS		300 mg/kg	
		L-Tartaric acid	334	GMP	

	including punches and ades, ginger cocktail (ginger beer and gingerale), thermally processed fruit beverages/ fruit drinks/ready to serve fruit beverages	[77][No colours permitted in iced tea and iced tea mixes.]			
		Curcumin	100	200 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	200 mg/kg	
		CAROTENOIDS		200 mg/kg	
		[52][omit			
				]	
		Annatto	[52][160b (i), (ii)]	200 mg/kg	
		Saffron		GMP	
		Ponceau 4R	124	200 mg/kg	XT99
		Carmoisine	122	200 mg/kg	XT99
		Erythrosine	127	100 mg/kg	XT99
		Tartarzine	102	200 mg/kg	XT99
		Sunset yellow FCF	110	200 mg/kg	XT99
		Indogotine (Indigo carmine)	132	200 mg/kg	XT99
		Brilliant Blue FCF	133	200 mg/kg	XT99
		Fast green FCF	143	200 mg/kg	XT99
		BENZOATES		600 mg/kg	
		SULFITES		350 mg/kg	XT100
		SORBATES		1,000 mg/kg	XT101
		Propylene glycol alginate	405	GMP	
		Alginic acid	400	GMP	

		Sodium alginate	401	GMP	
		Calcium alginate	404	GMP	
		[52][omit			]
		Glycerol ester of wood rosin	445(iii)	100 mg/kg	
		Sodium aluminium silicate	554	5 g/kg	
14.1.4.3	**Concentrates (liquid or solid) for water-based flavoured drinks (synthetic syrups for dispensers, sharbat (synthetic syrup)*,** squashes, crushes, fruit syrups, cordials and barley water	[77][No colours permitted in iced tea and iced tea mixes.]			
		Canthaxanthin	161g	5 mg/kg	127, XT102
		Ferric ammonium citrate	381	10 mg/kg	23
		Lauric arginate ethyl ester	243	50 mg/kg	127
		Polyvinylpyrrolidone	1201	500 mg/kg	
		RIBOFLAVINS		50 mg/kg	XT102
		SACCHARINS		300 mg/kg	127
		[70][*The following additives permitted in synthetic syrups for dispensers			127]
		L-Tartaric acid	334	GMP	
		Phosphoric acid	338	GMP	In cola beverages only
		SACCHARINS		450 mg/kg	
		Aspartame	951	3,000 mg/kg	
		Acesulfame potassium	950	1,500 mg/kg	
		Curcumin	100	200 mg/kg	XT102
		beta-Carotenes, vegetable	160a (ii)	200 mg/kg	XT102
		CAROTENOIDS		200 mg/kg	XT102
		Canthaxanthin	161g	200 mg/kg	

		RIBOFLAVINS		200 mg/kg	XT102
		Annatto	160b (i), ii)	200 mg/kg	XT102
		Saffron		GMP	
		Ponceau 4R	124	200 mg/kg	127
		Carmoisine	122	200 mg/kg	127
		Erythrosine	127	100 mg/kg	127
		Tartarzine	102	200 mg/kg	127
		Sunset yellow FCF	110	200 mg/kg	127
		Indogotine (Indigo carmine)	132	200 mg/kg	127
		Brilliant blue FCF	133	200 mg/kg	127
		Fast green FCF	143	200 mg/kg	127
		BENZOATES		600mg/kg	127
		SULFITES		350 mg/kg	44
		Glycerol ester of wood rosin	445(iii)	450 mg/kg	127
		Quinine sulphate		450 mg/kg	Subject to 100 mg/kg in ready to serve beverage after dilution
		[70][*The following additives are permitted in sharbat (synthetic syrup)			127]
		L-Tartaric acid	334	GMP	
		Curcumin	100	200 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	200 mg/kg	
		CAROTENOIDS		200 mg/kg	
		Canthaxanthin	161g	200 mg/kg	
		RIBOFLAVINS		200 mg/kg	
		Annatto	160(b)	200 mg/kg	

		Ponceau 4R	124	200 mg/kg	
		Saffron		GMP	
		Erythrosine	127	100mg/kg	
		Carmosine	122	200 mg/kg	
		Sunset yellow FCF	110	200mg/kg	
		Indogotine (Indigo carmine)	132	200mg/kg	
		Brilliant blue FCF	133	200mg/kg	
		Fast green FCF	143	200mg/kg	
		Tartrazine	102	200 mg/kg	
		BENZOATES		600 mg/kg	13
		SULFITES		350 mg/kg	122, 44
		SORBATES		1,000 mg/kg	42
		Propylene glycol alginate	405	GMP	
14.1.5	**Coffee, coffee /coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa**	Acesulfame potassium	950	600 mg/kg	188, 160
		Acetic acid, glacial	260	GMP	160
		Acetic and fatty acid esters of glycerol	472a	GMP	160
		Acetylated distarch adipate	1422	GMP	160
		Acetylated distarch phosphate	1414	GMP	160
		Acid-treated starch	1401	GMP	160
		Alginic acid	400	GMP	160
		Agar	406	GMP	160
		Alkaline treated starch	1402	GMP	160
		Ascorbic acid, L-	300	GMP	160
		Aspartame	951	600 mg/kg	160

		BENZOATES		1,000 mg/kg	13
		Beeswax	901	GMP	108
		Bleached starch	1403	GMP	160
		Calcium carbonate	170(i)	GMP	160
		Calcium chloride	509	GMP	160
		Calcium lactate	327	GMP	160
		Candelilla wax	902	GMP	108
		Carbon dioxide	290	GMP	59,160
		Caramel III - ammonia caramel	150c	10,000 mg/kg	7, 160
		Caramel IV – sulfite ammonia caramel	150d	10,000 mg/kg	7,127
		Carnauba wax	903	200 mg/kg	108
		Carob bean gum	410	GMP	160
		Carrageenan	407	GMP	160
		Citric acid	330	GMP	160
		Citric and fatty acid esters of glycerol	472c	GMP	160
		Dextrins, roasted starch	1400	GMP	90,160
		Diacetyltartaric and fatty acid esters of glycerol	472e	500 mg/kg	142
		Dimethyl dicarbonate	242	250 mg/kg	18
		Distarch phosphate	1412	GMP	160
		Disodium 5'-guanylate	627	GMP	201
		Disodium 5'-inosinate	631	GMP	201
		Disodium 5'-Ribonucleotides	635	GMP	201

		ETHYLENE DIAMINE TETRA ACETATES	386	35 mg/kg	21
		Fumaric acid	297	GMP	160
		Gellan gum	418	GMP	160
		Glycerol	422	GMP	160
		Guar gum	412	GMP	160
		Gum arabic (Acacia gum)	414	GMP	160
		HYDROXYBENZOATES, PARA-		450 mg/kg	27,160
		Hydroxypropyl cellulose	463	GMP	160
		Hydroxypropyl distarch phosphate	1442	GMP	160
		Hydroxypropyl methyl cellulose	464	GMP	160
		Hydroxypropyl starch	1440	GMP	160
		Karaya gum	416	GMP	160
		Konjac flour	425	GMP	160
		Lactic and fatty acid esters of glycerol	472b	GMP	160
		Lecithins	322(i), (ii)	GMP	160
		Magnesium carbonate	504(i)	GMP	160
		Magnesium chloride	511	GMP	160
		Magnesium hydroxide	528	GMP	160

		Magnesium hydroxide carbonate	504(ii)	GMP	160
		Malic acid, DL-	296	GMP	160
		Methyl cellulose	461	GMP	160
		Methyl ethyl cellulose	465	GMP	160
		Microcrystalline cellulose (cellulose gel)	460(i)	GMP	160
		Mono- and di-glycerides of fatty acids	471	GMP	160
		Monosodium L-glutamate	621	GMP	160
		Monostarch phosphate	1410	GMP	160
		Neotame	961	50 mg/kg	160
		Nitrogen	941	GMP	160, 59
		Oxidized starch	1404	GMP	160
		PHOSPHATES		300 mg/kg	33, 160
		Pectins	440	GMP	160
		Phosphated distarch phosphate	1413	GMP	160
		Potassium carbonate	501(i)	GMP	160
		Potassium chloride	508	GMP	160
		Potassium dihydrogen citrate	332(i)	GMP	160
		Powdered cellulose	460(ii)	GMP	160
		Processed eucheuma seaweed	407a	GMP	160

		Pullulan	1204	GMP	160
		SACCHARINS		200 mg/kg	160
		SORBATES		500 mg/kg	42,160
		Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	470(i)	GMP	160
		Salts of oleic acid with calcium, potassium and sodium	470(ii)	GMP	160
		Shellac, bleached	904	GMP	108
		Sodium DL-malate	350(ii)	GMP	160
		Silicon dioxide, amorphous	551	GMP	321
		Sodium acetate	262(i)	GMP	160
		Sodium alginate	401	GMP	160
		Sodium ascorbate	301	GMP	160
		Sodium carbonate	500(i)	GMP	160
		Carboxymethyl cellulose	466	GMP	160
		Sodium dihydrogen citrate	331(i)	GMP	160
		Sodium fumarates	365	GMP	160
		Sodium gluconate	576	GMP	160
		Sodium hydrogen carbonate	500(ii)	GMP	160
		Sodium lactate	325	GMP	160
		Starches, enzyme treated	1405	GMP	160
		Starch sodium octenyl succinate	1450	GMP	160

		Steviol glycosides	960	200 mg/kg	160,26
		Sucralose (Trichlorogalactos ucrose)	955	300 mg/kg	160
		Sucroglycerides	474	1,000 mg/kg	176
		Tara gum	417	GMP	160
		Tragacanth gum	413	GMP	160
		Tripotassium citrate	332(ii)	GMP	160
		Trisodium citrate	331(iii)	GMP	160
		Xanthan gum	415	GMP	160
		[82][Sorbitol	420(i)	GMP	
		Sorbitol syrup	420(ii)	GMP	
		Mannitol	421	GMP	
		Isomalt	953	GMP	
		Maltitol	965(i)	GMP	
		Maltitol syrup	965(ii)	GMP	
		Xylitol	967	GMP	
		Lactitol	966	GMP	
		Erythritol	968	GMP]	
14.2	**Alcoholic beverages including alcohol-free and low-alcoholic counterparts**				
14.2.1	**Beer andmalt beverages**	Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV – sulfiteammonia caramel	150d	50,000 mg/kg	

		beta-Carotenes, vegetable	160a(ii)	600 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		25 mg/kg	21
		Polydimethylsiloxane	900a	10 mg/kg	
		Polyvinylpyrrolidone	1201	10 mg/kg	36
		SULFITES		50 mg/kg	44
14.2.2	**Cider and perry**	**BENZOATES**		1,000mg/kg	124, 13
		CAROTENOIDS -		200 mg/kg	
		Caramel III - ammonia caramel	150c	1,000 mg/kg	
		Caramel IV – sulfiteammonia caramel	150d	1,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	600 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		Dimethyl dicarbonate	242	250 mg/kg	18
		Grape skin extract	163(ii)	300 mg/kg	181
		HYDROXYBENZOATES, PARA-		200 mg/kg	27
		Lysozyme	1105	500 mg/kg	
		PHOSPHATES		880 mg/kg	33
		Polydimethylsilox	900a	10 mg/kg	

		ane			
		Polyvinylpyrrolidone	1201	2 mg/kg	36
		RIBOFLAVINS		300 mg/kg	
		SORBATES		500 mg/kg	42
		SULFITES		200 mg/kg	44
14.2.3	**Grape wines**	Dimethyl dicarbonate	242	200 mg/kg	18
		Carbon dioxide	290	GMP	60
		Lysozyme	1105	500 mg/kg	
		SORBATES		200 mg/kg	42
		SULFITES		350 mg/kg	44, 103
		[31][52][Malic acid, DL-, L-]	296	GMP	FS04a
		Ascorbic acid L-	300	300 mg/kg	
		Citric acid	330	1,000 mg/kg	FS04a
		Tartaric acid L(+),DL	334	GMP	FS04a
		Lactic acid	270	GMP	FS04a
		Gum arabic (Acacia Gum)	414	300 mg/kg	
		Tannins	181	GMP	
		Metatartaric acid	353	100 mg/kg	
		Caramel (plain) 150a		GMP	(allowed only for liqueur wines)
		Carboxymethyl-Cellulose	466	100 mg/kg	(For white and sparkling wines)
		Calcium carbonate	170(i)	GMP	
		Polyvinyl-polypyrrolidone	1202	800 mg/kg	
		Nitrogen	941	GMP	
		Oxygen	948	GMP	

		Isoascorbic acid (Erythorbic acid)	315	250 mg/ml	
		[52][Potassium-D,L-, L(+)- tartrate, Potassium bitartrate	336	GMP]	
		Calcium tartrate	354	GMP	
		Copper sulphate (and Copper citrate)	519,	10mg/l	
		Argon	938	GMP	
		Caramel II	150 b	GMP	
		Yeast manno proteins		GMP	
		Potassium ferrocyanide	536	GMP	
		Urease		GMP	
		Silver chloride		10mg/l	
		Ammonium phosphate	342(i)	300 mg/l	
		Diammonium diphosphate	342(ii)	300 mg/l	(for sparkling wines)
		Ammonium sulfate	517	300 mg/l	(expressed as the salt) (for sparkling wines)
		Charcoal for oenogical use (Oenological		100 g/hl	

		Carbon)			
		Ammonium bisulphite (ammonium hydrogen sulphite)	-	GMP	
		Thiamin hydrochloride		GMP	
		Yeasts products coming from degradation of yeasts (autolysate, inert cells).		GMP	
		Potassium carbonate	501(i)	GMP	
		Potassium bicarbonate (Potassium hydrogen carbonate)	501(ii)	GMP	
		Lactic acid bacteria	-	GMP	The lactic acid bacteria must belong to the *Oenococcus*, *Leuconostoc*, *Lactobacillus* and *Pediococ*

					cus genus and must be isolated from grapes, musts, wine or have been derived from these bacteria.
		Polyvinylpolypyrrolidone	1202	800 mg/l	
		Proteins from plant origin	-	GMP	The plant protein extracted from wheat (*Triticum vulgaris*), peas (*Pisum sativum*), or potatoes (*Solanum tuberosum*).
		Casein	-	GMP	
		Potassium caesinate	-	GMP	

		Gelatin (edible)	-	GMP	Subject to proper label declaration. These are processing aids.
		Isinglass (Fish Glue)		GMP	
		Egg white albumin		GMP	
		Silicon dioxide	551	GMP	
		Bentonite	558	GMP	
		Aluminium silicate (Kaolin)	559	GMP	
		β-Glucanases		GMP	
		Yeast protein extract	-	GMP	The proteins of yeast of *Saccharomyces* sp. yeast.
		Adsorbant Copolymer Treatment polyvinylimidazole – polyvinylpyrrolidone (PVI/PVP)		GMP	
		Microcrystalline cellulose	460 (i)	GMP	
		Calcium alginate	404	GMP	(Allowed only for

					sparkling and semi-sparkling wines obtained by fermentation in bottle).
		Potassium alginate	402	GMP	-
		Yeast	-	GMP	-
		Calcium phytate		GMP	-
		Chitosan		GMP	-
		Chitin-Glucan		GMP	-
		Mixture of Mono- and diglycerides of oleic Acid		GMP	-]
14.2.3.1	**Still grape wines**				
14.2.3.2	**Sparkling and semi sparkling grape wines**				
14.2.3.3	**Fortified grape wines, grape liquor wines and sweet grape wines**	Caramel III - ammonia caramel	150c	50,000 mg/kg	
		Caramel IV – sulfite ammonia caramel	150d	50,000 mg/kg	
14.2.4	**Wines (other than grape)**	**BENZOATES**		1,000mg/kg	124, 13
		CAROTENOIDS		200 mg/kg	
		Caramel III - ammonia caramel	150c	1,000 mg/kg	

		Caramel IV – sulfite ammonia caramel	150d	1,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	600 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		Dimethyl dicarbonate	242	250 mg/kg	18
		Grape skin extract	163(ii)	300 mg/kg	181
		HYDROXYBENZOATES, PARA-		200 mg/kg	27
		RIBOFLAVINS		300 mg/kg	
		SORBATES		500 mg/kg	42
		SULFITES		200 mg/kg	44
14.2.5	**Mead**	**BENZOATES**		1,000mg/kg	13
		Caramel III - ammonia caramel	150c	1, 000 mg/kg	
		Caramel IV – sulfiteammonia caramel	150d	1, 000 mg/kg	
		Dimethyl dicarbonate	242	200 mg/kg	18
		HYDROXYBENZOATES, PARA-		200 mg/kg	27
		PHOSPHATES		440 mg/kg	33,88
		SORBATES		200 mg/kg	42
		SULFITES		200 mg/kg	44
14.2.6	**Distilled spirituous beverages containing**	**CAROTENOIDS**		200 mg/kg	
		Canthaxanthin	161g	5 mg/kg	
		Caramel III - ammonia caramel	150c	50,000 mg/kg	

	more than 15 % alcohol	Caramel IV – sulfite ammonia caramel	150d	50,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	600 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	5,000 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES (EDTA)		25 mg/kg	21
		Grape skin extract	163(ii)	300 mg/kg	181
		PHOSPHATES		440mg/kg	33, 88
		POLYSORBATES		120 mg/kg	
		SULFITES		200 mg/kg	44
		Sucroglycerides	474	5,000 mg/kg	
		[31][Caramel II -	150 b	GMP	-
		Gold (colour)	175	GMP	-
		Silver (colour)	174	GMP	-
		Glycerol esters Of wood Resin	445(iii)	GMP	-
		Alpha-Tocopherol	307	GMP	-
		RIBOFLAVINS		GMP	-
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		100 mg/kg	**-]**
		[82][Tatrazine	102	100 mg/kg	1. These colours can be used
		Carmoisine	122	100 mg/kg	
		Brilliant Blue	133	100 mg/kg	

		FCF			individually as per permissible limits or in combination which may be restricted to the lowest permissible limit amongst the combination of colors used. 2. These colors are not permitted to be used in country liquors as defined under regulation 2.2 of the Food Safety and Standards
		Sunset Yellow FCF	110	100 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		Allura Red	129	100 mg/kg	

					(Alcoholic Beverages) Regulations, 2018.]
14.2.7	**Aromatized alcoholic beverages**	Acesulfame potassium	950	350 mg/kg	188
		Aspartame	951	600 mg/kg	191
		Aspartame-acesulfame salt	962	350 mg/kg	113
		BENZOATES		1,000mg/kg	13

		CAROTENOIDS	160e	200 mg/kg	
		Canthaxanthin	161g	5 mg/kg	
		Caramel III - ammonia caramel	150c	50, 000 mg/kg	
		Caramel IV – sulfite ammonia caramel	150d	50,000 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	600 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	10, 000 mg/kg	
		ETHYLENE DIAMINE TETRA ACETATES		25 mg/kg	21
		Grape skin extract	163(ii)	300 mg/kg	181
		HYDROXYBENZOATES, PARA-		1,000 mg/kg	224, 27
		Neotame	961	33 mg/kg	
		POLYSORBATES		120 mg/kg	
		Polydimethylsiloxane	900a	10 mg/kg	
		RIBOFLAVINS		100 mg/kg	
		SACCHARINS		80 mg/kg	
		SORBATES		500 mg/kg	224, 42
		SULFITES		250 mg/kg	44
		Sucralose (Trichlorogalactosucrose)	955	700 mg/kg	
		Sucroglycerides	474	5,000 mg/kg	
		[31][Phosphoric acid	338	1,000 mg/kg	-]

		[82][Tatrazine	102	100 mg/kg	1. These colours can be used individually as per permissible limits or in combination which may be restricted to the lowest permissible limit amongst the combination of colors used. 2. These colors are not permitted to be used in country liquors as defined under regulation 2.2 of
		Carmoisine	122	100 mg/kg	
		Brilliant Blue FCF	133	100 mg/kg	
		Sunset Yellow FCF	110	100 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		Allura Red	129	100 mg/kg	

					the Food Safety and Standards (Alcoholic Beverages) Regulations, 2018.]

Table 15

Ready-to–eat savouries					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**NOTE**
15.0	**Ready-to-eat savouries**	Acesulfame potassium	950	350 mg/kg	188
		Aspartame	951	500 mg/kg	191
		Neotame	961	32 mg/kg	
		Beeswax	901	GMP	3
		Butylated hydroxytoluene (BHT)	321	200mg/kg	15, 130
		Candelilla wax	902	GMP	3
		Carnauba wax	903	GMP	3
		Caramel III - ammonia caramel	150c	10,000 mg/kg	
		Caramel IV –sulfite ammonia caramel	150d	10,000 mg/kg	
		PHOSPHATES		2,200 mg/kg	33
		SACCHARINS		100 mg/kg	

Table 15

Ready-to–eat savouries					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**NOTE**
		Steviol glycosides	960	170 mg/kg	26
		Sucralose (Trichlorogalactosucrose)	955	1,000 mg/kg	
		Shellac, bleached	904	GMP	3
		THIODIPROPIONATES		200 mg/kg	46
		TBHQ	319	200mg/kg	15, 130
15.1	**Snacks and savouries – potato, cereal, flour or starch based (from roots and tubers, pulses and legumes)**	**ASCORBYL ESTERS**		200 mg/kg	10
		Allura red AC	129	100 mg/kg	
		Brilliant blue FCF	133	100 mg/kg	
		Butylated hydroxyanisole (BHA)	320	200mg/kg	15, 130
		CAROTENOIDS		100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		350 mg/kg	
		Canthaxanthin	161g	45 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	100 mg/kg	
		Cyclodextrin, beta-	459	500 mg/kg	
		Diacetyltartaric and fatty acid esters of glycerol	472e	20,000 mg/kg	
		Grape skin extract	163(ii)	500 mg/kg	181
		HYDROXYBENZOATES, PARA-		300 mg/kg	27
		IRON OXIDES		500 mg/kg	

Table 15

Ready-to–eat savouries					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**NOTE**
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		Propyl gallate	310	200 mg/kg	15, 130
		RIBOFLAVINS		300 mg/kg	
		BENZOATES		1,000 mg/kg	13
		SORBATES		1,000 mg/kg	42
		SULFITES		50 mg/kg	44
		TOCOPHEROLS		GMP	
		Sunset yellow FCF	110	100 mg/kg	
		[70][Paprika oleoresin	160c(i)	GMP	
		Curcumin	100(i)	GMP	
		Turmeric	100(ii)	GMP]	
15.2	**Processed nuts including coated nuts and nut mixtures**	**ASCORBYL ESTERS**		200 mg/kg	10
		Allura red AC	129	100 mg/kg	
		Brilliant blue FCF	133	100 mg/kg	
		Butylated hydroxyanisole (BHA)	320	200 mg/kg	15, 130
		CAROTENOIDS		100 mg/kg	
		CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES		100 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	GMP	3
		Diacetyltartaric and fatty acid esters of glycerol	472e	10,000 mg/kg	

Table 15

Ready-to–eat savouries					
Food Category system	**Food Category Name**	**Food Additive**	**INS No**	**Recommended Maximum Level**	**NOTE**
		Grape skin extract	163(ii)	300 mg/kg	181
		HYDROXYBENZOATES, PARA-		300 mg/kg	27
		IRON OXIDES		400 mg/kg	
		Indigotine (Indigo carmine)	132	100 mg/kg	
		Neotame	961	32 mg/kg	
		Ponceau 4R	124	100 mg/kg	
		Propyl gallate	310	200 mg/kg	15, 130
		RIBOFLAVINS		1,000 mg/kg	
		SORBATES		1,000 mg/kg	42
15.3	**Snacks – fish based**	**CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES**		350 mg/kg	
		beta-Carotenes, vegetable	160a(ii)	100 mg/kg	
		Grape skin extract	163(ii)	400 mg/kg	

Explanation I (for 11.6 Table top sweeteners): Maximum limit of artificial sweetener in the product shall be as in reconstituted beverage or food or in final beverage or food for consumption, as the case may be. The product label shall give clear instruction for reconstitution of products for making final beverage or food for consumption as the case may be.

Provided where the artificial sweetener(s) is/are used in carbonated water/ sweetened aerated water/ fruit beverage/ carbonated fruit beverage/ fruit nectar, the requirement of minimum total soluble solids shall not apply.

Provided further table top sweetener may contain the following carrier or filler articles with label declaration as provided in Regulation 2.4.5 (24, 25, 26, 27, 28 and 29) of Food Safety and Standards (Packaging and Labelling) Regulations, 2011. Namely,-

(i) Dextrose

(ii) Lactose

(iii) Maltodextrin

(iv) Mannitol

(v) Sucrose

(vi) Isomalt

(vii) Citric acid

(viii) Calcium silicate

(ix) Carboxy methyl cellulose

(x) Cream of tartar, IP

(xi) Cross carmellose sodium

(xii) Colloidal silicone dioxide

(xiii) Glycine

(xiv) L-leucine

(xv) Magnesium stearate, IP

(xvi) Purified talc

(xvii) Poly vinyl pyrrolidone

(xviii) Providone

(xix) Sodium hydrogen carbonate

(xx) Starch

(xxi) Tartaric acid

(xxii) Erythritol

Explanation II (for preservatives)

The use of more than one preservative has been allowed in the alternative, those preservatives may be used in combination with one or more alternatives, provided the quantity of each preservative so used does not exceed such number of parts out of those specified for that preservative of the aforesaid tables as may be worked out on the basis of the proportion in which such preservatives are combined

Annexure-1

All capital and bold additives in the Table 1 to 15 refers to the group of additives as listed below

Group Name	**Additive Name**	**INS No.**
SULFITES	Sulfur dioxide	220
	Sodium sulfite	221
	Sodium hydrogen sulfite	222
	Sodium disulfite	223
	Potassium metabisulfite	224
	Potassium sulfite	225
	Calcium hydrogen sulfite	227
	Potassium hydrogen sulfite	228
	Sodium thiosulfate	539
PHOSPHATES	Phosphoric acid	338
	Sodium hydrogen phosphate	339(i)
	Disodium hydrogen phosphate	339(ii)
	Trisodium orthophosphate	339(iii)
	Potassium dihydrogen phosphate	340(i)
	Dipotassium hydrogen phosphate	340(ii)
	Tripotassium ydrogen phosphate	340(iii)
	Monocalcium orthophosphate	341(i)
	Calcium hydrogen phosphate	341(ii)
	Tricalcium phosphate	341(iii)
	Ammonium dihydrogen phosphate	342(i)
	Diammonium Hydrogen phosphate	342(ii)

Group Name	Additive Name	INS No.
	Magnesium phosphate	343(i)
	Dimagnesium hydrogen phosphate	343(ii)
	Trimagnesium phosphate	343(iii)
	Disodium diphosphate	450(i)
	Trisodium diphosphate	450(ii)
	Tetrasodium diphosphate	450(iii)
	Tetrapotassium diphosphate	450(v)
	Dicalcium diphosphate	450(vi)
	Calcium dihydrogen diphosphate	450(vii)
	Pentasodium triphosphate	451(i)
	Pentapotassium triphosphate	451(ii)
	Sodium polyphosphate	452(i)
	Potassium polyphosphate	452(ii)
	Sodium calcium polyphosphate	452(iii)
	Calcium polyphosphate	452(iv)
	Ammonium polyphosphate	452(v)
	Magnesium dihydrogen diphosphate	450(ix)
RIBOFLAVINS	Riboflavin, synthetic	101(i)
	Riboflavin 5'-phosphate sodium	101(ii)
	Riboflavin (Bacillus subtilis)	101(iii)
ASCORBYL ESTERS	Ascorbyl palmitate	304
	Ascorbyl stearate	305
BENZOATES	Benzoic acid	210
	Sodium benzoate	211
	Potassium benzoate	212
	Calcium benzoate	213
CAROTENOIDS	beta-Carotenes (synthetic)	160a(i)
	beta-Carotenes (Blakeslea trispora)	160a(iii)
	beta-apo-8'-Carotenal	160e
	beta-apo-8'-Carotenoic acid, ethyl ester	160f
CHLOROPHYLLS AND CHLOROPHYLLINS,	Chlorophylls, copper complexes	141(i)
	Chlorophyllin copper complexes, sodium and potassium salts	141(ii)

Group Name	Additive Name	INS No.
COPPER COMPLEXES		
HYDROXYBENZOATES, PARA-	Ethyl para-hydroxybenzoate	214
	Methyl para-hydroxybenzoate	218
NITRITES	Potassium nitrite	249
	Sodium nitrite	250
QUILLAIA EXTRACTS	Quillaia extract type 2	999(ii)
	Quillaia extract type I	999(i)
SODIUM ALUMINIUM PHOSPHATES	Sodium aluminium phosphate, acidic	541(i)
	Sodium aluminium phosphate, basic	541(ii)
STEAROYL LACTYLATES	Calcium stearoyl lactylate	482(i)
	Sodium stearoyl lactylate	481(i)
THIODIPROPIONATES	Dilauryl thiodipropionate	389
	Thiodipropionic acid	388
TOCOPHEROLS	dl-alpha-Tocopherol	3 07c
	d-alpha-Tocopherol	307a
	Tocopherol concentrate, mixed	307b
SACCHARINS	Saccharin	954(i)
	Calcium saccharin	954(ii)
	Potassium saccharin	954(iii)
	Sodium saccharin	954(iv)
SORBATES	Sorbic acid	200
	Sodium sorbate	201
	Potassium sorbate	202
	Calcium sorbate	203
POLYSORBATES	Polyoxyethylene (20) sorbitan monolaurate	432
	Polyoxyethylene (20) sorbitan monooleate	433
	Polyoxyethylene (20) sorbitan monopalmitate	434
	Polyoxyethylene (20) sorbitan monostearate	435

Group Name	Additive Name	INS No.
	Polyoxyethylene (20) sorbitan tristearate	436
POLYOXYETHYLENE STEARATES	Polyoxyethylene (40) stearate	431
	Polyoxyethylene (8) stearate	430
IRON OXIDES	Iron oxide, black	172(i)
	Iron oxide, red	172(ii)
	Iron oxide, yellow	172(iii)
FERROCYANIDES	Calcium ferrocyanide	538
	Potassium ferrocyanide	536
	Sodium ferrocyanide	535
TARTRATES	Potassium sodium L(+)-tartrate	337
	Sodium L(+)-tartrate	335(ii)
	L(+)-Tartaric acid	334
ETHYLENE DIAMINE TETRA ACETATES	Calcium disodium ethylenediaminetetraacetate	385
	Disodium ethylenediaminetetraacetate	386
[52]**[SORBITAN ESTERS OF FATTY ACIDS**		
	Sorbitan monolaurate	493
	Sorbitan monooleate	494
	Sorbitan monopalmitate	495
	Sorbitan monostearate	491
	Sorbitan tristearate	492]

Note No.	Notes to the Food Additives mentioned in the Table 1 to 15.
1	As adipic acid.
2	On the dry ingredient, dry weight, dry mix or concentrate basis.
3	For use in surface treatment only.
4	For use in decoration, stamping, marking or branding the product only.
5	Excluding products conforming to the standard for jams, jellies and marmalades
6	As aluminium.
7	For use in coffee substitutes only.
8	As bixin.
9	Except for use in ready-to-drink coffee products at 10,000 mg/kg.

10	As ascorbyl stearate.
11	On the flour basis.
12	As a result of carryover from flavouring substances.
13	As benzoic acid.
14	For use in hydrolysed protein liquid formula only.
15	On the fat or oil basis.
16	For use in glaze, coatings or decorations for fruit, vegetables, meat or fish only.
18	As added level; residue not detected in ready-to-eat food.
19	For use in cocoa fat only.
20	Singly or in combination with other stabilizers, thickeners and/or gums.
21	As anhydrous calcium disodium ethylenediaminetetraacetate.
22	For use in smoked fish products only.
23	As iron.
24	As anhydrous sodium ferrocyanide.
25	For use at GMP in full fat soy flour only.
26	As steviol equivalents.
27	As para-hydroxybenzoic acid.
28	Except for use in wheat flour conforming to the standard for wheat flour at 2,000 mg/kg.
29	For non-standardized food only.
30	As residual NO_3 ion.
31	On the mash used basis.
32	As residual NO_2 ion.
33	As phosphorus.
34	On the anhydrous basis.
35	For use in cloudy juices only.
36	On the residual level basis.
37	For non-standardized food and food conforming to the standard for quick frozen blocks of fish fillets, minced fish flesh and mixtures of fillets and minced fish flesh.
38	On the creaming mixture basis.
39	For use in products containing butter or other fats and oils only.
40	Pentasodium triphosphate (INS 451(i)) only, to enhance the effectiveness of benzoates and sorbates.

41	For use in breading or batter coatings only.
42	As sorbic acid.
43	As tin.
44	As residual SO_2.
45	As tartaric acid.
46	As thiodipropionic acid.
47	On the dry egg yolk weight basis.
48	For use in olives only.
49	For use on citrus fruits only.
50	For use in fish roe only.
51	For use in herbs only.
52	Excluding chocolate milk.
53	For use in coatings only.
54	For use in cocktail cherries and candied cherries only.
55	Within the limits for sodium, calcium, and potassium specified in the standard for infant formulaand formula for special dietary purposes intended for infants: singly or in combination with other sodium, calcium, and/or potassium salts.
56	Excluding products where starch is present.
57	GMP is 1 part benzoyl peroxide and not more than 6 parts of the subject additive by weight.
58	As calcium.
59	For use as a packaging gas only.
60	Except for use as a carbonating agent: the CO_2 in the finished wine shall not exceed 39.2 mg/kg.
61	For use in minced fish only.
62	As copper.
63	For non-standardized food and breaded or batter coatings in food conforming to the standard for quick frozen fish sticks (fish fingers), fish portions and fish fillets – breaded or in batter
64	For use in dry beans only.
65	As a result of carryover from nutrient preparations.
66	As formaldehyde.
67	Except for use in liquid egg whites at 8,800 mg/kg as phosphorus, and in liquid whole eggs at 14,700 mg/kg as phosphorus.
68	For use in products with no added sugar only.

69	For use as a carbonating agent only.
70	As the acid.
71	Calcium, potassium and sodium salts only.
72	On the ready-to-eat basis.
73	Excluding whole fish.
74	Excluding liquid whey and whey products used as ingredients in infant formula.
75	For use in milk powder for vending machines only.
76	For use in potatoes only.
77	For special nutritional uses only.
78	Except for use in pickling and balsamic vinegars at 50,000 mg/kg.
79	For use on nuts only.
80	Equivalent to 2 mg/dm^2 surface application to a maximum depth of 5 mm.
81	Equivalent to 1 mg/dm^2 surface application to a maximum depth of 5 mm.
82	Except for use in shrimp (Crangon crangon and Crangon vulgaris) at 6,000 mg/kg.
83	L(+)-form only.
84	For use in products for infants over 1 year of age only.
85	Use level in sausage casings; residue in sausage prepared with such casings should not exceed 100 mg/kg.
86	For use in whipped dessert toppings other than cream only.
87	On the treatment level basis.
88	As a result of carryover from the ingredient.
89	For use in sandwich spreads only.
90	For use in milk-sucrose mixtures used in the finished product only.
91	Singly or in combination: benzoates and sorbates.
92	Excluding tomato-based sauces.
93	Excluding natural wine produced from Vitis vinifera grapes.
94	For use in loganiza (fresh, uncured sausage) only.
95	For use in surimi and fish roe products only.
96	On the dried weight basis of the high intensity sweetener.
97	On the final cocoa and chocolate product basis.
98	For use in dust control only.
99	For use in fish fillets and minced fish only.

100	For use in crystalline products and sugar toppings only.
101	When used in combination with other emulsifiers, total combined use level not to exceed 15,000 mg/kg as specified in the standard for chocolate and chocolate products.
102	For use in fat emulsions for baking purposes only.
103	Except for use in special white wines at 400 mg/kg.
104	Except for use in bread and yeast-leavened bakery products: maximum 5,000 mg/kg residue.
105	Except for use in dried gourd strips at 5,000 mg/kg.
106	Except for use in Dijon mustard at 500 mg/kg.
107	Except for use of sodium ferrocyanide (INS 535) and potassium ferrocyanide (INS 536) in foodgrade dendridic salt at 29 mg/kg as anhydrous sodium ferrocyanide.
108	For use on coffee beans only.
109	Use level reported as 25 lbs/1,000 gal x (0.45 kg/lb) x (1 gal/3.75 L) x (1 L/kg) x (10E6 mg/kg) = 3,000 mg/kg
110	For use in frozen French fried potatoes only.
111	Except for use in dried glucose syrup used in the manufacture of sugar confectionery at 150 mg/kg and glucose syrup used in the manufacture of sugar confectionery at 400 mg/kg.
112	For use in grated cheese only.
113	As acesulfame potassium equivalents (the reported maximum level can be converted to an aspartame-acesulfame salt basis by dividing by 0.44). Combined use of aspartame-acesulfame salt with individual acesulfame potassium or aspartame should not exceed the individual maximum levels for acesulfame potassium or aspartame (the reported maximum level can be converted to aspartame equivalents by dividing by 0.68).
114	Excluding cocoa powder.
115	For use in pineapple juice only.
116	For use in doughs only.
117	Except for use in fresh, uncured sausage at 1,000 mg/kg.
118	Except for use in fresh, cured sausage at 1,000 mg/kg.
119	As aspartame equivalents (the reported maximum level can be converted to an aspartame acesulfame salt basis by dividing by 0.64). Combined use of aspartame-acesulfame salt with individual

	aspartame or acesulfame potassium should not exceed the individual maximum levels for aspartame or acesulfame potassium (the reported maximum level can be converted to acesulfame potassium equivalents by multiplying by 0.68).
120	Except for use in caviar at 2,500 mg/kg.
121	Except for use in fermented fish products at 1,000 mg/kg.
123	Except for use in beverages with pH greater than 3.5 at 1,000 mg/kg.
124	For use in products containing less than 7% ethanol only.
125	For use in a mixture with vegetable oil only, as a release agent for baking pans.
126	For use in releasing dough in dividing or baking only.
127	On the served to the consumer basis.
128	Tartaric acid (INS 334) only.
129	For use as an acidity regulator in grape juice only.
130	Singly or in combination: butylated hydroxyanisole (INS 320), butylated hydroxytoluene (INS 321), tertiary butylated hydroquinone (INS 319), and propyl gallate (INS 310).
131	For use as a flavour carrier only.
132	Except for use in semi-frozen beverages at 130 mg/kg on a dried basis.
133	Any combination of butylated hydroxyanisole (INS 320), butylated hydroxytoluene (INS 321), and propyl gallate (INS 310) at 200 mg/kg, provided that single use limits are not exceeded.
134	Except for use in cereal-based puddings at 500 mg/kg.
135	Except for use in dried apricots at 2,000 mg/kg, bleached raisins at 1,500 mg/kg, desiccated coconut at 200 mg/kg and coconut from which oil has been partially extracted at 50 mg/kg.
136	For use to prevent browning of certain light coloured vegetables only.
137	Except for use in frozen avocado at 300 mg/kg.
138	For use in energy-reduced products only.
139	For use in mollusks, crustaceans, and echinoderms only.
140	Except for use in canned abalone (univalve hydrolyse) at 1,000 mg/kg.
141	For use in white chocolate only.
142	Excluding coffee and tea.

143	For use in fruit juice-based drinks and dry ginger ale only.
144	For use in sweet and sour products only.
145	For use in energy reduced or no added sugar products only.
146	Beta-carotene (synthetic) (INS 160a(i)) only.
147	Excluding whey powders for infant food.
148	Except for use in microsweets and breath freshening mints at 10,000 mg/kg.
149	Except for use in fish roe at 100 mg/kg.
150	For use in soy-based formula only.
151	Except for use in hydrolysed protein and/or amino acid-based formula at 1,000 mg/kg.
152	For use in frying only.
153	For use in instant noodles only.
154	For use in coconut milk only.
155	For use in frozen, sliced apples only.
156	Except for use in microsweets and breath freshening mints at 2,500 mg/kg.
157	Except for use in microsweets and breath freshening mints at 2,000 mg/kg.
158	Except for use in microsweets and breath freshening mints at 1,000 mg/kg.
159	For use in pancake syrup and maple syrup only.
160	For use in ready-to-drink products and pre-mixes for ready-to-drink products only.
162	For use in dehydrated products and salami-type products only.
163	Except for use in microsweets and breath freshening mints at 3,000 mg/kg.
164	Except for use in microsweets and breath freshening mints at 30,000 mg/kg.
165	For use in products for special nutritional use only.
166	For use in milk-based sandwich spreads only.
167	For use in dehydrated products only.
168	Quillaia extract type 1 (INS 999(i)) only.
169	For use in fat-based sandwich spreads only.
170	Excluding products conforming to the standard for fermented milks.
171	Excluding anhydrous milkfat.

172	Except for use in fruit sauces, fruit toppings, coconut cream, coconut milk and “fruit bars” at 50 mg/kg.
173	Excluding instant noodles containing vegetables and eggs.
174	Singly or in combination: sodium aluminosilicate (INS 554), calcium aluminium silicate (INS 556),and aluminium silicate (INS 559).
175	Except for use in jelly-type fruit-based desserts at 200 mg/kg.
176	For use in canned liquid coffee only.
177	For non-standardized food and minced fish flesh and breaded or batter coatings conforming to the standard for quick frozen fish sticks (fish fingers), fish portions and fish fillets –breaded or in batter .
178	As carminic acid.
179	For use in restoring the natural colour lost in processing only.
180	Singly or in combination: butylated hydroxyanisole (BHA, INS 320) and butylated hydroxytoluene (BHT, INS 321).
181	As anthocyanin.
182	Excluding coconut milk.
183	Products conforming to the standard for chocolate and chocolate products may only use colours for surface decoration.
184	For use in nutrient coated rice grain premixes only.
185	As norbixin.
186	For use in flours with additives only.
187	Ascorbyl palmitate (INS 304) only.
188	If used in combination with aspartame-acesulfame salt (INS 962), the combined maximum use level, expressed as acesulfame potassium, should not exceed this level.
189	Excluding rolled oats.
190	Except for use in fermented milk drinks at 500 mg/kg.
191	If used in combination with aspartame-acesulfame salt (INS 962), the combined maximum use level, expressed as aspartame, should not exceed this level.
192	For use in liquid products only.
193	For use in crustacean and fish pastes only.
194	For use in instant noodles conforming to the standard for instant noodles only.
195	Singly or in combination: butylated hydroxyanisole (BHA, INS 320),

	butylated hydroxytoluene (BHT, INS 321) and tertiary butylhydroquinone (TBHQ, INS 319).
196	Singly or in combination: butylated hydroxyanisole (BHA, INS 320), butylated hydroxytoluene (BHT, INS 321) and ropyl gallate (INS 310).
197	Singly or in combination: butylated hydroxytoluene (BHT, INS 321) and propyl gallate (INS 310).
198	For use in solid products (e.g., energy, meal replacement or fortified bars) only.
199	Except for use in microsweets and breath freshening mints at 6,000 mg/kg as steviol equivalents.
200	Except for use in ham of pork loin (cured and non-heat-treated) at 120 mg/kg as steviol equivalents
201	For use in flavoured products only.
202	For use in brine used in the production of sausage only.
203	For use in chewable supplements only.
204	Except for use in longan and lichee at 50 mg/kg.
205	Except for use to prevent browning of certain light colored vegetables at 50 mg/kg.
206	Except for use as a bleaching agent in products conforming to the standard for aqueous coconut products at 30 mg/kg.
207	Except for use in soybean sauce intended for further processing at 50,000 mg/kg.
208	For use in dried and dehydrated products only.
209	Excluding products conforming to the standard for blend of skimmed milk and vegetable fat in powdered form.
210	For non-standardized food and fish filets and minced fish flesh conforming to the standard for quick frozen fish sticks (fish fingers), fish portions and fish fillets – breaded or in batter.
211	For use in noodles only.
212	Except for use in products conforming to the standard for bouillon and consommés at 3,000 mg/kg.
213	For use in liquid products containing high intensity sweeteners only.
214	Excluding products conforming to the standard for dairy fat spreads.
215	Excluding products conforming to the standard for fat spreads and blended spreads.

216	For use in maize-based products only.
217	Except for use in toppings at 300 mg/kg.
218	Only hydrolyse can be used as preservatives and antioxidants in the products covered by the standard for desiccated coconut.
219	Except for use in non-alcoholic aniseed-based, coconut-based, and almond-based drinks at 5,000 mg/kg.
220	For use in flavoured products heat treated after fermentation only.
221	For use in potato dough and pre-fried potato slices only.
222	For use in collagen-based casings with a water activity greater than 0.6 only.
223	Except for use in products containing added fruits, vegetables, or meats at 3,000 mg/kg.
224	Excluding aromatized beer.
225	Except for use in self-raising flour at 12,000 mg/kg.
226	Except for use as a meat tenderizer at 35,000 mg/kg.
227	For use in sterilized and UHT treated milks only.
228	Except for use to stabilize higher protein liquid whey used for further processing into whey protein concentrates at 1,320 mg/kg.
229	For use as a flour treatment agent, raising agent or leavening agent only.
230	For use as an acidity regulator only.
231	For use in flavoured fermented milks and flavoured fermented milks heat treated after fermentation only.
232	For use in vegetable fats conforming to the standard for edible fats and oils not covered by individual standards only.
233	As nisin.
234	For use as a stabilizer or thickener only.
235	For use in reconstituted and recombined products only.
236	Excluding products conforming to the standard for cream and prepared creams (reconstituted cream, recombined cream, prepackaged liquid cream).
237	Excluding products conforming to the standard for processed cereal-based foods for infants and young children
238	Except for use in products corresponding to the standard for processed cereal-based foods for infants and young children) at GMP.

239	Excluding products conforming to the standard for canned baby foods.
240	The use level is within the limit for sodium listed in the standard for canned baby foods
241	For use in surimi products only.
242	For use as an antioxidant only.
243	For use in products conforming to the standard for processed cereal-based foods for infants and young children only, as a raising agent.
244	For use in biscuit dough only.
245	For use in pickled vegetables only.
246	Singly or in combination: aluminium ammonium hydrolys (INS 523) and sodium aluminium phosphates (acidic and basic; (INS 541(i),(ii)).
247	For use in kuzukiri and harusame (starch based products) only.
248	For use as a raising agent only.
249	For use as a raising agent in mixes for steamed breads and buns only.
250	For use in boiled mollusks and tsukudani only.
251	For use in processed hydrolys cheese only.
252	For use in self-rising flour and self-rising corn meal only.
253	For use in dry mix hot chocolate only.
254	For use in salt applied to dry salted cheeses during manufacturing only.
255	Except for use in seasonings applied to foods in food category 15.1 at 1,700 mg/kg.
256	For use in noodles, gluten-free pasta and pasta intended for hypoproteic diets only.
257	For use in shrimps and prawns only.
258	Excluding maple syrup.
259	Singly or in combination: sodium aluminosilicate (INS 554) and calcium aluminium silicate (INS 556).
260	For use in powdered beverage whiteners only.
261	For use in heat-treated buttermilk only.
262	For use in edible fungi and fungus products only.
263	Except for use in pickled fungi at 20,000 mg/kg.
264	Except for use in sterilized fungi at 5,000 mg/kg: citric acid (INS 330) and lactic acid (INS 270),singly or in combination.

265	For use in quick frozen French fried potatoes only, as a sequestrant.
266	Excluding salted atlantic herring and sprat.
267	Excluding products conforming to the standard for salted fish and dried salted fish of the gadidae family of fishes , the standard for dried shark fins, the standard for crackers from marine and freshwater fish, crustaceans and molluscan shellfish , and the standard for boiled dried salted anchovies.
268	Singly or in combination: ins 471, 472a, 472b and 472c in products conforming to the standard forprocessed cereal-based foods for infants and young children.
269	Singly or in combination with other modified starches used as thickeners in products conforming to the standard for processed cereal-based foods for infants and young children.
270	For use at 60,000 mg/kg, singly or in combination with other starch thickeners in products conforming to the standard for canned baby foods.
271	For use in products conforming to the standard for canned baby foods.
272	Singly or in combination: ins 410, 412, 414, 415 and 440 at 20,000 mg/kg in gluten-free cereal based foods, and 10,000 mg/kg in other products conforming to the standard for processed cereal- based foods for infants and young children .
273	Singly or in combination: ins 410, 412, 414, 415 and 440 except for use at 20,000 mg/kg in glutenfree cereal based foods in products conforming to the standard for processed cereal-based foods for infants and young children .
274	For use at 15,000 mg/kg in products conforming to the standard for processed cereal-based foods for infants and young children.
275	For use at 1,500 mg/kg in products conforming to the standard for canned baby foods.
276	Singly or in combination with other modified starches used as thickeners in products conforming to the standard for canned baby foods.
277	Excluding virgin and cold pressed oils and products conforming to the standard for olive oils and olive pomace oils.
278	For use in whipped cream and cream packed under pressure only.

279	Except for products conforming to the standard for edible fungi and fungus products.
280	For use in pickled radish only.
281	For use in fresh minced meat which contains other ingredients apart from comminuted meat only.
282	Only non-amidated pectins may be used in the standard for canned baby foods
283	For use in canned fruit-based baby foods conforming to the standard for canned baby foods only.
284	Singly or in combination: INS 1412, 1413, 1414 and 1440 in products conforming to the standard for infant formula and formulas for special medical purposes intended for infants.
285	Singly or in combination: INS 1412, 1413, 1414 and 1422 in products conforming to the standardfor follow-up formula.
286	For use in products conforming to the standard for luncheon meat andthe standard for cooked cured chopped meat.
288	For use in products conforming to the standard for cooked cured ham and cooked cured pork shoulder.
289	For use of sodium dihydrogen phosphate (INS 339(i)), disodium hydrogen phosphate (INS 339(ii)),trisodium phosphate (INS 339(iii)), potassium dihydrogen phosphate (INS 340(i)), dipotassium hydrogen phosphate (INS 340(ii)), tripotassium phosphate (INS 340(iii)), calcium dihydrogen phosphate (INS 341(i)), calcium hydrogen phosphate (INS 341(ii)), tricalcium phosphate (INS 341(iii), disodium diphosphate (INS 450(i)), trisodium diphosphate (INS 450(ii)), tetrasodium diphosphate (INS 450(iii)), tetrapotassium diphosphate (INS 450(v)), calcium dihydrogen diphosphate (INS 450(vii)), pentasodium triphosphate (INS 451(i)), pentapotassium triphosphate (INS 451(ii)), sodium polyphosphate (INS 452(i)), potassium polyphosphate (INS 452(ii)), sodium calcium polyphosphate (INS 452(iii)), calcium polyphosphate (INS 452(iv)), ammonium polyphosphate (INS 452(v)), and bone phosphate (INS 542) as humectants in products conforming to the standard for cooked cured ham and cooked cured pork shoulder . The total amount of phosphates (naturally present and added) shall not exceed 3,520 mg/kg as phosphorus.

290	For use in products conforming to the standard for luncheon meat and cooked cured chopped meat at 15 mg/kg to replace loss of colour in product with binders only.
291	Except for use of beta-apo-8'-carotenal (INS 160e) and beta-apo-8'-carotenoic acid, methyl or ethyl ester (INS 160f) at 35 mg/kg.
292	Except for use in hydrolysed protein and/or amino acid-based formula at 25,000 mg/kg.
293	On the saponin basis.
294	Except for use in liquid products at 600 mg/kg as steviol equivalents.
295	For use in products conforming to the standard for canned baby foods only, as an acidity regulator.
296	Except for use in perilla in brine at 780 mg/kg.
297	The level in the ready-to-eat food shall not exceed 200 mg/kg on the anhydrous basis.
298	For use in provolone cheese only.
299	For use at 400 mg/kg as phosphorous singly or in combination in breaded or batter coating inaccordance with standard for quick frozen fish sticks (fish fingers), fish portions and fish fillets– breaded or in batter.
300	For use in salted squid only.
301	Interim maximum level.
302	For use of sodium dihydrogen phosphate (INS 339(i)), disodium hydrogen phosphate (INS 339(ii),trisodium phosphate (INS 339(iii)), potassium dihydrogen phosphate (INS 340(i)), dipotassium hydrogen phosphate (INS 340(ii)), tripotassium phosphate (INS 340(iii)), calcium dihydrogen phosphate (341(i)), calcium hydrogen phosphate (INS 341(ii)), tricalcium phosphate (INS 341(iii)), disodium diphosphate (INS 450(i)), trisodium diphosphate (INS 450(ii)), tetrasodium diphosphate(INS 450(iii)), tetrapotassium diphosphate (INS 450(v)), calcium dihydrogen diphosphate (INS 450(vii)), pentasodium triphosphate (INS 451(i)), pentapotassium triphosphate (INS 451(ii)), sodium polyphosphate (INS 452(i)), potassium polyphosphate (INS 452(ii)), sodium calcium polyphosphate (INS 452(iii)), calcium polyphosphate (INS 452(iv)), ammonium polyphosphate (INS 452(v)), and bone phosphate (INS 542) as humectants in products conforming to the standard for luncheon

	meat and cooked cured chopped meat at 1320 mg/kg as phosphorous. The total amount of phosphates (naturally present and added) shall not exceed 3,520 mg/kg as phosphorous.
303	For use as a pH stabilizer in soured cream butter only.
321	For use in powdered mixes only.
327	For use in fish products cooked in soy sauce.
330	Except for use in canned products.
340	Except for products not conforming to the Codex standard for bouillons and consommés (CODEX STAN 117-1981) at 100 mg/kg.
[69][408	Only for bakery shortening]
FS01	Glucose oxidase from Aspergillus niger, A. oryzae, Penicillium chrysogenum
FS02	Lipase from Aspergillus niger, A. oryzae, A. flavus, Rhizopus arrhizus, R. delemar, R. nigricans, R. niveus, Mucor javanicus, M. miehei, M. pusillus, Brevibacterium lineus, Candida lipolytica
FS03	Xylanase from Aspergillus niger, Sporotrichum dimorphosporum, Streptomyces sp., Trichoderma reesei, Humicola insolens, Bacillus licheniformis
[31][FS04a	Lactic acids, L(-) or DL malic acid and L(+) tartaric and citric acids can be only be added to musts under condition that the initial acidity content is not raised by more than 54 meq/l (i.e. 4 gm/l expressed in tartaric acid)].
[70][FS04b	For use in pre-packed coconut water only.]
XS89	Excluding products conforming to standard for luncheon meat.
XS96	Excluding products conforming to the standard for cooked cured ham.
XS97	Excluding products conforming to the standard for cooked cured pork shoulder.
XS98	Excluding products conforming to the standard for cooked cured chopped meat.

[73][XS243	Excluding products conforming to the standard for fermented milks]
XT99	In case of thermally processed fruit beverages/ fruit drinks/ready-to-serve fruit beverages, half of the recommended maxiumum level is permitted
XT100	70 mg/kg for thermally processed fruit beverages/ fruit drinks/ready-to- serve fruit beverages
XT101	300 mg/kg for thermally processed fruit beverages/ fruit drinks/ready-to- serve fruit beverages
XT102	On dilution except in cordial and barley water
[52][323	For use as firming agent
348	Singly or in combination: Sucrose esters of fatty acids (INS 473), sucrose oligoesters, type and type II (INS 473a) and sucroglycerides (INS 474)
[81][358	Except for use in fish oils at 6,000 mg/kg, singly or in combination]
359	Excluding dairy fat spreads with ≥ 70% milk fat content
360	In dairy fat spreads limited to products with < 70% fat content or baking purposes only.
363	For use at 50,000 mg/kg for emulsified oils used in the production of noodles or bakery products.
366	10,000 mg/kg in imitation chocolate with >5% water content.
367	For use at 10,000 mg/kg in candy containing not less than 10% oil
368	For use at 10,000 mg/kg in whipped decorations
389	Except for use at 500 mg/kg in products containing nut paste
XS 86	Excluding products conforming to the Standard for Cocoa Butter
XS 87	Excluding products conforming to the Standard for Chocolate and Chocolate Products
XS 105	Excluding products conforming to the Standard for Cocoa Powders (Cocoas) and Dry Mixtures of Cocoa and Sugars
XS141	Excluding products conforming to the Standard for Cocoa (Cacao) Mass (Cocoa/chocolate liquor) and Cocoa Cake
XS240	Excluding products conforming to the Standard for Aqueous Coconut Products
XS314R	Excluding products conforming to the Standard for Date Paste]

GMP Table Provisions For all Food Categories	
The following additives, as indicated may be used in all food categories (except those categories listed in the 'Annex to GMP' list) under the conditions of Good Manufacturing Practice (GMP) as outlined in the 3.1(8)	
INS No.	**Food Additive**
260	Acetic acid, glacial
472a	Acetic and fatty acid esters of glycerol
1422	Acetylated distarch adipate
1414	Acetylated distarch phosphate
1451	Acetylated oxidized starch
1401	Acid-treated starch
406	Agar
400	Alginic acid
1402	Alkaline treated starch
403	Ammonium alginate
503(i)	Ammonium carbonate
510	Ammonium chloride
503(ii)	Ammonium hydrogen carbonate
527	Ammonium hydroxide
1100(i)	alpha-Amylase from Aspergillus oryzae var.
1100(iv)	alpha-Amylase from Bacillus megaterium expressed in Bacillus subtilis
1100(v)	alpha-Amylase from Bacillus stearothermophilus expressed in Bacillus subtilis
1100(ii)	alpha-Amylase from Bacillus stearothermophilus
1100(iii)	alpha-Amylase from Bacillus subtilis
300	Ascorbic acid, L-
162	Beet red
1403	Bleached starch
1101(iii)	Bromelain
629	Calcium 5'-guanylate
633	Calcium 5'-inosinate
634	Calcium 5'-ribonucleotides
263	Calcium acetate
404	Calcium alginate

302	Calcium ascorbate
170(i)	Calcium carbonate
509	Calcium chloride
623	Calcium di-L-glutamate
578	Calcium gluconate
526	Calcium hydroxide
327	Calcium lactate
352(ii)	Calcium malate, DL-
529	Calcium oxide
282	Calcium propionate
552	Calcium silicate
516	Calcium sulfate
150a	Caramel I – plain caramel
1100(vi)	Carbohydrase from Bacillus licheniformis
290	Carbon dioxide
410	Carob bean gum
407	Carrageenan
427	Cassia gum
140	Chlorophylls
330	Citric acid
472c	Citric and fatty acid esters of glycerol
468	Cross-linked sodium carboxymethyl cellulose (Cross-linked-cellulose gum)
424	Curdlan
457	Cyclodextrin, alpha-
458	Cyclodextrin, gamma-
1504(i)	Cyclotetraglucose
1504(ii)	Cyclotetraglucose syrup
1400	Dextrins, roasted starch
628	Dipotassium 5'-guanylate
627	Disodium 5'-guanylate
631	Disodium 5'-inosinate
635	Disodium 5'-ribonucleotides
1412	Distarch phosphate
315	Erythorbic acid (Isoascorbic acid)
968	Erythritol

462	Ethyl cellulose
467	Ethyl hydroxyethyl cellulose
297	Fumaric acid
418	Gellan gum
575	Glucono delta-lactone
1102	Glucose oxidase (Note FS01)
620	Glutamic acid, L(+)-
422	Glycerol
626	Guanylic acid, 5'-
412	Guar gum
414	Gum arabic (Acacia gum)
507	Hydrochloric acid
463	Hydroxypropyl cellulose
1442	Hydroxypropyl distarch phosphate
464	Hydroxypropyl methyl cellulose
1440	Hydroxypropyl starch
630	Inosinic acid, 5'-
953	Isomalt (Hydrogenated isomaltulose)
416	Karaya gum
425	Konjac flour
270	Lactic acid, L-, D- and DL-
472b	Lactic and fatty acid esters of glycerol
966	Lactitol
322(i), (ii)	Lecithins
1104	Lipases (Note FS02)
160d(iii)	Lycopene, Blakeslea trispora
160d(i)	Lycopene, synthetic
160d(ii)	Lycopene, tomato
504(i)	Magnesium carbonate
511	Magnesium chloride
625	Magnesium di-L-glutamate
580	Magnesium gluconate
528	Magnesium hydroxide
504(ii)	Magnesium hydroxide carbonate
329	Magnesium lactate, DL-
530	Magnesium oxide

553(i)	Magnesium silicate, synthetic
[82][**470 (iii)**	Magnesium stearate]
518	Magnesium sulfate
296	Malic acid, DL-
965(i)	Maltitol
965(ii)	Maltitol syrup
421	Mannitol
461	Methyl cellulose
465	Methyl ethyl cellulose
460(i)	Microcrystalline cellulose (Cellulose gel)
471	Mono- and di-glycerides of fatty acids
624	Monoammonium L-glutamate
622	Monopotassium L-glutamate
621	Monosodium L-glutamate
1410	Monostarch phosphate
941	Nitrogen
942	Nitrous oxide
1404	Oxidized starch
1101(ii)	Papain
440	Pectins
1413	Phosphated distarch phosphate
1200	Polydextroses
964	Polyglycitol syrup
1202	Polyvinylpyrrolidone, insoluble
632	Potassium 5’-inosinate
261	Potassium acetates
402	Potassium alginate
303	Potassium ascorbate
501(i)	Potassium carbonate
508	Potassium chloride
332(i)	Potassium dihydrogen citrate
577	Potassium gluconate
501(ii)	Potassium hydrogen carbonate
515(ii)	Potassium hydrogen sulfate
525	Potassium hydroxide

326	Potassium lactate
351(ii)	Potassium malate
283	Potassium propionate
515(i)	Potassium sulfate
460(ii)	Powdered cellulose
407a	Processed eucheuma seaweed
944	Propane
280	Propionic acid
1101(i)	Protease
1204	Pullulan
470(i)	Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium
470(ii)	Salts of oleic acid with calcium, potassium and sodium
551	Silicon dioxide, amorphous
350(ii)	Sodium DL-malate
262(i)	Sodium acetate
401	Sodium alginate
301	Sodium ascorbate
500(i)	Sodium carbonate
466	Carboxymethyl cellulose
469	Sodium carboxymethyl cellulose, enzymatically hydrolysed (Cellulose gum, enzymatically hydrolyzed)
331(i)	Sodium dihydrogen citrate
316	Sodium erythorbate (Sodium isoascorbate)
365	Sodium fumarates
576	Sodium gluconate
350(i)	Sodium hydrogen DL-malate
500(ii)	Sodium hydrogen carbonate
514(ii)	Sodium hydrogen sulfate
524	Sodium hydroxide
325	Sodium lactate
281	Sodium propionate
500(iii)	Sodium sesquicarbonate
514(i)	Sodium sulfate
420(i)	Sorbitol
420(ii)	Sorbitol syrup

1420	Starch acetate
1450	Starch sodium octenyl succinate
1405	Starches, enzyme treated
553(iii)	Talc
417	Tara gum
957	Thaumatin
171	Titanium dioxide
413	Tragacanth gum
1518	Triacetin
380	Triammonium citrate
333(iii)	Tricalcium citrate
332(ii)	Tripotassium citrate
331(iii)	Trisodium citrate
415	Xanthan gum
967	Xylitol

ANNEX TO GMP Table

Food Categories or Individual Food Items where GMP Table shall not apply

Sr. No	Category number	Food category
1.	1.1.1	Milk and buttermilk (plain) (excluding heat-treated buttermilk)
2.	1.1.1.1	Milk (plain)
3.	1.1.1.2	Buttermilk (plain)
4.	1.2	Fermented and renneted milk products (plain) excluding food category 1.1.2 (dairy based drinks)
5.	1.2.1	Fermented and renneted milk products (plain), excluding food category 1.1.2 (dairy-based drinks)
6.	1.2.1.1	Fermented milks (plain), not heat-treated after fermentation
7.	1.2.1.2	Fermented milks (plain), heat-treated after fermentation
8.	1.2.2	Renneted milk (plain)
9.	1.4.1	Pasteurized cream (plain)
10.	1.4.2	Sterilized and UHT creams, whipping or whipped creams, and reduced fat creams (plain)
11.	1.6.3	Whey Cheese
12.	1.6.6	Whey protein cheese
13.	1.8.2	Dried whey and whey products, excluding whey cheese
14.	2.1	Fats and oils essentially free from water
15.	2.1.1	Butter oil, anhydrous milkfat, ghee
16.	2.1.2	Vegetable oils and fats

Sr. No	Category number	Food category
17.	2.1.3	Lard, tallow, fish oil, and other animal fats
18.	2.2.1	Butter
19.	4.1.1	Fresh fruit
20.	4.1.1.1	Untreated fresh fruit
21.	4.1.1.2	Surface-treated fresh fruit
22.	4.1.1.3	[52][Peeled or cut, minimally processed fruit]
23.	4.2.1	Fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes,and aloe vera), seaweeds, and nuts and seeds
24.	4.2.1.1	Untreated fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes [(including soybeans)], and aloe vera), seaweeds, and nuts and seeds
25.	4.2.1.2	Surface-treated fresh vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds
26.	4.2.1.3	[52][Peeled, cut or shredded minimally processed vegetables ((including mushrooms and fungi, roots and tubers, fresh pulses and legumes, and aloe vera) sea weeds, nuts and seeds)]
27.	4.2.2.1	Frozen vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds
28.	4.2.2.7	Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweed products, excluding fermented soybean products of food categories 6.8.6, 6.8.7, 12.9.1, 12.9.2.1 and 12.9.2.3

Sr. No	Category number	Food category
29.	6.1	Whole, broken or flaked grain, including rice
30.	6.2	Flours and starches (including soybean powder)
31.	6.2.1	Flours
32.	6.2.2	Starches
33.	6.4.1	Fresh pastas and noodles and like products
34.	6.4.2	Dried pastas and noodles and like products
35.	8.1	Fresh meat, poultry, and game
36.	8.1.1	Fresh meat, poultry, and game, whole pieces or cuts
37.	8.1.2	Fresh meat, poultry, and game, comminuted
38.	9.1	Fresh fish and fish products, including molluscs, crustaceans and echinoderms
39.	9.1.1	Fresh fish
40.	9.1.2	Fresh mollusks, crustaceans, and echinoderms
41.	9.2	Processed fish and fish products, including molluscs, crustaceans and echinoderms
42.	9.2.1	Frozen fish, fish fillets, and fish products, including mollusks, crustaceans, and echinoderms
43.	9.2.2	Frozen battered fish, fish fillets, and fish products, including mollusks, crustaceans, and echinoderms
44.	9.2.3	Frozen minced and creamed fish products, including mollusks, crustaceans, and echinoderms
45.	9.2.4	Cooked and/or fried fish and fish products, including mollusks, crustaceans, and echinoderms
46.	9.2.4.1	Cooked fish and fish products

Sr. No	Category number	Food category
47.	9.2.4.2	Cooked mollusks, crustaceans, and echinoderms
48.	9.2.4.3	Fried fish and fish products, including mollusks, crustaceans, and echinoderms
49.	9.2.5	Smoked, dried, fermented, and/or salted fish and fish products, including mollusks, crustaceans, and echinoderms
50.	10.1	Fresh eggs
51.	10.2.1	Liquid egg products
52.	10.2.2	Frozen egg products
53.	11.1	Refined and raw sugars
54.	11.1.1	White sugar, dextrose anhydrous, dextrose monohydrate, fructose
55.	11.1.2	Powdered sugar, powdered dextrose
56.	11.1.3	Soft white sugar, soft brown sugar, glucose syrup, dried glucose syrup, raw cane sugar
57.	11.1.3.1	Dried glucose syrup used to manufacture sugar confectionery
58.	11.1.3.2	Glucose syrup used to manufacture sugar confectionery
59.	11.1.4	Lactose
60.	11.1.5	Plantation or mill white sugar
[52][60A	11.1.6	Gur or Jaggery
60B	11.1.6.1	Cane Jaggery/Gur
60C	11.1.6.2	Palm Jaggery/Gur
60D	11.1.6.3	Date Jaggery/Gur]
61.	11.2	Brown sugar, excluding products of food category 11.1.3 (soft white sugar, soft brown sugar, glucose syrup, dried

Sr. No	Category number	Food category
		glucose syrup, raw cane sugar)
62.	11.3	Sugar solutions and syrups, also (partially) inverted, including treacle and molasses, excluding products of food category 11.1.3 (soft white sugar, soft brown sugar, glucose syrup, dried glucose syrup, raw cane sugar)
63.	11.4	Other sugars and syrups (e.g., xylose, maple syrup, sugar toppings)
64.	11.5	Honey
65.	12.1	Salt and salt substitutes
66.	12.1.1	Salt
67.	12.1.2	Salt substitutes
68.	12.2.1	Herbs and spices (EXCLUDING SPICES)
69.	14.1.1	Waters
70.	14.1.1.1	Natural mineral waters and source waters
71.	14.1.1.2	Table waters and soda waters
72.	14.1.2	Fruit and vegetable juices
73.	14.1.2.1	Fruit juice
74.	14.1.2.2	Vegetable juice
75.	14.1.2.3	Concentrates for fruit juice
76.	14.1.2.4	Concentrates for vegetable juice
77.	14.1.3	Fruit and vegetable nectars
78.	14.1.3.1	Fruit nectar

Sr. No	Category number	Food category
79.	14.1.3.2	Vegetable nectar
80.	14.1.3.3	Concentrates for fruit nectar
81.	14.1.3.4	Concentrates for vegetable nectar
82.	14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal beverages, excluding cocoa
83.	14.2.3	Grape wines
84.	14.2.3.1	Still grape wine
85.	14.2.3.2	Sparkling and semi-sparkling grape wines
86.	14.2.3.3	Fortified grape wine, grape liquor wine, and sweet grape wine]

APPENDIX B: Microbiological Requirements:

[28][Table 1A

Microbiological Requirements for Fish and Fishery products -Hygiene Indicator Organisms

Sl. No.	Product Category*	Aerobic Plate Count				Coagulase positive Staphylococci				Yeast &mold count				Stage where criterion applies	Action in case of unsatisfactory results
		Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)			
		n	c	m	M	n	c	m	M	n	c	m	M		
1.	Chilled/Frozen Finfish	5	3	$5x10^5$	$1x10^7$	-	-	-	-	-	-	-	-	After Chilling/Freezing.	Improvement in hygiene; Time-Temperature Control along value chain
2.	Chilled/Frozen Crustaceans	5	3	$1x10^6$	$1x10^7$	-	-	-	-	-	-	-	-	After Chilling/Freezing	Improvement in hygiene; Time-Temperature Control along value chain
3.	Chilled/Frozen Cephalopods	5	2	$1x10^5$	$1x10^6$	-	-	-	-	-	-	-	-	After Chilling/Freezing	Improvement in hygiene; Time-Temperature Control along value chain
4.	Live Bivalve Molluscs[#]	-	-	-	-	-	-	-	-	-	-	-	-	-	-

5.	Chilled/Frozen Bivalves	5	2	$1x10^5$	$1x10^6$	-		-	-	-	-	-	-	After Chilling/Freezing	Improvement in hygiene; Time-Temperature Control along value chain
6.	Frozen Cooked Crustaceans/Frozen Heat Shucked Mollusc	5	2	$1x10^5$	$1x10^6$	5	2	$1x10^2$	$1x10^3$	-	-	-	-	End of Manufacturing process	Improvement in hygiene; Selection of raw material; Time-Temperature Control along value chain; process control
7.	Dried/Salted and Dried Fishery Products	5	0	$1x10^5$		-	-	-	-	5	2	100	500	End of Manufacturing process	Improvement in hygiene; Selection of raw material; Adequate drying (water activity ≤ 0.78)
8.	Thermally Processed Fishery Products	Commercially Sterile**				-	-	-	-	-	-	-	-	End of Manufacturing process	Revalidation of thermal process
9.	Fermented Fishery Products	-	-	-	-	5	1	$1x10^2$	$1x10^3$	5	0	100		End of Manufacturing process	Improvement in hygiene; Selection of raw material
10.	Smoked Fishery Products	5	0	$1x10^5$		5	2	$1x10^2$	$1x10^3$	-	-	-	-	End of Manufacturing process	Improvement in hygiene; Time-

														Temperature Control along value chain
11.	Accelerated Freeze Dried Fishery Products	5	0	$1x10^4$		5	0	100		-	-	-	-	End of Manufacturing process	Selection of raw material: Improvement in hygiene; along value chain
12.	Fish Mince/Surimi and Analogues	5	2	$1x10^5$	$1x10^6$	5	2	$1x10^2$	$1x10^3$	-	-	-	-	End of Manufacturing process	Selection of raw material: Improvement in hygiene
13.	Fish Pickle	5	0	$1x10^3$		5	1	$1x10^2$	$1x10^3$	5	0	100		End of manufacturing process (before packing)	Improvement in hygiene; Control of pH/acidity, selection of ingredients
14.	Battered and Breaded Fishery Products	5	2	$1x10^5$	$1x10^7$	5	1	$1x10^2$	$1x10^3$	5	0	100		End of Manufacturing process	Improvement in hygiene; Time-Temperature Control
15.	Convenience Fishery Products	5	2	$1x10^3$	$1x10^4$	5	2	$1x10^2$	$1x10^3$	-	-	-		End of Manufacturing process	Improvement in hygiene; Time-Temperature control of batter mix
16.	Powdered Fish Based Products	5	2	$1x10^4$	$1x10^5$	5	2	1x10	$1x10^2$	5	0	100		End of Manufacturing process	Improvement in hygiene; Selection of raw material

	Test method	IS: 5402/ISO 4833	IS 5887 : Part 2 or IS 5887 Part 8 (Sec 1)/ ISO: 6888-1 or IS 5887 Part 8 (Sec 2)/ISO 6888-2	IS:5403/ISO 21527		

**Commercial sterility should be established as per APHA (2015). Canned Foods—Tests for Commercial Sterility. Compendium of Methods for the Microbiological Examination of Food.

No hygienic indicators are currently prescribed for the Live Bivalve Molluscs

Table 1B

Microbiological Requirements for Fish and Fishery products –Safety Indicator Organisms

Sl. No.	Product Category*	*Escherichia coli*				*Salmonella*				*Vibriocholerae* (O1 and O139)				*Listeria monocytogenes*				*Clostridium botulinum*			
		Sampling Plan		Limits (MPN/g)		Sampling Plan		Limits		Sampling Plan		Limits		Sampling Plan		Limits		Sampling Plan		Limits(MPN /g)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
1.	Chilled/Frozen Finfish	5	3	11	500	5	0	Absent/25g		5	0	Absent/25g		-	-	-	-	-	-	-	-
2.	Chilled/Frozen Crustaceans	5	3	11	500	5	0	Absent/25g		5	0	Absent/25g		-	-	-	-	-	-	-	-
3.	Chilled/frozen Cephalopods	5	0	20		5	0	Absent/25g		5	0	Absent/25g		-	-	-	-	-	-	-	-
4.	Live Bivalve Molluscs	5	1	230 /100g	700 /100g	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Chilled/Frozen Bivalves	5	0	46		10	0	Absent/25g		5	0	Absent/25g		-	-	-	-	-	-	-	-
6.	Frozen cooked crustaceans/Frozen heat shucked mollusca	5	2	1	10	5	0	Absent/25g		5	0	Absent/25g		5	0	Absent/25g		-	-	-	-
7.	Dried/ Salted and dried fishery products	5	0	20		5	0	Absent/25g		-	-	-	-	-	-	-	-	-	-	-	-

8.	Thermally processed fishery products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Absence of viable spores or vegetative cells of *Clostridium botulinum* and absence of botulinum toxin.			
9.	Fermented Fishery Products	5	2	4	40	10	0	Absent/25g		-	-	-	-	-	-	-	-	Absence of viable spores or vegetative cells of *Clostridium botulinum* and absence of botulinum toxin.			
10	Smoked fishery products	5	3	11	500	5	0	Absent/25g		5	0	Absent/25g		5	0	Absent/25g		-	-	-	-
11	Accelerated Freeze Dried Fishery Products	5	0	20		5	0	Absent/25g		5	0	Absent/25g		5	0	Absent/25g		-	-	-	-
12	Fish Mince/Surimi and analouges	5	0	20		5	0	Absent/25g		5	0	Absent/25g		5	0	Absent/25g		-	-	-	-
13.	Fish Pickle	5	0	20		5	0	Absent/25g		-	-	-	-	-	-	-	-	-	-	-	-

14.	Battered and Breaded fishery products	5	2	11	500	5	0	Absent/25 g	5	0	Absent/25g		5	5	Absent/25g		-	-	-	-
15.	Convenience fishery products	5	2	1	10	5	0	Absent/25 g	5	0	Absent/25g		5	0	Absent/25g		-	-	-	-
16.	Powered fish based products	-	-	-	-	5	0	Absent/25g	-	-	-	-	-	-	-	-	-	-	-	-
	Test Methods	IS: 5887 Part 1 or ISO 16649-2				IS: 5887 Part 3/ ISO 6579			*Vibrio*, Bacteriological Analytical Manual, Chapter 9. USFDA BAM Online, May, 2004				IS: 14988, Part 1&2/ISO 11290-1 &2				IS: 5887, Part 4 or ISO 17919			

Sampling Plan:

The terms n, c, m and M used in this standard have the following meaning:

n = Number of units comprising a sample.

c = Maximum allowable number of units having microbiological counts above m.

m = Microbiological limit that may be exceeded number of units c.

M = Microbiological limit that no sample unit may exceed.

Product Definitions:

(1) Chilled/Frozen Finfish includes clean and wholesome finfish, which are either in raw, chilled or frozen condition and handled in accordance with good manufacturing practices. Chilling is the process of cooling fish or fish products to a temperature approaching that of melting ice. Chilling can be achieved either by using ice, chilled water, ice slurries of both seawater and freshwater or refrigerated seawater. Similarly, freezing is the process which is sufficient enough to reduce the temperature of the whole product to a level low enough to preserve the inherent quality of the fish and that have been maintained at this low temperature during transportation, storage and distribution up to and including the time of final sale. Freezing process that is carried out in appropriate equipment in such a way that the range of temperature of maximum crystallization is passed quickly. The quick freezing process shall not be regarded as complete unless and until the product temperature reached –18^{o}C (0^{o}F) or lower at the thermal centre after thermal stabilization.

(2) Chilled/Frozen Crustaceans includes clean, whole or peeled crustaceans (shrimp/prawn, crabs and lobster) which are either in raw, chilled or frozen condition and handled in accordance with good manufacturing practices.

(3) Chilled/Frozen Cephalopods includes cleaned, whole or de-skinned cephalopods (squid, cuttlefish and octopus) which are either in raw, chilled or frozen condition and handled in accordance with good manufacturing practices.

(4) Live Bivalve Molluscs includes Oyster, Clam, Mussel, Scallop, Abalone which are alive immediately prior to consumption. Presentation includes the shell. Live bivalve molluscs are harvested alive from a harvesting area either approved for direct human consumption or classified to permit harvesting for an approved method of purification, like relaying or depuration, prior to human consumption. Both relaying and depuration must be subject to appropriate controls implemented by the official agency having jurisdiction.

(5) Chilled/Frozen Bivalves includes clean, whole or shucked bivalves, which are live either in chilled or frozen condition and handled in accordance with good manufacturing practices. This product category includes filter feeding aquatic animals such as oysters, mussels, clams, cockles and scallops.

(6) Frozen cooked Crustaceans or Frozen heat shucked Mollusca means clean, whole or peeled crustaceans, which are cooked at a defined temperature and time and subsequently frozen. Cooking of crustaceans must be designed to eliminate six log reduction of most heat resistant vegetative bacteria i.e. *Listeria monocytogenes*. Frozen heat shucked mollusca includes bivalves where meat is removed from the shell by subjecting the animals to mild heat before shucking to relax the adductor muscle and subsequently frozen.

(7) Dried or Salted and Dried fishery Products means the product prepared from fresh or wholesome finfish or shellfish after drying with or without addition of salt. The fish shall be bled, gutted, beheaded, split or filleted and washed prior to salting and drying. Salt used to produce salted fish shall be clean, free from foreign matter, and has no visible signs of contamination with dirt, oil, bilge or other extraneous materials.

(8) Thermally Processed Fishery Products means the product obtained by application of heat or temperature for sufficient time to achieve commercial sterility in hermetically sealed containers.

(9) Fermented Fishery Products includes any fish product that has undergone degradative changes through enzymatic or microbiological activity either in presence or absence of salt. Non-traditional products manufactured by accelerated fermentation, acid ensilage and chemical hydrolysis also belong to this category.

(10) Smoked Fishery Products means fish or fishery product subjected to a process of treatment with smoke generated from smouldering wood or plant materials. Here the product category refers to hot smoked fish where fish is smoked at an appropriate combination of temperature and time sufficient to cause the complete coagulation of the proteins in the fish flesh.

(11) Accelerated Freeze dried Fishery Products means fish, shrimp or any fishery product subjected to rapid freezing, followed by drying under high vacuum so as to remove the water by sublimation to a final moisture content of less than two percent.

(12) Fish Mince/Surimi and analogues means comminuted, mechanically removed meat which have been separated from and are essentially free from bones, viscera and skin. Surimi is the stabilized myofibrillar proteins obtained from mechanically deboned fish flesh that is washed with water and blended with cryoprotectants. Surimi analogues are variety of imitation products produced from surimi with addition of ingredients and flavor.

(13) Fish Pickle means an oily, semi-solid product with spices and acidic taste obtained from maturation of partially fried fish with vinegar. It is produced by frying edible portions of fish, shrimp or mollusc, followed by partial cooking with spices, salt and oil and maturing for 1-3 days with added organic acids. The product is intended for direct human consumption as a seasoning, or condiment for food.

(14) Battered and Breaded Fishery Products include fish portions, fillets or mince coated with batter and/or breading. Batter means liquid preparation from ground cereals, spices, salt, sugar and other ingredients and/or additives for coating. Typical batter types are non-leavened batter and leavened batter. Breading means dry breadcrumbs or other dry preparations mainly from cereals with colourants and other ingredients used for the final coating of fishery products.

(15) Convenience Fishery Products are tertiary food products made of fish, which are in ready to eat form and also includes snack based items prepared from fish and fishery products meant for direct human consumption such as extruded fishery products, fried items namely fish wafers, crackers, fish cutlets, fish burgers and other such products. These products can be consumed directly after minimal handling and processing. This category includes Sous-vide cooked products, surimi-based products cooked (in-pack), pasteurized crab meat, pasteurized molluscs which are distributed as refrigerated, but meant for direct human consumption with minimal or no cooking.

(16) Powdered Fish based Products include the products which are prepared from finfish/shellfish or parts thereof, with or without other edible ingredients in powdered form, suitable for human consumption. These may be consumed directly or as supplements and also after hydration and this category includes powdered and dried fish products generally used as ingredients in food preparations such as fish soup powder, fish chutney powder, ready to use fish-mix, and such other food.]

[21][Table 2

Microbiological Standards for Milk and Milk Products

Table-2A Microbiological Standards for Milk and Milk Products –Process Hygiene Criteria

Sr. No.	Product Description[1]	Aerobic Plate Count				Coliform Count[4]				*Staphylococcus aureus* (Coagulase positive)				Yeast and Mold Count				*Escherichia coli*			
		Sampling Plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
1	Pasteurized/boiled Milk/ Flavored Milk	5	3	$3x10^4$/ ml	5x 10^4/ml	5	0	<10/ml	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Pasteurized Cream	5	3	$5x10^4$/g	$7.5x10^4$ /g	5	0	<10/g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Sterilized milk /UHT milk / Evaporated Milk	NA																			
4	Sterilized / UHT Cream	NA																			
5	Sweetened Condensed Milk	5	3	$5x10^2$/g	$1x10^3$/g	5	0	<10/g	NA	5	0	<10/g	NA	5	0	<10/g	NA	NA	NA	NA	NA
6	Pasteurized Butter[2]	5	3	$2.5x10^4$/ g	$5x10^4$/g	5	2	10/g	20/g	5	2	10/g	50/g	5	3	20/g	50/g	5	0	Absent/ g	NA

Sr. No.	Product Description[1]	Aerobic Plate Count				Coliform Count[4]				*Staphylococcus aureus* (Coagulase positive)				Yeast and Mold Count				*Escherichia coli*			
		Sampling Plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
7	Milk Powder ; SMP, Partly SMP ; Dairy Whitener ; Cream Powder ; Ice Cream Mix Powder ; Lactose ; Whey based Powder ;Butter Milk Powder ; Casein Powder[3]	5	2	$3x10^4$/g	$5x10^4$/g	5	2	10/g	50/g	5	2	10/g	$1x10^2$/g	5	0	50/g	NA	NA	NA	NA	NA
8	[82][Infant Milk Substitute, Infant Formula, Food for special medical purpose intended for infants[4]]	5	2	$5x10^2$/g	$5x10^3$/g	NA	NA	NA	NA	5	0	<10/g	NA	5	0	<10/g	NA	NA	NA	NA	NA

Sr. No.	Product Description[1]	Aerobic Plate Count				Coliform Count[4]				*Staphylococcus aureus* (Coagulase positive)				Yeast and Mold Count				*Escherichia coli*			
		Sampling Plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
	Follow Up Formula [82][Cereal Based Complimentary food, Food for infants based on traditional food ingredients]	5	2	$1x10^3$/g	$1x10^4$/g	10	0	<10/g	NA	5	0	<10/g	NA	5	0	<10/g	NA	10	0	Absent/g	NA
9	Ice Cream, Frozen Dessert, Milk Lolly, Ice Candy	5	3	$1x10^5$/g	$2x10^5$/g	5	3	10/g	$1x10^2$/g	5	2	10/g	$1x10^2$/g	NA	NA	NA	NA	5	0	Absent/g	NA
10	Processed Cheese/ Cheese Spread	5	2	$2.5x10^4$/g	$5x10^4$/g	5	0	<10/g	NA	5	0	<10/g	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	All other cheeses categories including fresh cheeses / Cheddar / Cottage /Soft /Semi Soft[5]	NA	NA	NA	NA	5	3	$1x10^2$/g	$5x10^2$/g	5	3	10/g	$1x10^2$/g	5	3	$1x10^2$/g	$5x10^2$/g	5	0	<10 /g	NA
12	Fermented Milk Products	NA	NA	NA	NA	5	2	10/g	$1x10^2$/g	5	2	10/g	$1x10^2$/g	5	3	50/g	$1x10^2$/g	5	0	Absent/g	NA
13	Paneer/ Chhana/ chhana based sweets	5	3	$1.5x10^5$/g	$3.5x10^5$/g	5	3	10/g	$1x10^2$/g	5	3	10/g	$1x10^2$/g	5	3	50/g	$1.5x10^2$/g	5	0	<10/g	NA

Sr. No.	Product Description[1]	Aerobic Plate Count				Coliform Count[4]				*Staphylococcus aureus* (Coagulase positive)				Yeast and Mold Count				*Escherichia coli*			
		Sampling Plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
14	Khoa/ Khoa based sweets	5	3	$2.5x10^4$/g	$7.5x10^4$/g	5	2	50/g	$1x10^2$/g	5	3	10/g	$1x10^2$/g	5	3	10/g	50/g	5	0	<10/g	NA
	Test Methods[7]	**IS 5402/ ISO: 4833**				**5401 Part 1/ISO : 4832**				**IS 5887: Part 2 or IS 5887 Part 8 (Sec 1)/ ISO: 6888-1 or IS 5887 Part 8 (Sec 2)/ ISO 6888-2**				**IS:5403 or ISO : 6611**				**IS 5887: Part 1 or ISO : 16649-2**			

Table-2B: Microbiological Standards for Milk and Milk Products – Food Safety Criteria

Sr. No	Product Description[1]	Salmonella sp.				*Listeria monocytogenes*				*Bacillus cereus*				Sulphite Reducing Clostridia (SRC)				*Enterobacter sakazakii (Cronobacter sp.*			
		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
1	Pasteurized/boiled milk/ Flavored Milk	5	0	Absent/ 25 ml	NA	5	0	Absent/ 25ml	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Pasteurized Cream	5	0	Absent/ 25g	NA	5	0	Absent/ 25g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Sterilized milk /UHT milk / Evaporated Milk	Sterilized /UHT milk products shall comply with a test for commercial sterility as per IS: 4238 (Appendix C or Appendix D)																			
4	Sterilized/ UHT Cream	Sterilized/UHT cream product shall comply with a test for commercial sterility as per IS : 4884																			
5	Sweetened Condensed Milk[6]	5	0	Absent/ 25g	NA	5	0	Absent/ g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Pasteurized Butter[2]	5	0	Absent/ 25g	NA	5	0	Absent/ g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Sr. No	Product Description[1]	Salmonella sp.				*Listeria monocytogenes*				*Bacillus cereus*				Sulphite Reducing Clostridia (SRC)				*Enterobacter sakazakii (Cronobacter sp.*			
		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
7	Milk Powder; SMP, PSMP; Dairy Whitener; Cream Powder ; Ice Cream Mix Powder; Lactose; Whey based Powder; Butter Milk Powder; Casein Powder	5	0	Absent/ 25g	NA	5	0	Absent/ g	NA	5	3	$5x10^2$/ g	$1x10^3$/ g	5	3	50/g	$1x10^2$ /g	NA	NA	NA	NA
8	[82][Infant Milk Substitute, Infant Formula, Food for special medical purpose intended for infants]	60	0	Absent/ 25g	NA	10	0	Absent/ 25g	NA	5	2	$1x10^2$/ g	$5x10^2$/ g	5	2	10/g	$1x10^2$ /g	30	0	Absent /10g	NA

Sr. No	Product Description[1]	Salmonella sp.				*Listeria monocytogenes*				*Bacillus cereus*				Sulphite Reducing Clostridia (SRC)				*Enterobacter sakazakii (Cronobacter sp.*			
		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
	Follow Up Formula	15	0	Absent/ 25g	NA	10	0	Absent/ 25g	NA	5	2	$1x10^2$/ g	$5x10^2$/ g	5	2	10/g	$1x10^2$ /g	NA	NA	NA	NA
	[82][Cereal Based Complimentary food, Food for infants based on traditional food ingredients]	15	0	Absent/ 25g	NA	10	0	Absent/ 25g	NA	5	2	$1x10^2$/ g	$5x10^2$/ g	5	2	10/g	$1x10^2$ /g	NA	NA	NA	NA
9	Ice Cream, Frozen Dessert, Milk Lolly, Ice Candy	5	0	Absent/ 25g	NA	5	0	Absent/ g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Processed Cheese/ Cheese Spread	5	0	Absent/ 25g	NA	5	0	Absent / 25g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Sr. No	Product Description[1]	Salmonella sp.				*Listeria monocytogenes*				*Bacillus cereus*				Sulphite Reducing Clostridia (SRC)				*Enterobacter sakazakii (Cronobacter sp.*			
		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
11	All other cheeses categories including fresh cheeses / Cheddar / Cottage /Soft /Semi Soft etc	5	0	Absent/ 25g	NA	5	0	Absent/ 25 g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Fermented Milk Products-	5	0	Absent/ 25g	NA	5	0	Absent/ g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Paneer/ Chhana/ chhana based sweets	5	0	Absent/ 25g	NA	5	0	Absent/ g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Khoa/ Khoa based sweets	5	0	Absent/ 25g	NA	5	0	Absent/ g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	Test Methods[7]	**IS 5887 : Part 3/ ISO : 6579**				**IS 14988: Part 1/ ISO: 11290-1**				**IS 5887 (Part 6) /ISO:7932**				**ISO : 15213**				**ISO/TS 22964**			

NA- Not Applicable

[1]Microbiological standards shall also be applicable for proprietary dairy foods depending on their analogy as determined by FSSAI with the product categories specified in **Table 2A and 2 B**

[2]The microbiological specifications for ripened butter are the same as for pasteurized butter excluding the requirements of Aerobic Plate Count.

[3]The yeast and mold count of 50/g as specified in dried product categories shall be applicable only to casein powder

[4]For products in this category (Infant Milk Food, Infant Formulae, Infant Milk Substitute), the *enterobacteriaceae* shall be tested. The microbiological criteria applicable is n=10; c=2; m= Absent/10g; M=Not Applicable. Method of analysis is ISO 21528-1 and 21528-2, as appropriate.

[5]The yeast and mold counts is not applicable in mold ripened cheeses

[6]The Sweetened condensed milk product shall comply accelerated storage test as per IS: 1166 (latest version)

Stage where the Microbiological Standards shall apply:

The Microbiological Standards in **Table-2A** (Process Hygiene Criteria) indicate the acceptable functioning of the production process. These are not to be used as requirements for releasing the products in the market. These are indicative contamination values above which corrective actions are required in order to maintain the hygiene of the process in compliance with food law. These shall be applicable at the end of the manufacturing process.

[63[The Microbiological Standards in **Table-2B** (Food Safety Criteria) define the acceptability of a batch or lot and shall be met in respect of the product at the end of the manufacturing process and the products in the market during their shelf- life.]

Action in case of unsatisfactory result:

In case of non-compliance in respect of process hygiene criteria specified in **Table- 2A,** the FBO shall:

- check and improve process hygiene by implementation of guidelines in Schedule 4 (Part III) of FSS (Licensing and Registration of Food Businesses) Regulations; and,

- [63[Ensure that all food safety criteria as specified in Table-2B are complied with.]

The Microbiological Standards in **Table-2B** (Food Safety Criteria) define the acceptability of a batch/lot and shall be met in respect of the product for releasing it in the market. These shall be applicable to the products at the end of the manufacturing process and the products in the market during their shelf- life.

Sampling Plans and Guidelines;

For Regulator: The sampling for different microbiological standards with respect to the products specified in **Table-2A and 2B** shall be ensured aseptically at manufacturing units and/or at retail points, as applicable, by a trained person with specialized knowledge in the field of microbiology following guidelines in the Food Safety and Standards (Food Products and Food Additives) Regulations, 2011 and ISO: 707 **(Latest version**). The samples

shall be stored and transported at a temperature below 5°C (but not frozen), except the products that are recommended to be stored at room temperature by the manufacturer, to enable initiation of analysis within 24 hours of sampling. Preservatives shall not be added to sample units intended for microbiological examination. The desired number of sample units as per sampling plan given in **Table-2A & 2B** shall be taken from same batch/lot and shall be submitted to the notified laboratory. The testing in laboratory shall be ensured as per reference test methods given below in reference test methods for regulatory compliance. [63][A set (n) of five samples shall be tested from three different accredited laboratories and the final decision shall be drawn based on three test results. There will be no provision for retesting or re-sampling for microbiological testing]. The final decision shall be drawn based on results with no provision for retesting for microbiological parameters.

For FBO: Food Business Operator (FBO) shall perform testing as appropriate as per the microbiological standards with respect to the products specified in **Table-2A & 2B** to ensure validation and verification of compliance with the microbiological requirements. FBO shall decide themselves the necessary sampling and testing frequencies to ensure compliance with the specified microbiological requirements. FBO may use analytical methods other than those described in reference test methods given below for in-house testing only. However, these methods shall not be applicable for regulatory compliance purpose.

Sampling Plan:

The terms n,c,m and M used in this standard have the following meaning:
n = Number of units comprising a sample.
c = Maximum allowable number of units h
aving microbiological counts above m for 2- class sampling plan and between m and M for 3- class sampling plan.
m = Microbiological limit that separates unsatisfactory from satisfactory in a 2- class sampling plan or acceptable from satisfactory in a 3-class sampling plan.
M = Microbiological limit that separates unsatisfactor y from satisfactory in a 3-class sampling plan.

Interpretation of Results:

2-Class Sampling Plan (where n, c and m are specified)	3-Class Sampling Plan (where n, c, m and M are specified)
1. Satisfactory, if all the values observed are ≤ m 2. Unsatisfactory, if one or more of the values observed are >m or more than c values are > m	1. Satisfactory, if all the values observed are ≤ m 2. Acceptable, if a maximum of c values are between m and M and the rest of the values are observed as ≤ m 3. Unsatisfactory, if one or more of the values observed are >M or more than c values are > m

Reference test methods: The following test methods shall be applied as reference methods.

Reference test methods- latest version shall apply. In case where an ISO method adopted by the BIS is specified (e.g IS XXXX / ISO YYYY), latest version of the ISO method (or its BIS equivalent, if available) shall apply. [63][Test methods prescribed in FSSAI Manual of Methods of Analysis of Foods (Microbiological Testing) may also be referred along with the IS/ISO methods specified for Process Hygiene Criteria and Food Safety Criteria].

Sr. no.	Parameter	Reference Test Methods
1.	Aerobic Plate Count	Microbiology of the food chain -- Horizontal method for the enumeration of microorganisms -- Part 1: Colony count at 30 degrees C by the pour plate technique- IS 5402/ ISO:4833
2.	Coliforms	Microbiology of food and animal feeding stuffs -- Horizontal method for the Detection and Enumeration of Coliforms – Part-1 Colony-Count Technique- IS: 5401 Part 1 Microbiology of food and animal feeding stuffs -- Horizontal method for the enumeration of Coliforms - Colony-count technique- ISO 4832
3.	Enterobacteriaceae	Microbiology of food and animal feeding stuffs -- Horizontal methods for the detection and enumeration of Enterobacteriaceae -- Part 1: Detection and enumeration by MPN technique with pre-enrichment- ISO 21528 Part 1 Microbiology of food and animal feeding stuffs -- Horizontal methods for the detection and enumeration of Enterobacteriaceae -- Part 2: Colony-count method- ISO 21528 Part 2
4.	*Staphylococcus aureus*	Methods for detection of bacteria responsible for food poisoning: Part 2 Isolation, identification and enumeration of *Staphylococcus aureus* and *Faecal streptococci*- IS 5887: Part 2 Methods for Detection of Bacteria Responsible for Food Poisoning Part 8 Horizontal Method for Enumeration of *Coagulase-Positive Staphylococci*/ (*Staphylococcus aureus* and other species) **Section 1 Technique using baird-parker agar medium-** IS 5887 (Part 8/Sec 1: / ISO 6888-1: 1999 Methods For Detection Of Bacteria Responsible For Food Poisoning Part 8 Horizontal Method For Enumeration Of *Coagulase-Positive Staphylococci*/ (*Staphylococcus aureus* And Other Species) **Section 2 Technique using rabbit plasma fibrinogen agar medium-** IS 5887 (Part 8/Sec 2) / ISO 6888-2: 1999
5.	*Enterobacter sakazakii*	Milk and milk products -- Detection of *Enterobacter sakazakii*- ISO/TS 22964

6.	Yeast and Mould Count	Method for Yeast and Mould Count of Food Stuffs and Animal feed- IS 5403 Milk and milk products -- Enumeration of colony-forming units of Yeasts and/or Moulds -- Colony-count technique at 25 degrees C- ISO 6611
7.	*Escherichia coli*	Methods for Detection of Bacteria Responsible for Food Poisoning - Part I : Isolation, Identification and Enumeration of *Escherichia coli*- IS 5887 : Part 1 Microbiology of food and animal feeding stuffs -- Horizontal method for the enumeration of beta-glucuronidase-positive *Escherichia coli* -- Part 2: Colony-count technique at 44 degrees C using 5-bromo-4-chloro-3-indolyl beta-D-glucuronide- ISO: 16649-2
8.	*Salmonella*	Methods for Detection of Bacteria Responsible for Food Poisoning - Part 3: General Guidance on Methods for the Detection of *Salmonella*- IS 5887: Part 3 Microbiology of food and animal feeding stuffs -- Horizontal method for the detection of *Salmonella* spp.- ISO 6579
9.	*Listeria monocytogenes*	Microbiology of the food chain -- Horizontal method for the detection and enumeration of *Listeria monocytogenes* and other Listeria spp. -- Part 1: Detection method- ISO: 11290-1 Microbiology of food and animal feeding stuffs -- Horizontal method for the detection and enumeration of *Listeria monocytogenes* -- Part 2: Enumeration Method- ISO: 11290-2 Microbiology of Food and Feeding Stuffs - Horizontal method for Detection and Enumeration of *Listeria Monocytogenes*: Part 1 Detection Method- IS 14988: Part 1 Microbiology of Food and Animal Feeding Stuffs - Horizontal Method for the Detection and Enumeration of *Listeria monocytogenes* - Part 2: Enumeration Method- IS 14988: Part 2
10.	*Bacillus cereus*	Microbiology of food and animal feeding stuffs -- Horizontal method for the enumeration of presumptive *Bacillus cereus* -- Colony-count technique at 30 degrees C- IS 5887 (Part 6) /ISO:7932

11.	Sulfite-reducing bacteria	Microbiology of food and animal feeding stuffs -- Horizontal method for the enumeration of sulfite-reducing bacteria growing under anaerobic conditions- ISO 15213
12.		Milk and milk products - Guidance on sampling- ISO:707
13.		Indian Standard Specification for sterilized milk- IS: 4238
14.		Specification for sterilized cream- IS: 4884
15.		Specification for condensed milk, partly skimmed and skimmed condensed milk - IS :1166.".]

[70][Table: 3 Microbiological Standards for Spices and Herbs

Table -3A Microbiological Requirements for Spices and Herbs –Process Hygiene Criteria

Sr. No.	Product Category[i]	Aerobic Colony Count				Yeast and Mold Count				Enterobacteriaceae				*Staphylococcus aureus*			
		Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)	
		n	C	m	M	n	c	m	M	n	c	m	M	n	c	m	M
1.	**Fresh[ii]**																
2.	**Dried or Dehydrated**	5	2	$1x10^6$	$1x10^7$	5	2	$1x10^4$	$1x10^5$	5	2	$1x10^2$	$1x10^3$	5	2	$1x10^2$	$1x10^3$
3.	**Ground or Powdered**	5	2	$1x10^6$	$1x10^7$	5	2	$1x\ 10^4$	$1x\ 10^5$	5	2	$1x10^2$	$1x10^3$	5	2	$1x10^2$	$1x10^3$
4.	**Extracted**	5	2	$1x10^3$	$1x\ 10^4$	5	2	$1x10^2$	$1x\ 10^3$	5	1	$1x10^1$	$1x\ 10^2$	5	1	$1x10^1$	$1x10^2$
5.	**Wet ground (Paste)/ preserved or pickled**	5	2	$1x\ 10^3$	$1x\ 10^4$	5	2	$1x\ 10^3$	$1x\ 10^4$	5	2	$1x10^2$	$1x\ 10^3$	5	2	$1x10^1$	$1x10^2$
	Method of analysis[iii]	IS: 5402/ ISO 4833				IS: 5403/ ISO 21527 Part 1 and Part 2				IS/ISO:7402/ ISO 21528 Part 2				IS:5887, Part 2 and IS 5887 part 8 (Sec 1)/ ISO 6888-1 or IS:5887 Part 8 (Sec2)/ISO 6888-2			

Table -3B Microbiological Requirements for Spices and Herbs – Food Safety Criteria

Sr. No.	Product Category[i]	*Salmonella*				Sulphite Reducing Clostridia				*Bacillus cereus*			
		Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)	
		N	c	m	M	n	c	m	M	N	c	m	M
1.	**Fresh[ii]**												
2.	**Dried or Dehydrated**	5	0	Absent/25 g	NA	5	2	$1x10^2$	$1x10^3$	5	2	$1x10^3$	$1x10^4$
3.	**Ground or Powdered**	5	0	Absent/25 g	NA	5	2	$1x10^2$	$1x\ 10^3$	5	2	$1x10^3$	$1x10^4$
4.	**Extracted**	5	0	Absent/25 g	NA	5	1	$1x10^1$	$1x\ 10^2$	5	1	$1x10^1$	$1x\ 10^2$
5.	**Wet ground (Paste)/ preserved or pickled**	5	0	Absent/25 g	NA	5	2	$1x10^1$	$1x\ 10^2$	5	2	$1x10^1$	$1x\ 10^2$
6.	**Method of analysis[iii]**	IS: 5887 Part 3/ISO:6579				ISO 15213				IS:5887,Part 6 ISO 7932			

NA-Not applicable

[i.]Definitions:

a. **Fresh**: The spices and herbs that are consumed fresh.

b. **Dried or dehydrated**: The product obtained by drying/ removal of most of the moisture by any suitable method which ensures characteristics of fresh spices on rehydration or pre-cooking.

c. **Ground or powdered**: Ground or powdered product obtained by grinding or crushing of clean dried/dehydrated fruits, capsules, buds, seeds, rhizomes, aril, kernel, berries and stigmas etc.

d. **Extracted:** Products of the spices and herbs which are produced by extracting in a concentrated form including oleoresins.

e. Wet ground (paste)/preserved or pickled: Semi solid, preserved product using brine, vinegar and other permitted preservatives or physical methods.

For detailed product definition, refer to Food Safety & Standards (Food Product Standards & Food Additives) Regulations, 2011.

[ii]. The category "Fresh" shall be regulated in accordance with the Good Manufacturing Practices and Code of Good Hygiene Practices notified under Schedule 4 of FSS (Licensing and Registration of Food Businesses) Regulations, 2011.

Stage where the Microbiological Standards shall apply:

The microbiological standards with respect to the product categories specified in **Table-3A** (Process Hygiene Criteria) indicate the acceptable functioning of the production process. These are not to be used as requirements for releasing the products in the market. These are indicative values above which corrective actions are required in order to maintain the hygiene of the process in compliance with food law. These shall be applicable at the end of the manufacturing process. The Microbiological Standards in **Table-3B** (Food Safety Criteria) define the acceptability of a batch/lot and shall be met in respect of the products at the end of manufacturing process and the products in the market during their shelf- life.

Action in case of unsatisfactory result:

In case of non-compliance in respect of Process Hygiene Criteria specified in **Table- 3A,** the FBO shall:

- check and improve process hygiene by implementation of guidelines in Schedule 4 of FSS (Licensing and Registration of Food Businesses) Regulations; and,
- Ensure that all food safety criteria as specified in **Table -3B** are complied with.

Sampling Plans and Guidelines;

For Regulator: The sampling for different microbiological standards specified in **Table-3A and 3B** shall be ensured aseptically at manufacturing units and/or at retail points, as applicable, by a trained person with specialized knowledge in the field of microbiology following guidelines in the Food Safety and Standards (Food Products and Food Additives) Regulations, 2011 and ISO: 707 **(Latest version**). The samples shall be stored and transported in frozen condition at -18°C(±2°C) or under refrigerated conditions at 2-5°C as applicable except the products that are recommended to be stored at room temperature by the manufacturer to enable initiation of analysis within 24 hours of sampling. Preservatives shall not be added to sample units intended for microbiological examination. The desired number of sample units as per sampling plan given in **Table-3A & 3B** shall be taken from same batch/lot and shall be submitted to the notified laboratory. Three sets, each containing 'n' number of samples (n as defined in the sampling planeg if n=5, then total no. of samples to be drawn is 15) shall be drawn. Each of these three sets shall be tested in three different accredited laboratories. The final decision shall be based on the results of three accredited laboratories. In the case of food safety criteria (Table 8B), results from all the three laboratories should indicate compliance with specified criteria. There will be no provision for retesting or resampling for microbiological testing. The testing in laboratory shall be ensured as per reference test methods given below in reference test methods for regulatory compliance.

For FBO: Food Business Operator (FBO) shall perform testing as appropriate as per the microbiological standards in **Table-3A & 3B** to ensure validation and verification of compliance with the microbiological requirements. FBO shall decide themselves subject to minimum prescribed under FSSR (Licensing and Registration of Food Businesses), the necessary sampling and testing frequencies to ensure compliance with the specified microbiological requirements. FBO may use analytical methods other than those described in reference test methods given below for in-house testing only. However, these methods shall not be applicable for regulatory compliance purpose.

Sampling Plan:

The terms n, c, m and M used in this standard have the following meaning:

n = Number of units comprising a sample.

c = Maximum allowable number of units having microbiological counts above m for 2- class sampling plan and between m and M for 3- class sampling plan.

m = Microbiological limit that separates unsatisfactory from satisfactory in a 2- class sampling plan or acceptable from satisfactory in a 3-class sampling plan.

M = Microbiological limit that separates unsatisfactory from satisfactory in a 3-class sampling plan.

Interpretation of Results:

2-Class Sampling Plan (where n,c and m are specified)	3-Class Sampling Plan (where n,c,m and M are specified)

1. Satisfactory, if all the values observed are ≤ m **2.** Unsatisfactory, if one or more of the values observed are >m.	1. Satisfactory, if all the values observed are ≤ m 2. Acceptable, if a maximum of c values are between m and M. 3. Unsatisfactory, if one or more of the values observed are > M or more than prescribed c values are >m

iii. Reference test methods: The following test methods shall be applied as reference methods. Test methods prescribed in FSSAI Manual of Method of Analysis of Foods (Microbiological Testing) may also be referred along with the IS/ISO methods specified for Process Hygiene Criteria and Food Safety Criteria**.** Latest version of test methods shall apply. In case where an ISO method adopted by the BIS is specified (e.g IS XXXX / ISO YYYY), latest version of the ISO method (or its BIS equivalent, if available) shall apply.

Sr. No.	**Parameter**	**Reference Test methods**
1.	Aerobic Plate Count	Microbiology of the food chain -- Horizontal method for the enumeration of microorganisms -- Part 1: Colony count at 30 °C by the pour plate technique- IS 5402/ ISO:4833
2.	Yeast and Mold Count	Method for Yeast and Mold Count of Food Stuffs and Animal feed- IS 5403 Microbiology of food and animal feeding stuff- Horizontal method for the enumeration of yeasts and moulds-Part1: Colony count technique in products with water activity greater than 0.95-ISO 21527-1 Microbiology of food and animal feeding stuff-Horizontal method for the enumeration of yeasts and moulds-Part2: Colony count technique in products with water activity less than 0.95-ISO 21527-2
3.	Enterobacteriaceae	Microbiology - General Guidance for the Enumeration of Enterobacteriaceae without Resuscitation - MPN Technique and Colony-count Technique- IS/ISO 7402 Microbiology of Food and Animal feeding stuff –Horizontal methods for the detection and enumeration of Enterobacteriaceae- Part 2:Colony- count method-ISO 21528-2

4.	*Staphylococcus aureus*	Methods for detection of bacteria responsible for food poisoning: Part 2 Isolation, identification and enumeration of *Staphylococcus aureus* and faecal streptococci- IS 5887: Part 2 Methods for Detection of Bacteria Responsible for Food Poisoning Part 8 Horizontal Method for Enumeration of Coagulase-Positive Staphylococci/ (*Staphylococcus aureus* and other species) **Section 1 Technique using baird-parker agar medium -** IS 5887 (Part 8/Sec 1: / ISO 6888-1: 1999 Methods for Detection of Bacteria Responsible for Food Poisoning Part 8 Horizontal Method for Enumeration of Coagulase-Positive Staphylococci/ (*Staphylococcus aureus* and Other Species) **Section 2 Technique using rabbit plasma fibrinogen agar medium-** IS 5887 (Part 8/Sec 2) / ISO 6888-2: 1999
5.	*Salmonella*	Methods for Detection of Bacteria Responsible for Food Poisoning - Part 3: General Guidance on Methods for the Detection of Salmonella- IS 5887: Part 3 Microbiology of food and animal feeding stuffs -- Horizontal method for the detection of Salmonella spp.- ISO6579
6.	Sulfite-Reducing Bacteria	Microbiology of food and animal feeding stuffs -- Horizontal method for the enumeration of sulfite-reducing bacteria growing under anaerobic conditions- ISO 15213
7.	*Bacillus cereus*	Microbiology of Food and Animal Feeding Stuffs-Horizontal Method for the Enumeration of Preservative Bacillus Cereus, Part 6 Colony –count Technique at 30°C- IS 5887-6 Microbiology of food and animal feeding stuffs- Horizontal method for the enumeration of presumptive Bacillus cereus- Colony- count technique at 30degrees C.-ISO 7932.]

[46][Table 4A: Microbiological Standards for Fruits and Vegetables and their Products – Process Hygiene Criteria

Sl. No.	Product description [1]	Aerobic Plate Count				Yeast and Mold Count				*Enterobacteriaceae*				*Staphylococcus aureus* (Coagulase +ve)			
		Sampling Plan		Limit (cfu)		Sampling Plan		Limit (cfu)		Sampling Plan		Limit (cfu)		Sampling Plan		Limit (cfu)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
1.	Fresh[2]					NA											
2.	Cut or minimally processed and packed, including juices (Non-thermally processed)	5	2	$1x10^6$/g	$1x10^7$/g	5	1	$1x10^2$/g	$1x10^4$/g	5	2	$1x10^2$/g	$1x10^4$/g	5	1	$1x10^2$/g	$1x10^3$/g
3.	Fermented[3] or pickled or acidified or with preservatives	NA				5	1	$1x10^2$/g	$1x10^3$/g	5	2	$1x10^2$/g	$1x10^3$/g	5	1	10/g	$1x10^2$/g
4.	Pasteurized Juices[4]	5	2	$1x10^2$/ml	$1x10^4$/ml	5	1	$1x10^2$/ml	$1x10^3$/ml	5	0	Not detectable as per prescribed method		5	0	Absent/25ml	
	Carbonated Fruit beverages[4]	5	1	50/ml	$5x10^2$/ml	5	0	<10/ml		5	0			5	0	Absent/25ml	

5.	Frozen	5	2	$4x10^4$/g	$5x10^5$/g	5	1	$1x10^2$/g	$1x10^3$/g	5	2	$1x10^2$/g	$3x10^2$/g	5	1	20/g	$1x10^2$/g
6.	Dehydrated or dried	5	1	$4x10^4$/g	$1x10^5$/g	5	1	$1x10^2$/g	$1x10^4$/g	5	1	$1x10^2$/g	$1x10^3$/g	5	1	10/g	$1x10^2$/g
7.	Thermally processed (other than pasteurization at less than 100°C)	5	1	$1x10^2$/g	$1x10^3$/g	5	1	50/g	$1x10^2$/g	5	0	Not detectable as per prescribed method		5	0	Absent/25g	
8.	Retort processed[5]	5	0	50/g		NA				5	0			5	0	Absent/25g	
	Test Methods[6]	IS: 5402/ISO:4833				IS: 5403/ ISO 21527 Part 1 and Part 2				IS/ISO 7402/ ISO 21528 Part 2				IS:5887, Part 2 and IS 5887 part 8 (Sec 1)/ ISO 6888-1 or IS:5887 Part 8 (Sec2)/ISO 6888-2			

Table 4B: Microbiological Standards for Fruits and Vegetables and their Products-Food Safety Criteria

Sl. N.	Product description[1]	*Salmonella*			*Listeria monocytogenes*			Sulphite Reducing Clostridia (SRC)				*E. Coli 0157* and Vero or Shiga toxin producing *E coli*			*Vibrio cholerae*		
		Sampling Plan		Limit (cfu)	Sampling Plan		Limit (cfu)	Sampling Plan		Limit (cfu)		Sampling Plan		Limit (cfu)	Sampling Plan		Limit (cfu)
		n	c	m M	n	c	m M	n	c	m	M	n	c	m M	n	c	m M
1.	Fresh[2]	NA			NA			NA				NA			NA		
2.	Cut or minimally processed and packaged, including juices (Non-thermally processed)	5	0	Absent/ 25 g	5	0	Absent/25 g	NA	NA	NA	NA	5	0	Absent/25 g	5	0	Absent/25 g
3.	Fermented[3] or pickled or acidified or with preservatives	5	0	Absent/ 25 g	5	0	Absent/25 g	NA	NA	NA	NA	5	0	Absent/25 g	5	0	Absent/25 g
4.	Pasteurized Juices[4]	5	0	Absent/ 25 ml	5	0	Absent/25 ml	NA	NA	NA	NA	5	0	Absent/25 ml	5	0	Absent/25 ml

Sl. N.	Product description[1]	*Salmonella*			*Listeria monocytogenes*			Sulphite Reducing Clostridia (SRC)				*E. Coli 0157* and Vero or Shiga toxin producing *E coli*			*Vibrio cholerae*		
		Sampling Plan		Limit (cfu)	Sampling Plan		Limit (cfu)	Sampling Plan		Limit (cfu)		Sampling Plan		Limit (cfu)	Sampling Plan		Limit (cfu)
		n	c	m M	n	c	m M	n	c	m	M	n	c	m M	n	c	m M
	Carbonated fruit beverages[4]	5	0	Absent/ 25 ml	5	0	Absent/25 ml	NA	NA	NA	NA	5	0	Absent/25 ml	5	0	Absent/25 ml
5.	Frozen	5	0	Absent/ 25 g	5	0	Absent/25 g	NA	NA	NA	NA	5	0	Absent/25 g	5	0	Absent/25 g
6.	Dehydrated or dried	5	0	Absent/ 25 g	5	0	Absent/25 g	NA	NA	NA	NA	5	0	Absent/25 g	5	0	Absent/25 g
7.	Thermally processed (other than pasteurization at less than 100°C	5	0	Absent/ 25 g	5	0	Absent/25 g	NA	NA	NA	NA	5	0	Absent/25 g	5	0	Absent/25 g
8.	Retort processed[5]	5	0	Absent/25 g	5	0	Absent/25 g	5	0	Absent/25 g		5	0	Absent/25 g	5	0	Absent/25 g

Sl. N.	Product description[1]	*Salmonella*				*Listeria monocytogenes*				Sulphite Reducing Clostridia (SRC)				*E. Coli 0157* and Vero or Shiga toxin producing *E coli*				*Vibrio cholerae*			
		Sampling Plan		Limit (cfu)		Sampling Plan		Limit (cfu)		Sampling Plan		Limit (cfu)		Sampling Plan		Limit (cfu)		Sampling Plan		Limit (cfu)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
	Test Methods[6]	IS: 5887 Part3 / ISO:6579				IS: 14988, Part 1 / ISO 11290-1				ISO 15213				IS: 14397				IS:5887, (Part V)/ ISO 21872 Part 1			

Note- 'ml' will be applicable in place of 'g' in case of liquid product.

NA-Not applicable

[1] **Definitions of fruits and vegetables and their products**

(a) **Fresh**: The whole fruits and vegetables that are sold fresh.

(b) **Cut or minimally processed and packaged including juices**: Fruits and vegetables which are washed or sanitized or peeled or cut up and made in to juice and packed.

(c) **Fermented or pickled or acidified or with preservatives**: Fruits and vegetables including their products which are preserved using living ferments like yeast, bacterium, mold, enzyme or in brine to produce lactic acid or marinating and storing it in an acid solution, usually vinegar (acetic acid), salt and sugar.

(d) **Pasteurized Juices**: Fruit and vegetable j*uices that are subjected to pasteurization* to destroy or inactivate harmful microorganisms.

(e) **Carbonated fruit beverages (and fruit drinks):** Any beverage or drink which is prepared from fruit juice and water or carbonated water and containing sugar, dextrose, invert sugar or liquid glucose either in single or in combination which may contain peel oil and fruit essences. It may also contain any other ingredients appropriate to the products.

(f) **Frozen**: Fruits and vegetables including their products which are subjected to a freezing process and maintained at temperature of -18^0C.

(g) **Dehydrated or dried**: Fruits and vegetables including their products which are preserved by removing most of their water content following an appropriate dehydrating process.

(h) **Thermally processed (other than pasteurization at less than 100°C)**: Fruits and vegetables including their products which are processed by heat in an appropriate manner before or after being sealed in a container so as to prevent spoilage.

(i) **Retort processed**: Fruits and vegetables including their products which are canned or flexible packaged, processed by retorting.

For detailed product description, refer to regulation 2.3 related to Fruit & Vegetable Products of these regulations.

[2]The category "Fresh" shall be regulated in accordance with the Good Manufacturing Practices and Good Hygiene Practices specified under Schedule 4 of Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011.

[3]In case of fermentation process involving yeast/ mold the respective standard for yeast and mold count does not apply.

[4]Carbonated fruit beverages and pasteurized fruit juices can be excluded for testing of *Listeria*, where the pH is below 4.4.

[5]The retort processed foods shall be tested after incubation at 37°C for 10 days and at 55°C for 7 days.

Stage where the Microbiological Standards shall apply:

The microbiological standards with respect to the products categories specified in Table-4A (Process Hygiene Criteria) indicate the acceptable functioning of the production process. These are not to be used as requirements for releasing the products in the market. These are indicative values above which corrective actions are required in order to maintain the hygiene of the process in compliance with food law. These shall be applicable at the end of the manufacturing process.

[63][The Microbiological Standards in Table-4B (Food Safety Criteria) define the acceptability of a batch/lot and shall be met in respect of the product at the end of the manufacturing process and the products in the market during their shelf- life.]

Action in case of unsatisfactory result:

In case of non-compliance in respect of process hygiene criteria specified in Table- 4A, the FBO shall:

- check and improve process hygiene by implementation of guidelines in Schedule 4 of FSS (Licensing and Registration of Food Businesses) Regulations; and,
- Ensure that all food safety criteria as specified in Table -4B (Food Safety Criteria) are complied with.

[63][Omitted]

Sampling Plans and Guidelines;

For Regulator: The sampling for different microbiological standards specified in Table-4A and 4B shall be ensured aseptically at manufacturing units and/or at retail points, as applicable, by a trained person with specialized knowledge in the field of microbiology following guidelines in the Food Safety and Standards (Food Products and Food Additives) Regulations, 2011 and ISO: 707 (Latest version). The samples shall be stored and transported in frozen condition at -18°C (±2°C) or under refrigerated conditions at 2-5°C as applicable except the products that are recommended to be stored at room temperature by the manufacturer to enable initiation of analysis within 24 hours of sampling. Preservatives shall not be added to sample units intended for microbiological examination. The desired number of sample units as per sampling plan given in Table-4A & 4B shall be taken from same batch/lot and shall be submitted to the notified laboratory. [63][A set (n) of five samples shall be tested from three different accredited laboratories and the final decision shall be drawn based on three test results. There will be no provision for retesting or re-sampling for microbiological testing.] The testing in laboratory shall be ensured as per reference test methods given below in reference test methods for regulatory compliance.

For FBO: Food Business Operator (FBO) shall perform testing as appropriate as per the microbiological standards in Table-4A & 4B to ensure validation and verification of compliance with the microbiological requirements. FBO shall decide themselves the necessary sampling and testing frequencies to ensure compliance with the specified microbiological requirements. FBO may use analytical methods other than those described in reference test methods given below for in-house testing only. However, these methods shall not be applicable for regulatory compliance purpose.

Sampling Plan:

The terms n, c, m and M used in this standard have the following meaning:

n = Number of units comprising a sample.

c = Maximum allowable number of units having microbiological counts above m for 2- class sampling plan and between m and M for 3- class sampling plan.
m = Microbiological limit that separates unsatisfactory from satisfactory in a 2- class sampling plan or acceptable from satisfactory in a 3-class sampling plan.
M = Microbiological limit that separates unsatisfactory from satisfactory in a 3-class sampling plan.

Interpretation of Results:

2-Class Sampling Plan (where n, c and m are specified)	**3-Class Sampling Plan (where n, c, m and M are specified)**
3. Satisfactory, if all the values observed are ≤ m 4. Unsatisfactory, if one or more of the values observed are >m or more than c values are >m	4. Satisfactory, if all the values observed are ≤ m 5. Acceptable, if a maximum of c values are between m and M and the rest of the values are observed as ≤m 6. Unsatisfactory, if one or more of the values observed are > M or more than c values are >m

Reference test methods: The following test methods shall be applied as reference methods.

[6]**Reference test methods-** latest version shall apply. In case where an ISO method adopted by the BIS is specified (e.g IS XXXX / ISO YYYY), latest version of the ISO method (or its BIS equivalent, if available) shall apply. [63][Test methods prescribed in FSSAI Manual of Methods of Analysis of Foods (Microbiological Testing) may also be referred along with the IS/ISO methods specified for Process Hygiene Criteria and Food Safety Criteria.]

Sl. No	**Parameter**	**Reference Test Methods**
1.	Aerobic Plate Count	Microbiology of the food chain - Horizontal method for the enumeration of microorganisms - Part 1: Colony count at 30°C by the pour plate technique- IS 5402/ ISO:4833

Sl. No	Parameter	Reference Test Methods
2.	Yeast and Mold Count	Method for Yeast and Mold Count of Food Stuffs and Animal feed- IS 5403 Microbiology of food and animal feeding stuff-Horizontal method for the enumeration of yeasts and moulds- Part1: Colony count technique in products with water activity greater than 0.95-ISO 21527-1 Microbiology of food and animal feeding stuff-Horizontal method for the enumeration of yeasts and moulds- Part2: Colony count technique in products with water activity less than 0.95-ISO 21527-2
3	Enterobacteriaceae	Microbiology - General Guidance for the Enumeration of Enterobacteriaceae without Resuscitation - MPN Technique and Colony-count Technique- IS/ISO 7402 Microbiology of Food and Animal feeding stuff –Horizontal methods for the detection and enumeration of Enterobacteriaceae- Part 2: Colony- count method-ISO 21528-2
4	*Staphylococcus aureus*	Methods for detection of bacteria responsible for food poisoning: Part 2 Isolation, identification and enumeration of *Staphylococcus aureus* and faecal streptococci- IS 5887: Part 2 Methods for detection of bacteria responsible for food poisoning: Part 8 Horizontal Method for enumeration of Coagulase-Positive Staphylococci/ (*Staphylococcus aureus* and other species) Section 1 Technique using baird-parker agar medium - IS 5887 (Part 8/Sec 1: / ISO 6888-1: 1999) Methods for detection of bacteria responsible for food poisoning: Part 8 Horizontal Method for enumeration of Coagulase-Positive Staphylococci/ (*Staphylococcus aureus* And Other Species) Section 2 Technique using rabbit plasma fibrinogen agar medium- IS 5887 (Part 8/Sec 2) / ISO 6888-2: 1999)
5	*E. Coli 0157* and Vero or Shiga toxin producing *E Coli*	Methods for detection, isolation and identification of pathogen i.e. E.coli in foods- IS :14397

Sl. No	Parameter	Reference Test Methods
6	*Salmonella*	Methods for detection of bacteria responsible for food poisoning - Part 3: General Guidance on Methods for the Detection of Salmonella- IS 5887: Part 3 Microbiology of food and animal feeding stuffs - Horizontal method for the detection of Salmonella spp.- ISO 6579
7	*Listeria monocytogenes*	Microbiology of the food chain - Horizontal method for the detection and enumeration of *Listeria monocytogenes* and other Listeria spp. - Part 1: Detection method – IS: 14988, Part 1 / ISO 11290-1
8	Sulfite-Reducing Bacteria	Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of sulfite-reducing bacteria growing under anaerobic conditions- ISO 15213
9	*Vibrio cholerae*	Isolation, identification and enumeration of *Vibrio cholerae* and *Vibrio parahaemolyticus* - IS:5887, (Part V) Microbiology of food and animal feeding stuff-Horizontal method for the detection of potentially enteropathogenic Vibrio spp.-Part 1: Detection of Vibrio parahaemolyticus and Vibrio cholerae-ISO/TS 21872-1]

[21][Table 5
Microbial Standards for Meat and Meat Products

Table 5A: Microbiological Standards for Meat and Meat Products- Process Hygiene Criteria

S. No.	Product Category[1]	Aerobic Plate Count				Yeast and Mold Count				*Escherichia coli*				*Staphylococcus aureus* (Coagulase +ve)			
		Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)	
		n	c	m	M	n	c	m	M	n	c	m	M	n	c	m	M
1.	Fresh meat/ Chilled meat[2]	5	3	$1x10^6$	$5x10^6$	5	2	$1x10^4$	$5x10^4$	5	2	$1x10^2$	$1x10^3$	5	2	$1x10^2$	$1x10^3$
2.	Frozen meat[2]	5	2	$1x10^5$	$5x10^6$	5	2	$1x10^3$	$1x10^4$	5	2	1x10	$1x10^2$	5	2	10	$1x10^2$
3.	Raw marinated/minced /comminuted meat[2]	5	2	$5x10^5$	$5x10^6$	5	2	[57][$1x10^4$]	[57][$5x10^4$]	5	2	$1x10^2$	$1x10^3$	5	2	$1x10^2$	$1x10^3$
4.	Semi-cooked /Smoked Meat/ meat food Product[2]	5	2	$1x10^4$	$1x10^5$	5	2	10	$1x10^2$	5	2	10	$1x10^2$	5	2	10	$1x10^2$
5.	Cured/Pickled meat	5	2	$5x10^2$	$5x10^3$	5	2	$1x10^2$	$1x10^3$	5	2	10	$1x10^2$	5	1	$1x10^2$	$1x10^3$
6.	Fermented meat products	NA	NA	NA	NA	NA	NA	NA	NA	5	2	10	$1x10^2$	5	1	$1x10^2$	$1x10^3$
7.	Dried/dehydrated meat products	5	2	$1x10^3$	$1x10^4$	5	2	$1x10^2$	$1x10^3$	5	2	10	$1x10^2$	5	1	10	$1x10^2$

8.	Cooked Meat Products	5	2	$1x10^3$	$1x10^4$	5	1	10	$1x10^2$	5	2	10	$1x10^2$	5	1	10	$1x10^2$
9.	Canned/Retort pouch Meat Products	NA	NA	NA	NA	NA	NA	NA	NA	5	0	Absent	NA	5	0	Absent	NA
	Test Methods[3]	**IS: 5402/ISO 4833**				**IS: 5403/ISO 21527**				**IS: 5887 Part1 or ISO 16649-2**				**IS 5887 : Part 2 or IS 5887 Part 8 (Sec 1)/ ISO : 6888-1 or IS 5887 Part 8 (Sec 2)/ISO 6888-2**			

Table 5B: Microbiological Standards for Meat & Meat Products- Food Safety Criteria

Sr. No.	**Product Category[1]**	***[63][Salmonella[$]]***			***Listeria monocytogenes***			**Sulphite Reducing Clostridia**				***Clostridium Botulinum***				***Campylobacter* Spp***			
		Sampling Plan		Limits (cfu/25g)	Sampling Plan		Limits (cfu/25g)	Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)		Sampling Plan		Limits (cfu/g)	
		n	c	m M	n	C	m M	n	c	m	M	n	c	m	M	n	c	m	M
1.	Fresh meat / Chilled meat[2]	5	0	Absent	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.	Frozen meat[2]	5	0	Absent	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.	Raw marinated/minced/comminuted meat[2]	5	0	Absent	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4.	Semi-cooked /Smoked Meat/meat food Product[2]	5	0	Absent	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	0	Absent	

5.	Cured/Pickled meat	5	0	Absent	5	0	Absent	5	2	$5x10^2$	$5x10^3$	NA	NA	NA	NA	NA	NA	NA	NA
6.	Fermented meat products	5	0	Absent	5	0	Absent	5	2	$5x10^2$	$5x10^3$	NA	NA	NA	NA	NA	NA	NA	NA
7.	Dried/dehydrated meat product	5	0	Absent	5	0	Absent	5	2	$5x10^2$	$5x10^3$	NA	NA	NA	NA	NA	NA	NA	
8.	Cooked Meat Products	5	0	Absent	5	0	Absent	5	1	$1x10^2$	$1x10^3$	NA	NA	NA	NA	5	0	Absent	
9.	Canned/ Retort pouch Meat Products	5	0	Absent	5	0	Absent	5	0	Absent		5	0	Absent		5	0	Absent	
	Test Methods[3]	**IS: 5887 Part 3/ ISO 6579**			**IS: 14988, Part 1 &2/ISO 11290-1 & 2**			**ISO 15213**				**IS:5887, Part 4 or ISO 17919**				**ISO 10272-1&2**			

NA- Not Applicable

[63][$For poultry meat the requirement shall be applicable for *Salmonella enterica* serovars Typhi, Typhimurium and Entritidis.]

[1] Definition of meat and meat products:

Definition of animal, carcass, meat food product and slaughter house are the same as provided in FSS (Food Products Standards and Food Additives) Regulations 2011. Additionally, the following definitions apply for the purpose of this regulation.

- **Canned/Retorted meat product:** Meat product packed in hermetically sealed containers which have been heat treated after sealing to such an extent that the product is shelf stable.
- **Chilled meat**: Fresh meat which has been washed with potable water and kept between 0-7^{0}C.
- **Cooked Meat/meat product**: Meat/meat product that is subjected to heat treatment, wherein minimum thermal core temperature of 75 ^{0}C is achieved.
- **Cured/pickled meat products:** Product prepared after curing/pickling meat in solution containing salt, nitrate/nitrite and adjuncts for the purpose of preservation and obtaining desirable colour, flavour and shelf life.
- **Dried/Dehydrated meat/meat products**: Meat/meat products in which part of free water has been removed by evaporation or sublimation.

- **Fermented meat product:** Chopped or ground meat products that have under gone ageing process and developed characteristics low pH, unique flavour, taste, texture and long shelf life through action of desirable microorganisms.
- **Fresh meat**: Meat that has not been treated in any way to ensure its preservation.
- **Frozen meat**: Fresh meat which has been washed with potable water, chilled and subjected to freezing in an appropriate equipment in such a way that product attains a temperature of -18^0C or colder at the thermal centre after thermal stabilization.
- **Raw marinated/minced/comminuted meat**: meat with or without bones which has been reduced to fragments by cutting/grinding/dicing/chopping/milling and/or marinated and with or without additives.
- **Semi-cooked /Smoked Meat/meat food Product:** Partially heat treated and/ or smoked meat and meat product, that will require additional heat treatment before consumption.
- **Slaughter:** Means killing of an animal for food employing a human method not inconsistent with the provisions of the prevention of cruelty to Animal act, 1960 (54 of 1960) in an authorized slaughter house or abattoir where the animal is subjected to through ante- mortem and post-mortem examination".
- **Raw processed whole, cut pieces or comminuted meat Products:** Raw processed, whole, cut pieces bone/ boneless and comminuted meat products with or without addition of other ingredients and additives as per specified in FSSAI standards.

[2] **Products under categories 1-5 to be cooked to make safe before consumption.**

Stage where the Microbiological Standards shall apply:

The Microbiological Standards with respect to the product categories specified in **Table-5A** (Process Hygiene Criteria) indicate the acceptable functioning of the production process. These are not to be used as requirements for releasing the products in the market. These are indicative contamination values above which corrective actions are required in order to maintain the hygiene of the process in compliance with food law. These shall be applicable at the end of the manufacturing process.

[63][The Microbiological Standards in Table-5B (Food Safety Criteria) define the acceptability of a batch/lot and shall be met in respect of the product at the end of the manufacturing process and the products in the market during their shelf- life.]

Action in case of unsatisfactory result:

In case of non-compliance in respect of process hygiene criteria specified in **Table- 5A**, the FBO shall:

- check and improve process hygiene by implementation of guidelines in Schedule 4 (Part IV) of FSS (Licensing and Registration of Food Businesses) Regulations; and,
- [63][Ensure that all food safety criteria's as specified in **Table -5B** are complied with.]

The Microbiological Standards in **Table-5B** (Food Safety Criteria) define the acceptability of a batch/lot and shall be met in respect of the product for releasing it in the market. These shall be applicable to the products at the end of the manufacturing process and the products in the market during their shelf- life.

Sampling Plans and Guidelines;

For Regulator: The sampling for different microbiological standards with respect to the product categories specified in **Table-5A and 5B** shall be ensured aseptically at manufacturing units and/or at retail points, as applicable, by a trained person with specialized knowledge in the field of microbiology following guidelines in Food Safety and Standards (Food Products and Food Additives) Regulations, 2011 and ISO: 707 **(Latest version**). The samples shall be stored and transported at a temperature below 5°C (but not frozen), except the products that are recommended to be stored at room temperature by the manufacturer, to enable initiation of analysis within 24 hours of sampling. Preservatives shall not be added to sample units intended for microbiological examination. The desired number of samples as per sampling plan given in **Table-5A & 5B** shall be taken from same batch/lot and shall be submitted to the notified laboratory. The testing in laboratory shall be ensured as per reference test methods given below in reference test methods for regulatory compliance. [63][A set (n) of five samples shall be tested from three different accredited laboratories and the final decision shall be drawn based on three test results. There will be no provision for retesting or re-sampling for microbiological testing.] The final decision shall be drawn based on results with no provision for retesting for microbiological parameters.

For FBO: Food Business Operator (FBO) shall perform testing as appropriate as per the microbiological standards in **Table-5A & 5B** to ensure validation and verification of compliance with the microbiological requirements. FBO shall decide themselves the necessary sampling and testing frequencies to ensure compliance with the specified microbiological requirements. FBO may use analytical methods other than those described in reference test methods given below for in-house testing only. However, these methods shall not be applicable for regulatory compliance purpose.

Sampling Plan:

The terms n,c,m and M used in this standard have the following meaning:

n = Number of units comprising a sample.

c = Maximum allowable number of units having microbiological counts above m for 2- class sampling plan and between m and M for 3- class sampling plan.

m = Microbiological limit that separates unsatisfactory from satisfactory in a 2- class sampling plan or acceptable from satisfactory in a 3-class sampling plan.

M = Microbiological limit that separates unsatisfactory from satisfactory in a 3-class sampling plan.

Interpretation of Results:

2-Class Sampling Plan (where n, c and m are specified)	**3-Class Sampling Plan (where n, c, m and M are specified)**
1. Satisfactory, if all the values observed are ≤ m 2. Unsatisfactory, if one or more of the values observed are >m or more than c values are > m	1. Satisfactory, if all the values observed are ≤ m 2. Acceptable, if a maximum of c values are between m and M and the rest of the values are observed as ≤ m 3. Unsatisfactory, if one or more of the values observed are >M or more than c values are > m

[3]**Reference test methods:** The following test methods shall be applied as reference methods

Reference test methods- latest version shall apply. In case where an ISO method adopted by the BIS is specified (e.g IS XXXX / ISO YYYY), latest version of the ISO method (or its BIS equivalent, if available) shall apply. [63][Test methods prescribed in FSSAI Manual of Methods of Analysis of Foods (Microbiological Testing) may also be referred along with the IS/ISO methods specified for Process Hygiene Criteria and Food Safety Criteria.]

S.No	**Parameter**	**Reference Test Method**
1.	Aerobic Plate Count	Microbiology of the food chain -- Horizontal method for the enumeration of microorganisms -- Part 1: Colony count at 30 degrees C by the pour plate technique- IS 5402 /ISO 4833
2.	Yeast and Mould Count	Method for Yeast and Mould Count of Foodstuffs and animal feeds- IS:5403 Microbiology of food and animal feeding stuff-Horizontal method for enumeration of Yeasts and Moulds- part 1: Colony count technique in products with water activity greater than 0.95.- IS0 21527-1: Microbiology of food and animal feeding stuffs -- Horizontal method for the enumeration of Yeasts and Moulds -- Part 2: Colony count technique in products with water activity less than or equal to 0,95- **IS0 21527-2**

3.	*Staphylococcus aureus* and *Faecal streptococci*	Methods for detection of bacteria responsible for food poisoning: Part 2 Isolation, identification and enumeration of *Staphylococcus aureus* and *faecal streptococci*- IS 5887: Part 2 Methods for Detection of Bacteria Responsible for Food Poisoning Part 8 Horizontal Method for Enumeration of Coagulase-Positive Staphylococci/ (*Staphylococcus Aureus* and other species) **Section 1 Technique using baird-parker agar medium-** IS 5887 (Part 8/Sec 1: / ISO 6888-1: 1999 Methods for Detection of Bacteria Responsible for Food Poisoning Part 8 Horizontal Method for Enumeration of Coagulase-Positive *Staphylococci*/ (*Staphylococcus Aureus* and Other Species) **Section 2 Technique using rabbit plasma fibrinogen agar medium-** IS 5887 (Part 8/Sec 2) / ISO 6888-2: 1999
4.	*Escherichia coli*	Methods for Detection of Bacteria Responsible for Food Poisoning - Part I: Isolation, Identification and Enumeration of *Escherichia coli*- IS 5887: Part 1 Microbiology of food and animal feeding stuffs -- Horizontal method for the enumeration of beta-glucuronidase-positive *Escherichia coli* -- Part 2: Colony-count technique at 44 degrees C using 5-bromo-4-chloro-3-indolyl beta-D-glucuronide- ISO: 16649-2
5.	*Salmonella spp.*	Methods for Detection of Bacteria Responsible for Food Poisoning - Part 3: General Guidance on Methods for the Detection of *Salmonell*- IS 5887: Part 3 Microbiology of food and animal feeding stuffs -- Horizontal method for the detection of *Salmonella spp*.- ISO 6579
6.	*Listeria monocytogenes*	Microbiology of Food and Feeding Stuffs - Horizontal method for Detection and Enumeration of *Listeria Monocytogenes*-Part 1: Detection Method- IS 14988: Part 1/ ISO: 11290-1 Microbiology of Food and Animal Feeding Stuffs - Horizontal Method for the Detection and Enumeration of *Listeria monocytogenes* - Part 2: Enumeration Method. IS 14988: Part 2/ ISO: 11290-2

7.	*Campylobacter spp*	Microbiology of Food and Animal Feeding Stuffs - Horizontal Method for the Detection and Enumeration of *Campylobacter spp*- Part 1: Detection Method- ISO 10272-1 Microbiology of food and animal feeding stuffs -- Horizontal method for detection and enumeration of *Campylobacter spp.* -- Part 2: Colony-count technique- **ISO 10272-2**
8.	*Sulphite-Reducing Bacteria*	Microbiology of food and animal feeding stuffs -- Horizontal method for the enumeration of *Sulphite-Reducing Bacteria* growing under anaerobic conditions- ISO 15213
9.	[63][*Clostridium botulinum*]	Methods for Detection of Bacteria Responsible for Food Poisoning: Part 4 Isolation and Identification of *Clostridium perfringens (Clostridium welchii)* and *Costridium botulinum* and enumeration of *Clostridium perfringens*- IS:5887 Part 4 Microbiology of the food chain Polymerase Chain Reaction (PCR) for the detection of food borne pathogens –Detection of botulinum type A, B, E & F- neurotoxin Producing clostridia.- ISO-TS 17919.".]

[27][TABLE 6

MICROBIOLOGICAL REQUIREMENTS OF OTHER PRODUCTS

Food Products	Parameters	Limits
Baker's Yeast		
Baker's Yeast (Compressed)	Total bacterial count, CFU/g (on dry basis), Max	$7.5X10^5$
	E. coli, CFU	Absent in 1g
	Salmonella, Shigella species	Absent in 25 g
	Coliform count, CFU/g, Max	10
	Rope spore count, CFU/g, Max	10
Baker's Yeast (Dried)	Total bacterial count, CFU/g (on dry basis), Max	$8 X10^6$
	E. coli, CFU	Absent in 1g
	Salmonella, Shigella species	Absent in 25g
	Coliform count, CFU/g, Max	50
	Rope spore count, CFU/g, Max	100.]

[35][Table 7

Microbiological Requirements for Non-Carbonated Water Based Beverages (Non Alcoholic)

S.No.	Parameters	Limits
1.	Total Plate count per ml.	Not more than 50 CFU per ml.
2.	Yeast and mould count per ml	Not more than 2 cfu per ml.
3.	Coliform count	Absent in 100 ml.

Note: - Non-carbonated beverages shall be free from pathogens]

[73][Table-8 Microbiological Standards of Eggs and Egg Products

Table 8A: Microbiological Standards of Eggs and Egg Products – Process Hygiene Criteria

Sr. No.	Product Description	Aerobic Plate Count (cfu/g)				Enterobacteriacae (cfu/g)			
		Sampling Plan		Limit (cfu)		Sampling Plan		Limit (cfu)	
		n	c	m	M	n	c	m	M
1.	Table Egg	NA							
2.	Pasteurized Liquid egg products (whole, yolk or albumin liquid)	5	2	10^4	10^5	5	2	10^1	10^2
3.	Frozen /dried/ egg products	5	2	10^4	10^5	5	2	10^1	10^2
4.	Cooked/ready-to-eat egg products including mayonnaises	5	2	10^4	10^5	5	2	10^1	10^2
	Test Methods	**IS: 5402/ISO:4833**				**IS/ISO 7402/ISO 21528 Part 2**			

Table 8B

"Table 8B: Microbiological Standards of Eggs and Egg Products – Food Safety Criteria

Sr. No.	Product Description	*Salmonella*			*Listeria monocytogenes* (cfu/g)		
		Sampling Plan		Limit (cfu)	Sampling Plan		Limit (cfu)
		n	c	m M	n	c	m M
1.	Table Egg	NA					
2.	Pasteurized Liquid egg products (whole, yolk or albumin liquid)	5	0	Absent/25 g	5	0	Absent/25 g
3.	Frozen /dried/ egg products	5	0	Absent/25 g	5	0	10^2 /g
4.	Cooked/ready-to-eat egg products including mayonnaises	5	0	Absent/25 g	5	0	Absent/25 g
	Test Methods	**IS: 5887 Part3 / ISO:6579**			**IS: 14988, Part 1 & Part 2 / ISO 11290-1& 2**		

Definition.- Definition related to egg and egg products are the same as provided in Food Safety and Standards (Food Products Standards and Food Additives) Regulations 2011. The category "Table egg" shall be regulated in accordance with the good manufacturing practices and code of good hygiene practices notified under Schedule 4 of Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011.

Stage where the Microbiological Standards shall apply.- The microbiological standards with respect to the products categories specified in **Table-8A** (Process Hygiene Criteria) indicate the acceptable functioning of the production process. These are not to be used as requirements for releasing the products in the market. These are indicative values above which corrective actions are required in order to maintain the hygiene of the process in compliance with food law. These shall be applicable at the end of the manufacturing process. The microbiological standards in Table-8B (Food Safety Criteria) define the acceptability of a batch/lot and shall be met in respect of the products at the end of the manufacturing process and the products in the market during their shelf- life.

Action in case of unsatisfactory result:
In case of non-compliance in respect of process hygiene criteria specified in **Table- 8A,** the FBO shall:

- check and improve process hygiene by implementation of guidelines in Schedule 4 of Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations; and,
- Ensure that all food safety criteria as specified in **Table -8B** (Food Safety Criteria) are complied with.

Sampling Plans and Guidelines

For Regulator.- The sampling for different microbiological standards specified in **Table-8A and 8B** shall be ensured aseptically at manufacturing units and/or at retail points, as applicable, by a trained person with specialized knowledge in the field of microbiology following guidelines in the Food Safety and Standards (Food Products and Food Additives) Regulations, 2011 and ISO:707 **(Latest version**). The samples shall be stored and transported in frozen condition at -18°C(±2°C) or under refrigerated conditions at 2-5°C as applicable except the products that are recommended to be stored at room temperature by the manufacturer to enable initiation of analysis within 24 hours of sampling. Preservatives shall not be added to sample units intended for microbiological examination. The desired number of sample units as per sampling plan given in **Table-8A and 8B** shall be taken from same batch/lot and shall be submitted to the notified laboratory. **Three sets, each containing 'n' number of samples (n as defined in the sampling plan eg if n=5, then total number of samples to be drawn is 15) shall be drawn**. Each of these three sets shall be tested in three different accredited laboratories. The final decision shall be based on the results of three accredited laboratories. In the case of food safety criteria (Table 8B), results from all the three laboratories should indicate compliance with specified criteria. There will be no provision for retesting or resampling for microbiological testing. The testing in laboratory shall be ensured as per reference test methods given below in reference test methods for regulatory compliance.

For FBO.- Food Business Operator (FBO) shall perform testing as appropriate as per the microbiological standards in **Table-8A and 8B** to ensure validation and verification of compliance with the microbiological requirements. FBO shall decide themselvessubject to minimum prescribed under FSSR (Licensing and Registration of Food Businesses), the necessary sampling and testing frequencies to ensure compliance with the specified microbiological requirements. FBO may use analytical methods other than those described in reference test methods given below for in-house testing only. However, these methods shall not be applicable for regulatory compliance purpose.

Sampling Plan.-

The terms n, c, m and M used in this standard have the following meaning:
n = Number of units comprising a sample.
c = Maximum allowable number of units having microbiological counts above m for 2- class sampling plan and between m and M for 3- class sampling plan.
m = Microbiological limit that separates unsatisfactory from satisfactory in a 2- class sampling plan or acceptable from satisfactory in a 3-class sampling plan.

M = Microbiological limit that separates unsatisfactory from satisfactory in a 3-class sampling plan.

Interpretation of Results:

2-Class Sampling Plan (where n,c and m are specified)	3-Class Sampling Plan (where n,c,m and M are specified)
1. Satisfactory, if all the values observed are ≤ m 2. Unsatisfactory, if one or more of the values observed are >m	1. Satisfactory, if all the values observed are ≤ m 2. Acceptable, if a maximum of c values are between m and M and the rest of the values are observed as ≤m 3. Unsatisfactory, if one or more of the values observed are > M or more than prescribed c values are >m

Reference test methods: The following test methods shall be applied as reference methods. Test methods prescribed in FSSAI Manual of Method of Analysis of Foods (Microbiological Testing) may also be referred along with the IS/ISO methods specified for Process Hygiene Criteria and Food Safety Criteria. Latest version of test methods shall apply. In case where an ISO method adopted by the BIS is specified (e.g. IS XXXX / ISO YYYY), latest version of the ISO method (or its BIS equivalent, if available) shall apply.

S.No.	Parameter	Reference Test methods
1.	Aerobic Plate Count	Microbiology of the food chain -- Horizontal method for the enumeration of microorganisms -- Part 1: Colony count at 30 °C by the pour plate technique- IS 5402/ ISO:4833
2.	Enterobacteriaceae	Microbiology - General Guidance for the Enumeration of Enterobacteriaceae without Resuscitation - MPN Technique and Colony-count Technique- IS/ISO 7402 Microbiology of Food and Animal feeding stuff –Horizontal methods for the detection and
3.	*Salmonella*	Methods for Detection of Bacteria Responsible for Food Poisoning - Part 3: General Guidance on Methods for the Detection of Salmonella- IS 5887: Part 3 Microbiology of food and animal feeding stuffs -- Horizontal method for the detection of Salmonella spp.- ISO6579

4.	*Listeria monocytogenes*	Microbiology of the food chain -- Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of Listeria spp. -- Part 1: Detection method –ISO 11290-1 Microbiology of the food chain -- Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of Listeria spp. -- Part 2: enumeration method –ISO 11290-2 Microbiology of Food and Feeding Stuffs - Horizontal method for Detection and Enumeration of *Listeria Monocytogenes*, Part 1: Detection Method -IS 14988-1 Microbiology of Food and Animal Feeding Stuffs - Horizontal Method for the Detection and Enumeration of *Listeria monocytogenes*, Part 2: Enumeration Method- IS 14988-2]

[77][Table-9 Microbiological Standards of Food Grain Products

Table 9A: Microbiological Standards of Food Grain Products – Process Hygiene Criteria

Sr. No.	Product Description	*Staphylococcus aureus* count (cfu/g)				*Enterobacteriaceae* count(cfu/g)			
		Sampling plan		Limit		Sampling plan		Limit	
		n	c	m	M	n	c	m	M
1.	Sprouted grains, sweet corn cob or packed wet grains for direct consumption	NA				5	2	10	10^2
2.	Batters and doughs (Ready to Cook)	5	2	10^2	10^3	5	2	10^2	10^3
3.	Fermented products other than batters and doughs (ready to cook) including bread, cakes and doughnuts, other ready to eat grain products, malted milk food, instant noodles, and pasta products	NA				5	2	10	10^2
	Test Methods	**IS:5887, Part 2 and IS 5887 part 8(Sec 1)/ ISO 6888-1 or IS:5887Part 8 (Sec2)/ISO 6888-2**				**IS/ISO 7402/ ISO 21528 Part 2**			

Table 9B: Microbiological Standards of Food Grain Products – Food Safety Criteria

Sr. No.	Product Description	*Salmonella*			*Listeria monocytogenes*		
		Sampling plan		**Limit**	**Sampling plan**		**Limit**
		n	**c**	**m**	**n**	**c**	**m**
1.	Sprouted grains, sweet corn cob or packed wet grains for direct consumption	5	0	Absent/25 g	5	0	Absent/25 g
2.	Batters and Doughs (Ready to Cook)	NA			NA		
3.	Fermented products other than batters and doughs (ready to cook) including bread, cakes, doughnuts, other ready to eat grain products, malted milk food, instant noodles* and pasta products*	5	0	Absent/25 g	5	0	Absent/25 g
	Test Methods	IS: 5887 Part3 / ISO:6579			IS: 14988, Part 1 / ISO 11290-1		

* Instant noodles and pasta products shall be tested for Salmonella but not for *Listeria monocytogenes.*

Definitions

Definitions related to Cereal and Cereal Products are as provided in FSS (Food Products Standards and Food Additives) Regulations 2011.

Stage where the Microbiological Standards shall apply:

The microbiological standards with respect to the product categories specified in **Table-9A** (Process Hygiene Criteria) indicate the acceptable functioning of the production process. These are not to be used as requirements for releasing the products in the market. These are indicative values above which corrective actions are required in order to maintain the hygiene of the process in compliance with the food law. These shall be applicable at the end of the manufacturing process. The Microbiological Standards in **Table-9B** (Food Safety Criteria) define the acceptability of a batch/lot and shall be met in respect of the products at the end of the manufacturing process and the products in the market during their shelf- life.

Action in case of unsatisfactory result:
In case of non-compliance in respect of process hygiene criteria specified in **Table- 9A,** the FBO shall:

- check and improve process hygiene by implementation of guidelines in Schedule 4 of FSS (Licensing and Registration of Food Businesses) Regulations; and,

- ensure that all food safety criteria as specified in **Table -9B** (Food Safety Criteria) are complied with

Sampling Plan and Guidelines:

For Regulator: The sampling for different microbiological standards specified in **Table-9A and 9B** shall be ensured aseptically at manufacturing units and/or at retail points, as applicable, by a trained person with specialized knowledge in the field of microbiology following guidelines in the Food Safety and Standards (Food Products and Food Additives) Regulations, 2011 and ISO: 707 **(Latest version**). The samples shall be stored and transported in frozen condition at -18°C (±2°C) or under refrigerated conditions at 2-5°C as applicable except the products that are recommended to be stored at room temperature by the manufacturer to enable initiation of analysis within 24 hours of sampling. Preservatives shall not be added to sample units intended for microbiological examination. The desired number of sample units as per sampling plan given in **Table-9A & 9B** shall be taken from same batch/lot and shall be submitted to the notified laboratory. Three sets, each containing 'n' number of samples (n as defined in the sampling plan eg if n=5, then total no. of samples is 15) shall be drawn. Each of these three sets shall be tested in three different accredited laboratories. The final decision shall be based on the results of three accredited laboratories. In the case of food safety criteria (Table 9B), results from all the three laboratories should indicate compliance with specified criteria. There will be no provision for retesting or resampling for microbiological testing. The testing in laboratory shall be done as per the methods given in the Table "Reference Test Methods"

For FBO: Food Business Operator (FBO) shall perform testing as appropriate as per the microbiological standards in **Table-9A & 9B** to ensure verification of compliance with the microbiological requirements. FBO shall decide themselves, subject to the minimum prescribed under FSSR (Licensing and Registration of Food Businesses), the necessary sampling and testing frequencies, to ensure compliance with the specified microbiological requirements. FBO may use analytical methods other than those described in reference test methods for in-house testing only. However, these methods shall not be applicable for regulatory compliance purpose.

Sampling Plan:

The terms n, c, m and M used in this standard have the following meaning:

n = Number of units comprising a sample.

c = Maximum allowable number of units having microbiological counts above m for 2- class sampling plan and between m and M for 3- class sampling plan.

m = Microbiological limit that separates unsatisfactory from satisfactory in a 2- class sampling plan or acceptable from satisfactory in a 3-class sampling plan.

M = Microbiological limit that separates unsatisfactory from satisfactory in a 3-class sampling plan.

Interpretation of Results:

2-Class Sampling Plan (where n,c and m are specified)	**3-Class Sampling Plan (where n,c,m and M are specified)**
1. Satisfactory, if all the values observed are ≤ m 2. Unsatisfactory, if one or more of the values observed are >m	1. Satisfactory, if all the values observed are ≤ m 2. Acceptable, if a maximum of c values are between m and M 3. Unsatisfactory, if one or more of the values observed are > M or more than prescribed c values are >m

Reference Test Methods: The following test methods shall be applied as Reference Test Methods. Test methods prescribed in FSSAI Manual of Method of Analysis of Foods (Microbiological Testing) may also be referred along with the IS/ISO methods specified for Process Hygiene Criteria and Food Safety Criteria.

Reference test methods- latest version shall apply. In case where an ISO method adopted by the BIS is specified (e.g IS XXXX / ISO YYYY), latest version of the ISO method (or its BIS equivalent, if available) shall apply.

S.No	**Parameter**	**Reference Test methods**
1.	Enterobacteriaceae count	Microbiology - General Guidance for the Enumeration of Enterobacteriaceae without Resuscitation - MPN Technique and Colony-count Technique- IS/ISO 7402 Microbiology of Food and Animal feeding stuff –Horizontal methods for the detection and enumeration of Enterobacteriaceae- Part 2:Colony- count method-ISO 21528-2

2.	*Staphylococcus Aureus*count	Methods for detection of bacteria responsible for food poisoning: Part 2 Isolation, identification and enumeration of *Staphylococcus aureus* and faecal streptococci- IS 5887: Part 2 Methods for Detection of Bacteria Responsible for Food Poisoning Part 8 Horizontal Method for Enumeration of Coagulase-Positive Staphylococci/ (*Staphylococcus aureus* and other species) **Section 1 Technique using baird-parker agar medium -** IS 5887 (Part 8/Sec 1: / ISO 6888-1: 1999) Methods For Detection Of Bacteria Responsible For Food Poisoning Part 8 Horizontal Method For Enumeration Of Coagulase-Positive Staphylococci/ (*Staphylococcus aureus* And Other Species) **Section 2 Technique using rabbit plasma fibrinogen agar medium-** IS 5887 (Part 8/Sec 2) / ISO 6888-2: 1999)
3.	*Salmonella*	Methods for Detection of Bacteria Responsible for Food Poisoning - Part 3: General Guidance on Methods for the Detection of Salmonella- IS 5887: Part 3 Microbiology of food and animal feeding stuffs -- Horizontal method for the detection of Salmonella spp.- ISO 6579
4.	*Listeria monocytogenes*	Microbiology of the food chain -- Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of Listeria spp. -- Part 1: Detection method –ISO 11290-1 Microbiology of Food and Feeding Stuffs - Horizontal method for Detection and Enumeration of Listeria Monocytogenes, Part 1: Detection Method -IS 14988-1]

[82][Table-10 Microbiological Standards for Health Supplements, Nutraceuticals, Food for Special Dietary Use, Food for Special Medical Purpose, Functional Food and Novel Food

Table 10A: Microbiological Standards for Health Supplements, Nutraceuticals, Food for Special Dietary Use, Food for Special Medical Purpose, Functional Food and Novel Food – Process Hygiene Criteria

S. No.	Product description	Aerobic Plate Count				Yeast and Mold Count				*Enterobacteriaceae* count			
		Sampling plan		Limit (cfu/g or ml)		Sampling plan		Limit (cfu/g or ml)		Sampling plan		Limit (cfu/g or ml)	
		n	c	m	M	n	c	m	M	n	c	m	M
1.	Health Supplements, Nutraceuticals, Food for Special Dietary Use, Food for Special Medical Purpose and Novel Food for consumption after processing	5	3	$1x10^6$	$1x10^7$	5	3	$1x10^4$	$1x10^5$	5	3	$1x10^3$	$1x10^4$
2.	Health Supplements, Nutraceuticals, Food for Special Dietary Use, Food for Special Medical Purpose and Novel Food for direct consumption	5	2	$1x10^4$	$1x10^5$	5	2	$1x10^2$	$1x10^3$	5	2	$1x10^2$	$1x10^3$
3.	Probiotics and products containing specified live microorganisms*	NA				NA				NA			
	Test Methods	**IS 5402/ISO 4833**				**IS 5403/ ISO 21527 Part 1 and Part 2**				**ISO 21528 Part 2**			

Note:- *Should contain only the specified microorganism(s) at the level claimed on the label. The counts have to be determined using methodology appropriate for the organisms. e.g. For Lactic acid bacteria ISO 15214/IS 16068, for Bifidobacteria ISO 29981

Table 10B: Microbiological Standards for Health Supplements, Nutraceuticals, Food for Special Dietary Use, Food for Special Medical Purpose, Functional Food and Novel Food – Food Safety Criteria

S. No.	Product description	*Salmonella*				*Listeria monocytogenes*			
		Sampling plan		Limit (cfu)		Sampling plan		Limit (cfu)	
		n	c	m	M	n	c	m	M
1.	Health Supplements, Nutraceuticals, Food for Special Dietary Use, Food for Special Medical Purpose, functional food and Novel Food and not for direct consumption	NA				NA			
2.	Health Supplements, Nutraceuticals , Food for Special Dietary Use, Food for Special Medical Purpose, functional food and Novel Food for direct consumption	5	0	Absent/25g		5	0	Absent/25g	
3.	Probiotics and products containing specified live micro organisms	5	0	Absent/25g		5	0	Absent/25g	
	Test Methods	**IS 5887 Part3 / ISO 6579**				**IS 14988 Part 1 / ISO 11290-1**			

Note: In high value low volume (less than 100 g) and large retail pack (pack more than 1 kg) sizes, the sample plan may be modified (e.g. absence of Salmonella in 10 g or 5 g in the case of former or n number of samples to be taken from different sites of one large pack) accordingly on case to case basis with the prior approval of Food Safety and Standards Authority of India (FSSAI).

Definition

Definition related to Nutraceutical Products are the same as provided in Food Safety and Standards (Health Supplements, Nutraceuticals, Food for Special Dietary Use, Food for Special Medical Purpose, Functional Food and Novel Food) Regulations, 2016.

Stage where the Microbiological Standards shall apply:

The microbiological standards with respect to the products categories specified in **Table-10A** (Process Hygiene Criteria) indicate the acceptable functioning of the production process. These are not to be used as requirements for releasing the products in the market. These are indicative values above which corrective actions are required in order to maintain the hygiene of the process in compliance with food law. These shall be applicable at the end of the manufacturing process. The Microbiological Standards in **Table-10B** (Food Safety Criteria) define the acceptability of a batch or lot and shall be met in respect of the products at the end of the manufacturing process and the products in the market during their shelf- life.

Action in case of unsatisfactory result:

In case of non-compliance in respect of process hygiene criteria specified in **Table- 10A,** the Food Business Operator (FBO) shall-

- check and improve process hygiene by implementation of guidelines in Schedule 4 of Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011; and
- ensure that all food safety criteria as specified in **Table -10B** (Food Safety Criteria) are complied with.

Sampling Plan and Guidelines

For Regulator: The sampling for different microbiological standards specified in **Table-10A and 10B** shall be ensured aseptically at manufacturing units and/or at retail points, as applicable, by a trained person with specialised knowledge in the field of microbiology following guidelines in the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 and ISO: 17728:2015 (confirmed in 2019). The samples shall be stored and transported in frozen condition at -18°C (±2°C) or under refrigerated conditions at 2-5°C as applicable

except for the products that are recommended to be stored at room temperature by the manufacturer to enable initiation of analysis within 24 hours of sampling. Preservatives shall not be added to sample units intended for microbiological examination. The desired number of sample units as per sampling plan given in **Table-10A and 10B** shall be taken from same batch or lot and shall be submitted to the notified laboratories. Three sets, each containing 'n' number of samples (n as defined in the sampling plan e.g. if n=5, then total no. of samples to be drawn is 15) shall be drawn. Each of these three sets shall be tested in three different accredited laboratories. The final decision shall be based on the results of three accredited laboratories. In the case of Food Safety Criteria (Table 10B), the results from all the three laboratories should indicate compliance with the specified criteria. There will be no provision for retesting or resampling for microbiological testing. The testing in laboratory shall be ensured as per the methods given in the table "reference test methods".

For FBO: Food Business Operator (FBO) shall perform testing as appropriate as per the microbiological standards in **Table-10A & 10B** to ensure verification of compliance with the microbiological requirements. FBO shall decide themselves subject to minimum prescribed under Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011, the necessary sampling and testing frequencies to ensure compliance with the specified microbiological requirements. FBO may use analytical methods other than those described in "reference test methods" given below for in-house testing only. However, these methods shall not be applicable for regulatory compliance purpose.

Sampling Plan:

The terms n, c, m and M used in this standard have the following meaning:

n = Number of units comprising a sample.

c = Maximum allowable number of units having microbiological counts above m for 2- class sampling plan and between m and M for 3- class sampling plan.

m = Microbiological limit that separates unsatisfactory from satisfactory in a 2- class sampling plan or acceptable from satisfactory in a 3-class sampling plan.

M = Microbiological limit that separates unsatisfactory from satisfactory in a 3-class sampling plan.

Interpretation of Results:

2-Class Sampling Plan (where n, c and m are specified)	3-Class Sampling Plan (where n, c, m and M are specified)
1. Satisfactory, if all the values observed are ≤ m 2. Unsatisfactory, if one or more of the values observed are >m	7. Satisfactory, if all the values observed are ≤ m 8. Acceptable, if a maximum of c values are between m and M. 9. Unsatisfactory, if one or more of the values observed are > M or more than prescribed c values are >m

Reference Test Methods: The following test methods shall be applied as reference methods. Test methods prescribed in FSSAI Manual of Methods of Analysis of Foods (Microbiological Testing) may also be referred along with the IS/ISO methods specified for Process Hygiene Criteria and Food Safety Criteria. Latest version of test methods shall apply. In case where an ISO method adopted by the BIS is specified (e.g IS XXXX / ISO YYYY), latest version of the ISO method (or its BIS equivalent, if available) shall apply.

S. No	Parameter	Reference Test Methods
1.	Aerobic Plate Count	Microbiology of the food chain - Horizontal method for the enumeration of microorganisms - Part 1: Colony count at 30 °C by the pour plate technique- IS 5402/ ISO 4833
2.	Yeast and Mold Count	Method for Yeast and Mould Count of Food Stuffs and Animal feed- IS 5403 Microbiology of food and animal feeding Stuff-Horizontal method for the enumeration of yeasts and moulds-Part1: Colony count technique in products with water activity greater than 0.95-ISO 21527-1 Microbiology of food and animal feeding Stuff-Horizontal method for the enumeration of yeasts and moulds-Part2: Colony count technique in products with water activity less than 0.95-ISO 21527-2

3.	*Enterobacteriaceae* count	Microbiology of Food and Animal feeding stuff –Horizontal methods for the detection and enumeration of *Enterobacteriaceae*- Part 2: Colony- count method - ISO 21528-2
4.	*Salmonella*	Methods for Detection of Bacteria Responsible for Food Poisoning - Part 3: General Guidance on Methods for the Detection of Salmonella- IS 5887 Part 3 Microbiology of food and animal feeding stuffs -- Horizontal method for the detection of Salmonella spp.- ISO 6579
5.	*Listeria monocytogenes*	Microbiology of Food and Feeding Stuffs - Horizontal method for Detection and Enumeration of *Listeria monocytogenes*, Part 1: Detection Method -IS 14988-1 Microbiology of the food chain - Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of Listeria spp. - Part 1: Detection method –ISO 11290-1.**]**

[71][APPENDIX C

I. PROCESSING AIDS CATEGORIES:

(1) Antifoaming Agents: Substances that reduce and hinder the formation of foam during processing of liquid food products.

(2) Catalyst: Substances that increase the rate of a chemical reaction without itself undergoing any permanent chemical change.

(3) Clarifying Agents and Filtration Agents: Substances that are used to remove suspended solids from liquids by inducing flocculation and those substances which aid in the process of filtration.

(4) Lubricants, Release and Antistick Agents: Substances which help to reduce friction between food contact surfaces and substances that provide critical barrier between molding surface and the substrate facilitating separation of cured part from the mold.

(5) Microbial Control Agents, Microbial Nutrients and Microbial Nutrient Adjuncts

(a) Microbial Control Agents: Substances that can be used to inactivate target organisms in the processing of foods.

(b) Microbial Nutrients and Microbial Nutrient Adjuncts: Substances that can be used to enhance the growth of the microbial culture intended to be used in food processing.

(6) Solvent for Extraction and Processing: Processing aids that help in the separation of a particular substance from a mixture by dissolving that substance in a solvent that will dissolve it, but which will not dissolve any other substance in the mixture.

(7) Bleaching, Washing, Peeling and Denuding Agents: Substances that can be used in making food products white or colorless and substances that aid in surface treatment (washing, denuding and peeling) of food specified in these regulations.

(8) Flocculating Agents: Substances that promote flocculation by forming colloids and other suspended particles in liquids to aggregate and forming a floc. Flocculants are used to improve the sedimentation or filterability of small particles.

(9) Contact Freezing and Cooling Agents: Substances that can cause rapid freezing on contact with food.

(10) Desiccating Agent: Substances that extract water and prevent the formation of lumps during manufacturing of food products. They are either soluble or insoluble substances that adsorb water due to their chemical properties.

(11) Enzymes: These are macromolecular biological catalysts which accelerate chemical reactions in the treatment or processing of raw materials, foods, or ingredients. The enzymes may be used as a

processing aid to perform any technological purpose if the enzyme is derived from the corresponding source specified in the table.

(12) Generally permitted processing aids

This category includes processing aids which have different technological functions. They shall be used as per the conditions specified in the corresponding table under these regulations.

II. USE OF PROCESSING AIDS IN FOOD PRODUCTS:

The processing aids listed in Table 1 to Table 12 may be used in the course of manufacture of food specified in the corresponding table, provided the final food contains not more than the corresponding residue level specified in the Table.

TABLE 1: ANTIFOAMING AGENTS

S. No.	Name of the processing aid	Product Category	Residual level (mg/kg) (Not more than)
1.	Coconut oil	Juices	GMP
2.	Hydrogenated coconut oil	Confectionary	15
		Vegetable protein	GMP
3.	Polydimethylsiloxane (INS 900a)	Beer, fats & oils, vegetable protein, Juices, Potato processing [81][,alcoholic beverages]	10
4.	Polyethylene glycol (INS 1521)	All foods	GMP
5.	Propylene glycol (INS 1520)	All foods	GMP
6.	Sorbitan monolaurate (INS 493)	All foods	1
7.	Sorbitan monooleate (INS 494)	All foods	1
8.	Vegetable fatty acid esters	Juices	GMP
[81][9.	Polysorbate Sorbitan Monolaurate	Sugar	GMP]

TABLE 2: CATALYST

S. No.	Name of the processing aid	Product Category	Residual Level (mg/kg) Not more than
1	Chromium (excluding chromium VI)	Hydrogenated vegetable oil	0.1
2.	Copper	Hydrogenated vegetable oil	0.1
3.	Molybdenum	Hydrogenated vegetable oil	0.1
4.	Nickel	Polyols	1
		Hardened oil	0.8
		Hydrogenated vegetable oil	1.5
5.	Potassium	Interesterified vegetable oil	1
6.	Potassium ethoxide	Interesterified vegetable oil	1
7.	Sodium	Interesterified vegetable oil	1
8.	Sodium ethoxide	Interesterified vegetable oil	1
9.	Sodium methoxide	Interesterified vegetable oil	1

TABLE 3: CLARIFYING AGENTS AND FILTRATION AIDS

S. No.	Name of the processing aid	Product Category	Residual level (mg/kg) (Not more than)
1.	Acid clays of montmorillonite	Fruit or vegetable juices, fruit nectars, syrups [81][,oils] and wine	GMP
2.	Chitosan sourced from *Aspergillus niger*	Wine, beer, cider, spirits and food grade ethanol	GMP
3.	Chloro methylated aminated styrene-divinyl benzene resin	Sugar	1
4.	Co-extruded polystyrene and polyvinyl polypyrrolidone	Fruit or vegetable juices, fruit nectars, syrups and [81][Alcoholic beverages including low	1

		alcoholic and alcohol free counterparts]	
5.	Copper sulphate (INS 519)	Fruit or vegetable juices, fruit nectars, syrups and wine	GMP
6.	Diatomaceous earth	Fruit or vegetable juices, Alcoholic beverages including low alcoholic and alcohol-free counterparts (as filter powder), [81][non-alcoholic beverages, sharbat, sugar syrups, synthetic syrups and fruit syrups] [82][and honey]	GMP
7.	Fish collagen, including isinglass	Fruit or vegetable juices, fruit nectars, syrups and Alcoholic beverages including low alcoholic and alcohol-free counterparts	GMP
8.	Kaolin	Fruit or vegetable juices, fruit nectars, syrups and wine	GMP
9.	Magnesium oxide (INS 530)	Fruit or vegetable juices, fruit nectars, syrups and wine	GMP
10.	Perlite	Starch hydrolysis	GMP
11.	Polyvinyl polypyrrolidone (INS 1201)	Fruit or vegetable juices, fruit nectars, syrups and wine	GMP
12.	Shellac, bleached (INS 904)	Fruit or vegetable juices, fruit nectars, syrups and wine	GMP
13.	Synthetic magnesium silicate (INS 553(i))	Edible oils	GMP
[81][14.	Calcium oxide (INS 529)	Preparation of Corn Flour	GMP
15.	Phosphoric acid (INS 338)	Sugar	GMP]

[73][TABLE 4: LUBRICANTS, RELEASE AND ANTISTICK AGENTS

S. No.	Name of the processing aid	Product Category	Residual level (mg/kg) (Not more than)
1.	Acetylated mono- and diglycerides (INS 472a)	All foods	100
2.	Bees wax (INS 901)	All foods	GMP
3.	Calcium carbonate (INS 170 (i))	All foods	GMP
4.	Calcium and sodium salts of stearic acid	Confectionery	GMP
5.	Carnauba wax (INS 903)	Confectionery	GMP
6.	Coconut Oil	Confectionery, bakery wares, salts, spices, soups, cereal products	GMP
7.	Glycerin/Glycerol (INS 422)	All foods	GMP
8.	Hydrogenated palm kernel oil (HPKO)	Confectionery and bakery wares	GMP
9.	Hydrogenated vegetable oil (HVO)	All foods	GMP
10.	Icing sugar	Confectionery	GMP
11.	Lecithin (INS 322 (i))	All foods	GMP
12.	Liquid paraffin (INS 905 e)	Confectionery	GMP
13.	Magnesium stearate (INS 470(iii))	Confectionery	GMP
14.	Medium chain Triglyceride (MCT) (C6- C12)	Confectionery, bakery wares and fruit Jelly	GMP
15.	Oleic acid	All foods	GMP
16.	Palm oil/Palmolein	Confectionery, bakery wares, Salts, spices, soups and cereal products	GMP
17.	Rice starch	Confectionery	GMP
18.	Sunflower oil	Confectionery, bakery	GMP

		wares, Salts, spices, soups [81][, salts, spices, sauces, salads, protein products, seasonings, fruits & vegetable products, nuts & nut products, cereal] and cereal products	
19.	Soybeanoil	Confectionery and bakery wares	GMP
20.	Thermally oxidised soya-bean oil (INS 479)	All foods	320
21.	White mineral oil (INS 905e)	All foods	GMP]
[81][22.	Cocoa powder	Chocolates	GMP
23.	Cottonseed oil	Fruits and vegetables, seasonings, bakery products, fruits & vegetable products, salt, spices and soups, cereal and cereal products, nut and nut products	GMP
24.	Magnesium hydrogen carbonate (INS 504(ii))	Snacks	GMP
26.	Talc (INS 553(iii))	Confectionary	GMP
27.	Tricalcium phosphate (INS 341(iii))	Snacks	GMP]

TABLE 5: MICROBIAL CONTROL AGENTS, MICROBIAL NUTRIENTS AND MICROBIAL NUTRIENT ADJUNCTS

MICROBIAL CONTROL AGENT			
S. No.	**Name of the processing aid**	**Product Category**	**Residual Level (mg/kg) (Not more than)**
1.	Dimethyl dicarbonate* (INS 242)	Wine, Fruits and vegetable juices, Water based flavoured drinks	Non-detectable
2.	Lysozyme (INS 1105)	Alcoholic beverages including low alcoholic and alcohol-free counterparts	GMP

3.	Octanoic acid	Meat, fruit and vegetables	GMP
4.	Sodium metasilicate (INS 550 (ii))	Meat and poultry carcasses and cuts	GMP
5.	Sodium chlorite	Meat, fish, fruit and vegetables	GMP
6.	Salmonella phage preparation (S16 and FO1a)	Raw meat and poultry	GMP

∗ Maximum usage level shall not be more than 200 mg/kg for wine, 250 mg/kg for fruits and vegetable juices and its products and 250 mg/kg for water based flavoured drinks. Residue shall be analyzed as per method specified in "Joint FAO/WHO Expert Committee on Food Additives (JECFA) specification of Dimethyl dicarbonate".

MICROBIAL NUTRIENTS AND MICROBIAL NUTRIENT ADJUNCTS (for sustaining microbial growth)		
S. No.	**Name of the processing aid**	**Residual Level (mg/kg) (Not more than)**
7.	Adenine	GMP
8.	Adonitol	GMP
9.	Arginine	GMP
10.	Asparagine	GMP
11.	Aspartic acid	GMP
12.	Ammonium sulphate	GMP
13.	Ammonium sulphite	GMP
14.	Benzoic acid	GMP
15.	Biotin	GMP
16.	Calcium pantothenate	GMP
17.	Calcium propionate (INS 282)	GMP
18.	Copper sulphate (INS 519)	GMP
19.	Cysteine	GMP
20.	Cysteine monohydrochloride	GMP
21.	Dextran	GMP
22.	Ferrous sulphate	GMP
23.	Glutamic acid	GMP
24.	Glycine	GMP
25.	Guanine	GMP
26.	Histidine	GMP
27.	Hydroxyethyl starch	GMP
28.	Inosine	GMP

29.	Inositol	GMP
30.	Manganese chloride	GMP
31.	Manganese sulphate	GMP
32.	Niacin	GMP
33.	Nitric acid	GMP
34.	Pantothenic acid	GMP
35.	Peptone	GMP
36.	Phytates	GMP
37.	Polyvinylpyrrolidone (INS 1201)	GMP
38.	Pyridoxine hydrochloride	GMP
39.	Riboflavin (INS 101 (i))	GMP
40.	Sodium formate	GMP
41.	Sodium molybdate	GMP
42.	Sodium tetraborate	GMP
43.	Thiamine	GMP
44.	Threonine	GMP
45.	Trisodium orthophosphate	GMP
46.	Uracil	GMP
47.	Xanthine	GMP
48.	Zinc chloride	GMP
49.	Zinc sulphate	GMP

TABLE 6: SOLVENT FOR EXTRACTION AND PROCESSING

S. No.	Name of the processing aid	Product Category	Residual Level (mg/kg) (Not more than)
1.	Acetone	[81][flavouring substances]	30
		Spice oleoresins	30
		Colours	2
		Vegetable oils	0.1
		Other foods	0.1
2.	Benzyl alcohol	Fatty acids, [81][flavouring substances], colours	GMP
3.	Butanol	Fatty acids, [81][flavouring substances], colours	10
		Spice oleoresins	2
4.	Butan-2-ol	Spice oleoresins	2

5.	Carbon dioxide (INS 290)	[81][flavouring substances]	GMP
		Spice oleoresins	GMP
6.	Cyclohexane	[81][flavouring substances], vegetable oils	1
7.	Dibutyl ether	[81][flavouring substances]	2
8.	Diethyl ether	[81][flavouring substances], colors	2
		Spice oleoresins	2
9.	Dimethyl ether	[81][flavouring substances]	2
10.	Ethyl acetate	[81][flavouring substances]	10
		Spice oleoresins	50
11.	Ethyl alcohol	Spice oleoresins	GMP
		Other Foods	GMP
12.	Ethylene dichloride (1,2 Dichloroethane)	Spice oleoresins	30
13.	Glycerol diacetate	All foods	GMP
14.	Glycerol monoacetate	All foods	GMP
15.	Heptane	[81][flavouring substances]	1
		Vegetable oils	
16.	Hexane	[81][flavouring substances], vegetable oils	5
		Spice oleoresins	25
		Chocolate and chocolate products	1
17.	Isobutane	[81][flavouring substances]	1
		Other foods	0.1
18.	Isopropyl alcohol	Spice oleoresins	50
		Other foods	10
19.	Methyl alcohol	Spice oleoresins	50

20.	Methylene chloride (Dichloromethane)	Decaffeinated tea	2
		Decaffeinated coffee	10
		[81][flavouring substances]	2
		Spice oleoresins	30
		Vegetable oils	0.02
21.	Methyl ethyl ketone (butanone)	Fatty acids, [81][flavouring substances], colourings, decaffeination of coffee, tea	2
22.	Methyl tert-butyl ether	Spice oleoresins	2
23.	Propane	[81][flavouring substances]	1
		Edible oils	0.1
24.	Propan-1-ol	Spice oleoresins	1
25.	Toluene	[81][flavouring substances]	1
26.	Water	Spice oleoresins	GMP

TABLE 7: BLEACHING, WASHING, DENUDING AND PEELING AGENTS

S. No.	Name of the processing aid	Product Category	Residual level (mg/kg) (Not more than)
1.	Ammonium persulphate (INS 923)	Yeast	GMP
2.	Benzoyl peroxide (INS 928)	Fruits and vegetables	40 (as benzoic acid)
3.	Calcium hypochlorite	Fruits and vegetables, flours and starches, water	1 (as available chlorine)
4.	Carbonic acid	Tripe	GMP
5.	Chlorine (INS 925)	Fruits and vegetables, flours and starches	1 (as available chlorine)
6.	Chlorine dioxide	Fruits and vegetables, flours and starches	1 (as available chlorine)

7.	Diammonium hydrogen orthophosphate	Canned fruits and vegetables	GMP
8.	Hydrogen peroxide	Fruits and vegetables, flours and starches	5
9.	Peracetic acid	Fruits and vegetables	GMP
10.	Sodium bisulphite	Root and tuber vegetables (not meant for those intended to be served or sold raw/fresh to consumers)	GMP
11.	Sodium hypochlorite	Fruits and vegetables, flours and starches	1 (as available chlorine)
12.	Sodium gluconate (INS 576)	Tripe	GMP
13.	Sodium laurate	Fruits and vegetables	GMP
14.	Sodium/ Potassium metabisulphite	Root and tuber vegetables (not meant for those intended to be served or sold raw/fresh to consumers)	25
15.	Sodium peroxide	Root and tuber vegetables	5
[82][16.]	Calcium oxide (INS 529) (on dry basis)	Dried Ginger; whole and powder (unbleached or bleached)	20,000]

TABLE 8: FLOCCULATING AGENTS

S. No.	Name of the processing aid	Product Category	Residual level mg/kg (Not more than)
1.	Citric acid (INS 330)	Unripened cheese – Paneer and Chhana	GMP
2.	Glucono delta lactone (INS 575)		
3.	Lactic acid (INS 270)		
4.	Malic acid (INS 296)		
5.	Sour whey		

6.	Vinegar		

TABLE 9: CONTACT FREEZING AND COOLING AGENTS

S. No.	Name of the processing aid	Product Category	Residual level (mg/kg) (Not more than)
1	Liquid Nitrogen (INS 941)	Dairy-based desserts - Ice cream	GMP

TABLE 10: DESICCATING AGENTS

S. No.	Name of the processing aid	Product Category	Residual level (mg/kg) (Not more than)
1	Corn starch	Icing sugar	GMP

[73]**[TABLE 11: ENZYMES (for treatment or processing of raw materials, foods, or ingredients)**

S.No.	Name of the Enzyme* [in order of Enzyme Commission (EC) number]	Source*	Residual level (mg/kg) (Not more than)
1.	Glucose oxidase (EC No. 1.1.3.4)	*Aspergillusniger*	GMP
		Aspergillusoryzae	
2.	Catalase (EC No. 1.11.1.6)	*Aspergillusniger*	GMP
3.	Glycero-phospholipid cholesterol acyltransferase (EC No. 2.3.1.43)	*Bacillus licheniformis*	GMP
4.	Transglutaminase (EC No. 2.3.2.13)	*Streptomyces mobaraensis*	GMP

	5.	Lipase triacylglycerol (EC No. 3.1.1.3)	*Rhizopusoryzae*	GMP
			Fusariumoxysporum	
			Thermomyceslanuginosus	
			Rhizopusniveus	
			Carica papaya	
			Rhizomucormiehei	
			Aspergillusniger	
			Candida rugosa(*cylindracea*)	
			Pregastric bovine (calf) tissue	
			Pregastric ovine (lamb) tissue	
			Penicilliumroquefortii	
			Porcine pancreas	
			Mucorjavanicus (*Mucorcircinelloides f. circinelloides*)	
			Rice bran	
	6.	Phospholipase A2 (EC No. 3.1.1.4)	*Streptomyces violaceoruber*	GMP
			[81]*[Aspergillus niger*	GMP]
	7.	Lysophospholipase (EC No. 3.1.1.5)	*Aspergillusniger*	GMP
	8.	Pectin esterase (EC No. 3.1.1.11)	*Aspergillusniger*	GMP
	9.	Acylglycerol lipase (EC No. 3.1.1.23)	*Penicilliumcamembertii*	GMP
	8.	Phospholipase A1 (EC No. 3.1.1.32)	*Aspergillusniger*	GMP
	9.	Phytase (EC No. 3.1.3.8)	*Aspergillusniger*	GMP
	10.	Phosphodiesterase I (EC No. 3.1.4.1)	*Leptographiumprocerum*	GMP
	11.	Phospholipase D (EC No. 3.1.4.4)	*Streptomyces cinnamoneus*	GMP
	12.	Hemicellulase (EC No. 3.2.1)	*Aspergillusniger*	GMP
			Trichodermareesei/ longibrachiatum	
	13.	Alpha amylase (EC No. 3.2.1.1)	*Aspergillusoryzae*	GMP
			Aspergillusniger	
			Bacillus licheniformis	

		Bacillus amyloliquefaciens	
		Bacillus subtilis	
		Bacillus stearothermophilus	
		Cereal (barley) malt	
14.	Beta amylase (EC No. 3.2.1.2)	Cereal (barley) malt	GMP
		Bacillus amyloliquefaciens	
		Hordeumvulgare (barley)	
		[81][Soybean	GMP]
15.	Glucan 1,4-α-glucosidase (or Glucoamylase or acid maltase) (EC No. 3.2.1.3)	*Aspergillusniger*	GMP
		Aspergillusoryzae	
		Trichodermareesei	
		Rhizopusoryzae	
16.	Cellulase (4-β-D-glucan 4-glucanohydrolase) (EC No. 3.2.1.4)	*Penicilliumfuniculosum*	GMP
		Aspergillusniger	
		Humicolainsolens	
		Rasamsonia (Talaromyces) emersonii	
		Trichodermareesei	
17.	Beta-glucanase (endo-beta glucanase or endo-1,3-beta- glucanase) (EC No. 3.2.1.6)	*Aspergillusniger*	GMP
		Bacillus amyloliquefaciens	
		Rasamsonia (Talaromyces) emersonii	
		Trichodermareesei	
		Aspergillusaculeatus	
		Penicilliumfuniculosum	
		Bacillus subtilis	
		Trichodermaharzianum	
		Disporotrichumdimorphosporum	
		Humicolainsolens	
18.	Inulinase (EC No. 3.2.1.7)	*Aspergillusniger*	GMP
19.	Endo-1,4-beta-xylanase (EC No. 3.2.1.8)	*Aspergillusniger*	GMP
		Bacillus licheniformis	
		Disporotrichumdimorphosporum	
		Rasamsonia (Talaromyces) emersonii	

		Trichodermareesei(longibrachiatum)	
		Humicolainsolens	
20.	Dextranase (EC No. 3.2.1.11)	*Chaetomiumerraticum*	GMP
21.	Polygalacturonase (pectinase) (EC No. 3.2.1.15)	*Aspergillusniger*	GMP
		Aspergillusaculeatus	
22.	Lysozyme (EC No. 3.2.1.17)	*Gallus gallus* egg	GMP
23.	Alpha-glucosidase (EC No. 3.2.1.20)	*Aspergillusniger*	GMP
		Trichodermareesei	
24.	Beta-glucosidase (EC No. 3.2.1.21)	*Aspergillusniger*	GMP
		Kluyveromyceslactis	
		*Trichodermareesei/ longibrachiatum*CL 847	GMP
25.	Alpha-galactosidase (melibiase) (EC No. 3.2.1.22)	*Aspergillusoryzae*	GMP
		Aspergillusniger	GMP
		Morterellavinacea	GMP
		Saccharomyces carlsbergensis	GMP
26.	Beta-galactosidase (lactase) (EC No. 3.2.1.23)	*Kluyveromyceslactis*	GMP
		Bacillus circulans	
		Saccharomyces sp.	
		Aspergillusniger	
		Aspergillusoryzae	
27.	Beta- fructofuranosidase (invertase or saccharase) (EC No. 3.2.1.26)	*Saccharomyces cerevisiae*	GMP
		Kluyveromycesfragilis	
		Saccharomyces carlsbergensis	
		Saccharomyces cerevisiae	
28.	Trehalase (EC No. 3.2.1.28)	*Trichodermareesei*	GMP
29.	Endo-1,3-β-xylanase (EC No. 3.2.1.32)	*Humicolainsolens*	GMP
30.	Pullunase	*Bacillus acidopullulyticus*	GMP

	(EC 3.2.1.41)	*Bacillus brevis*	
		Bacillus circulans	
		Bacillus naganoensis	
		Klebsiellaaerogenes	
31.	Alpha Arabinofuronosidase (EC No. 3.2.1.55)	*Aspergillusniger*	GMP
32.	Glucan1,3-betaglucosidase (EC No. 3.2.1.58)	*Trichodermaharzianum*	GMP
33.	Mannanase (Mannan endo-1,4-beta-mannosidase) (EC No. 3.2.1.78)	*Trichodermareesei*	GMP
		Aspergillusniger	GMP
34.	Protease (Bacteria) (EC No. 3.4)	*Bacillus amyloliquefaciens*	GMP
		Bacillus licheniformis	
		Bacillus subtilis	
		Geobacilluscaldoproteolyticus	
35.	Protease (Fungi) (EC No. 3.4)	*Aspergillusniger*	GMP
		Aspergillusoryzae	
36.	Aminopeptidase (EC No. 3.4.11.1)	*Aspergillusoryzae*	GMP
37.	Serine protease (subtilisin) (EC No. 3.4.21.62)	*Bacillus licheniformis*	GMP
[81][37a	Oryzin (EC No. 3.4.21.63)	*Aspergillus melleus*	GMP]
38.	PIII-type proteinase (Lactocepin) (EC No. 3.4.21.96)	*Lactococcuslactis subsp. cremoris (strain SK11)*	GMP
39.	Papain (EC No 3.4.22.2)	*Carica papaya*	GMP
40.	Ficin (EC No. 3.4.22.3)	Figs	GMP
41.	Bromelain (EC No 3.4.22.33)	*Ananascomosus/bracteatus*	GMP
42.	Chymosin (EC No. 3.4.23.4)	*Kluyveromyceslactis*	GMP
[81][42a	Aspergillopepsin I (EC No. 3.4.23.18)	*Aspergillus niger*	GMP
		Aspergillus oryzae	GMP
42b	Aspergillopepsin II (EC No. 3.4.23.19)	*Aspergillus niger*	GMP]
43.	Endo(thia)peptidase (EC No. 3.4.23.22)	*Cryphonectria (Endothia) parasitica*	GMP

44.	Mucorpepsin [81][(Aspartic proteinase)] (EC No. 3.4.23.23)	*Rhizomucormiehei*	GMP
[81][44a	Thermolysin (EC No. 3.4.24.27)	*Bacillus stearothermophilus*	GMP
		Geobacillus caldoproteolyticus	GMP]
45.	Metalloproteinase (Bacillolysin) [81][Metalloendopeptidase] (EC No. 3.4.24.28)	*Bacillus amyloliquefaciens*	GMP
		[81][*Bacillus subtilis*	GMP]
[81][45a	Glutaminase (EC No. 3.5.1.2)	*Bacillus amyloliquefaciens*	GMP
45b	Protein glutaminase (EC No. 3.5.1.44)	*Chryseobacterium proteolyticum*	GMP]
46.	AMP deaminase (EC No. 3.5.4.6)	*Aspergillusmelleus*	GMP
		Streptomyces murinus	
47.	Pectin lyase (EC No. 4.2.2.10)	*Aspergillusniger*	GMP
48.	Glucose isomerase (or xylose isomerase) (EC No. 5.3.1.5)	*Streptomyces rubiginosus*	GMP
		Streptomyces murinus	GMP
		Streptomyces olivaceus	
		Streptomyces olivochromogenes	
		Microbacteriumarborescens	
		Actinoplanesmissouriensis	

∗*All enzymes are from non-genetically modified sources*]

[80][TABLE 11 A: Enzymes derived from Genetically Modified Microorganisms (GMM)

S.No.	Enzyme Name	Production Organism	Donor Organism or Source	Functional and technological purpose	Indicative food uses	Residual level (mg/kg) (Not more than)
1.	**Glucose oxidase (EC No. 1.1.3.4)**	Aspergillus oryzae	Aspergillus niger	Dough stabilizer	Baking and other cereal-based processes (bread, pasta, noodles, snacks)	GMP
		Aspergillus niger	Penicillium chrysogenum	Dough stabilizer, food	Bakery products and	GMP

				preservative, color stabilizer and for reduced alcohol wine production	other cereal based products (e.g. pasta, noodles, snacks), Egg processing, fruit and vegetable processing, Production of beer and other cereal based beverages	
		Aspergillus niger	Aspergillus niger	For conversion of glucose to gluconic acid in presence of dissolved oxygen	In food processing to remove glucose and oxygen and in bakery application	GMP
2.	**Hexose oxidase** **(EC No. 1.1.3.5)**	Hansenula polymorpha	Chondrus crispus	To catalyze the oxidation of C6 sugars into their corresponding lactones and hydrogen peroxide	In food processing of wide range of products for dough-strengthening, oxygen scavenging, curd formation and to reduce the occurrence of excessive maillard reactions	GMP
3.	**Catalase** **(EC No. 1.11.1.6)**	Aspergillus niger	Aspergillus niger	Catalyzes the decomposition of hydrogen peroxide to water and oxygen	In food processing for enzymatic production of gluconic acid, removal of hydrogen peroxide or generation of oxygen in	GMP

					foods and beverages	
		Trichoderma reesei	Aspergillus niger	Catalyzes the decomposition of hydrogen peroxide to water and oxygen	For egg processing	GMP
4.	**Peroxidase** **(EC No. 1.11.1.7)**	Aspergillus niger	Marasmiusscorodonius	Preservation of raw milk, yoghurt and cheese	Dairy processing (whey processing) and Production of bakery products	GMP
5.	**Phosphatidylcholine-sterol O-acyltransferase** **(EC No. 2.3.1.43)**	Bacillus licheniformis	Aeromonassalmonicida	Modification of phospholipids to lyso-phospholipids and cholesterol ester	Baking, dairy, egg processing, fats and oils Processing, meat processing	GMP
6.	**1,4-alpha-glucan branching** **(EC No. 2.4.1.18)**	Bacillus subtilis	Rhodothermus obamensis	Converts amylose into amylopectin	Starch processing	
7.	**4-α-glucanotransferase (amylomaltase)** **(EC No. 2.4.1.25)**	Bacillus amyloliquefaciens	Thermus thermophilus	Modification of the structural properties of starch to mimic fat.	Starch processing	GMP
8.	**Triacylglycerol Lipase** **(EC No. 3.1.1.3)**	Aspergillus niger	Fusarium culmorum	Improvement of texture of fat in bakery products, flavour modification, interesterification of fats, degumming of oils and fats	Production of bakery products dairy processing oils and fats processing	GMP

		Kluyveromyces lactis	Calf, goat, lamb	Improvement of texture of n bakery products, flavour modification, interesterification of fats, degumming of oils and fats	Production of bakery products dairy processing oils and fats processing	GMP
		Hansenula polymorpha	Fusarium heterosporum	Improvement of texture of bakery products, modifying egg yolk for use in cake preparation and degumming of oils and fats	Production of Bakery products, egg processing, fats and oils processing	GMP
		Aspergillus niger	Candida antarctica	Degumming of oils and fats	Oils and Fats processing	GMP
		Aspergillus oryzae	Humicola lanuginosa and Fusarium oxysporum	Improvement of texture of bakery products, flavour modification, modifying egg yolk for use in cake preparation interesterification of fats, degumming of oils and fats	Bakery and other cereal-based products(bread, pasta, noodles, snacks), brewing and other cereal-based beverages, egg processing oils and fats processing	GMP
		Aspergillus oryzae	Fusarium oxysporum	Improvement of texture of bakery products, flavour modification, modifying egg yolk for use in cake preparation	Bakery and other cereal-based products (bread, pasta, noodles, snacks) Egg processing,	GMP

				interesterification of fats, degumming of oils and fats	brewing and other cereal-based beverages	
		Aspergillus oryzae	Thermomyces lanuginosus	Improvement of texture of bakery products, flavour modification, modifying egg yolk for use in cake preparation, interesterification of fats, degumming of oils and fats	Bakery and other cereal-based products (bread, pasta, noodles, snacks), brewing and other cereal-based beverages egg processing oils and fats processing	GMP
		Aspergillus oryzae	Rhizomucor miehei	Interesterification of fats, degumming of oils and fats	oils and fats processing	GMP
		Trichoderma reesei	Aspergillus niger	As a processing aid in food manufacturing to catalyze the hydrolysis of ester bonds in triglycerides primarily in 1 and 3 positions of fatty acids in triglycerides with release of fatty acids and glycerol	For use in baking and brewing process, in the manufacture of cereal beverage, in pasta production, and in potable alcohol production	GMP
9.	**Phospholipase A2** **(EC No. 3.1.1.4)**	Aspergillus niger	Porcine pancreas	Oil degumming	Production of bakery products , egg processing, oils and fats processing	GMP
10.	**Lysophospholipase** **(EC No.**	Aspergillus niger	Aspergillus niger	Dough stabilizer, Improvement of texture of	Bakery and other cereal-based products(brea	GMP

	3.1.1.5)			bakery products, enhance filtration rate of syrups, De-gumming of oils and fats	d, pasta, noodles, snacks) starch based products oils and fats processing	
11.	**Pectin esterase** **(EC No. 3.1.1.11)**	Aspergillus niger	Aspergillus niger	Juice extraction, concentration and clarification of fruit juices, gelation of fruit, and to modify texture and rheology of fruit and vegetable-based products	Fruit and vegetable products, flavouring production	GMP
		Aspergillus oryzae	Aspergillus aculeatus	Juice extraction, concentration and clarification of fruit juices, gelation of fruit, and to modify texture and rheology of fruit and vegetable-based products	Fruit and vegetable products	GMP
12.	**Phospholipase A1** **(EC No. 3.1.1.32)**	Aspergillus oryzae	Fusarium venenatum	To modify the functionality of dairy products and its ingredients	Milk and dairy based products	GMP
		Aspergillus niger	Aspergillus niger	De-gumming of oils and fats	Oils and fats processing	GMP
		Aspergillus niger	Talaromyces leycettanus	De-gumming of oils and fats	Oils and Fats processing	GMP
13.	**3-phytase** **(EC No. 3.1.3.8)**	Aspergillus niger	Aspergillus niger (A. niger also include A. tubingensis)	Phytate reduction in cereals and legumes	Bakery products and other cereal and legume based products (e.g. pasta,	GMP

					noodles, snacks), soy sauce	
14.	**Phytase** **(EC No. 3.1.3.26)**	Trichoderma reesei	Buttiauxella sp.	Hydrolysis of phytic acid	In potable alcohol production and in animal feed	GMP
15.	**Phospholipase C** **(EC No. 3.1.4.3)**	Pichia pastoris (now renamed as Komagataellaphaffiï)	Soil	De-gumming of oils and fats	Oils and fats processing	GMP
		Bacillus licheniformis	Bacillus thuringiensis	De-gumming of oils and fats	Oils and fats processing	GMP.
16.	**Phosphoinositide phospholipase C** **(EC No. 3.1.4.11)**	Pseudomonas fluorescens	Soil	De-gumming of oils and fats	Oils and fats processing	GMP
		Bacillus licheniformis	Pseudomonas sp-62186	De-gumming of oils and fats	Oils and Fats processing	GMP
17.	**Alpha – amylase** **(EC No. 3.2.1.1)**	Bacillus subtilis	Alicyclobacillus pohliae	Antistaling agent in combination with lipase	Bakery products	GMP
		Bacillus licheniformis	Bacillus licheniformis	Liquefaction and thinning of starch, fermentation, Starch processing into dextrins and of oligosaccharides. High DE-maltodextrin production	Brewing, Potable alcohol production, Grain or Carbohydrate, non-alcoholic Beverages, and bakery products, processing of starch for other purposes	GMP
		Bacillus licheniformis	Geobacillus stearothermophilus	Liquefaction and thinning of starch, fermentation, starch processing into dextrins and	Processing of starch for baking, brewing and fermentation	GMP

				oligosaccharides and high DE-maltodextrin.		
		Bacillus licheniformis	Cytophaga sp.	Liquefaction and thinning of starch, fermentation	Processing of starch for baking and brewing processes	GMP
		Pseudomonas fluorescens	Thermococcales	Starch processing into dextrins and oligosaccharides and high DE-maltodextrin	Processing of starch for baking, brewing and fermentation	GMP
		Aspergillus niger	Rhizomucor pusillus	Starch processing into dextrins and oligosaccharides and high DE-maltodextrin	Processing of starch for baking, brewing and fermentation and other processes	GMP
		Trichoderma reesei	Aspergillus clavatus	Starch processing into dextrins and of oligosaccharides. High DE-maltodextrin production	In Carbohydrate or starch processing, brewing and potable alcohol production	GMP
		Trichoderma reesei	Aspergillus kawachii	Starch processing into dextrins and of oligosaccharides. High DE-maltodextrin production	In Carbohydrate or starch processing, brewing and potable alcohol production	GMP
		Bacillus amyloliquefaciens	Bacillus amyloliquefaciens	As processing aid in food manufacturing to hydrolyze polysaccharides	Carbohydrate or grain processing, potable alcohol production, brewing, cereal processes, non-alcoholic	GMP

					beverages	
		Trichoderma reesei	Aspergillus terreus	Starch processing into dextrins and of oligosaccharides. High DE-maltodextrin production	Brewing, Potable alcohol production, grain or carbohydrate, non-alcoholic beverages, cereal processes	GMP
18.	**Beta-amylase** **(EC No. 3.2.1.2)**	Bacillus licheniformis	Bacillus flexus	Starch processing into maltose	Starch processing for maltose-based syrups	GMP
19.	**Glucoamylase (Glucan 1,4-alpha-glucosidase or Acid maltase or Amyloglucosidase)** **(EC No. 3.2.1.3)**	Trichoderma reesei	Trichoderma reesei	Processing of polysaccharides and oligosaccharides for improved fermentation and liquefaction	Brewing, fermentation and starch liquifaction and saccharifaction	GMP
		Aspergillus niger	Gloeophyllum trabeum	Processing of polysaccharides and oligosaccharides for improved brewing fermentation, clarification and starch liquefaction , starch liquefaction and Saccharification	Brewing, fermentation and starch liquifaction and saccharifaction	GMP
		Aspergillus niger	Aspergillus niger	Processing of polysaccharides and oligosaccharides for improved brewing	Brewing, fermentation and starch liquefaction and saccharification	GMP

				fermentation, clarification and starch liquefaction		
		Aspergillus niger	Talaromyces emersonii	Processing of polysaccharides and oligosaccharides for improved brewing fermentation, clarification and starch liquefaction	Brewing, fermentation and starch liquefaction and saccharification processes	GMP
		Aspergillus niger	Trametes cingulata	Processing of polysaccharides and oligosaccharides for improved brewing fermentation, clarification and starch liquefaction and Saccharification	Brewing, fermentation and starch liquefaction and saccharification processes	GMP
		Aspergillus niger	Penicillum oxalicum	Processing of polysaccharides and oligosaccharides for improved brewing fermentation, clarification and starch liquefactionandSaccharification	Brewing, fermentation and starch liquifaction and saccharifaction	GMP
		Trichoderma reesei	Aspergillus fumigatus	Processing of polysaccharides and oligosaccharides for improved fermentation	For carbohydrate or grain processing, brewing and potable alcohol	GMP

				and liquefaction	production	
		Trichoderma reesei	Fusarium verticillioides	Processing of polysaccharides and oligosaccharides for improved fermentation and liquefaction	For carbohydrate or grain processing, brewing and potable alcohol production	GMP
20.	**Cellulase (EC No. 3.2.1.4)**	Trichoderma reesei	Aspergillus fumigatus	Hydrolysis of amorphous cellulose	Brewing	GMP
		Trichoderma reesei	Penicillium emersonii	Hydrolysis of amorphous cellulose. Saccharification	Brewing	GMP
		Trichoderma reesei	Trichoderma reesei	As processing aid in food manufacturing or breakdown of cellulose	For carbohydrate processing, potable alcohol production, maceration in fruit and vegetable processing, brewing and wine production and in food processing of other wide range of products like coffee	GMP
21.	**Beta-glucanase (endo-beta glucanase or endo-1,3-beta glucanase**	Bacillus subtilis	Bacillus subtilis	Hydrolysis of beta-glucans, to improve the brewing properties of beer	Brewing processes	GMP

	) **(EC No. 3.2.1.6)**					
22.	**Xylanase (Endo-1,4-beta-xylanase)** **(EC No. 3.2.1.8)**	Aspergillus niger	Aspergillus niger	Hydrolysis of plant carbohydrates to improve quality of bakery products (firmness, stiffness, consistency and others)	Bakery and other cereal based products	GMP
		Aspergillus oryzae	Humicola lanuginosus	Dough stabilizer, enhancing loaf volume, enhance crumb structure and bloom	Bakery products	GMP
		Bacillus subtilis	Bacillus subtilis	Dough stabilizer, ehancing loaf volume, enhance crumb structure bloom and loaf softening, hydrolysis of plant carbohydrates to improve quality of bakery products (firmness, stiffness, consistency and others)	Bakery products, carbohydrate or starch processing, Brewing, Potable alcohol production, non-alcoholic beverages processing	GMP
		Trichoderma reesei	Talaromyces leycettanus	To improve filtration in brewing, Starch liquefaction and enhance oil extraction from grain	Baking and Brewing and oil extraction -	GMP

		Aspergillus niger	Rasamsonia emersonii	Dough stabilizer, enhancing loaf volume, crumb structure, bloom and loaf softening, improving filtration in brewing, starch liquefaction	Bakery products production of beer and other cereal based beverages	GMP
		Trichoderma reesei	Aspergillus niger	Dough stabilizer, enhancing loaf volume, crumb structure, bloom and loaf softening, to improve filtration in brewing, starch liquefaction	Brewing and baking productspotable alcohol production, non-alcoholic beverages	GMP
		Aspergillus oryzae	Aspergillus aculeatus	Dough stabilizer, enhance loaf volume, crumb structure, bloom and loaf softening, to improve filtration in brewing, starch liquefaction	Baking brewing and other cereal-based beverages and starch processing	GMP
		Bacillus licheniformis	Bacillus licheniformis	Dough stabilizer, enhancer of loaf volume, enhance crumb structure,bloom and loaf softening. starch liquefaction	Baking and brewing processes grain treatment	GMP
		Trichoderma reesei	Fusarium verticillioides	Hydrolysis of plant carbohydrates	As processing aid in	GMP

				to improve quality of bakery products (firmness, stiffness, consistency and others)	carbohydrate or starch processing and potable alcohol production	
23.	**Endo-Polygalacturonase (Pectinase)** **(EC No 3.2.1.15)**	Aspergillus niger	Aspergillus niger	Extraction and clarification of juice from fruits and vegetables, extraction of flavors	Fruit and vegetable processing, flavouring production	GMP
24.	**Alpha-glucosidase** **(EC No 3.2.1.20)**	Trichoderma reesei	Aspergillus niger	Aids in fermentation, hydrolysis of terminal, non-reducing (1 ~4)-linked alpha-D-glucose residues with release of alpha-D-glucose	Brewing and starch processing	GMP
25.	**Lactase (Beta-galactosidase)** **(EC No 3.2.1.23)**	Kluyveromyces lactis	Kluyveromyces lactis	Hydrolysis of lactose content of in whey or milk	Dairy products and processing	GMP
		Bacillus subtilis	Bifidobacterium bifidum	Hydrolysis of lactose content of whey or milk	Dairy products and , production of GOS (galacto-oligosaccharide)	GMP
		Aspergillus niger	Aspergillus oryzae	Hydrolysis of lactose content of whey or milk	Dairy products and processing	GMP
		Bacillus licheniformis	Bifidobacterium bifidum	Hydrolysis of lactose content of whey or milk	Dairy products and processing	GMP

		Bacillus subtilis	Lactobacillus delbrueckii subsp. bulgaricus	Hydrolysis of lactose content of in whey or milk	In dairy processing, GOS (galacto-oligosaccharide) production and production of low lactose products	GMP
		Aspergillus oryzae	Aspergillus oryzae	Hydrolysis of lactose content of in whey or milk	In dairy processing, GOS (galacto-oligosaccharide) production and production of low lactose products	GMP
26.	**Trehalase** **(EC No 3.2.1.28)**	Trichoderma reesei	Trichoderma reesei	Starch processing for fermentation	Brewing process	GMP
		Aspergillus niger	Myceliophthorase pedonium	Starch processing for fermentation	Brewing process	GMP
27.	**Pullulanase** **(EC No 3.2.1.41)**	Bacillus licheniformis	Bacillus deramificans	Hydrolysis of pullulan in starch processing, as processing aid in efficient starch hydrolysis and saccharification	Brewing processes and production of sweeteners, manufacture of starch or carbohydrate processing	GMP
		Bacillus subtilis	Bacillus acidopullulyticus	Hydrolysis of pullulan in starch processing	Brewing processes and manufacture of sweeteners	GMP
		Bacillus subtilis	Bacillus deramificans	Hydrolysis of pullulan in grain processing	Brewing and starch processing	GMP
28.	**Alpha arabinofuranosidas**	Trichoderma reesei	Talaromyces pinophilus	Separation of soluble and starch or	Potable alcohol production	GMP

	e **(EC No. 3.2.1.55)**			gluten fractions		
29.	**Maltotetraohydrolase or glucan 1,4-alpha-maltotetraohydrolase** **(EC No. 3.2.1.60)**	Bacillus licheniformis	Pseudomonas stutzeri (saccharophila)	Dough stabilizer, anti-staling agent in baking, antiretrogradation agent to enhance the quality attributes of bakery products	Baking, carbohydrate or grain processing	GMP
30.	**Mannan endo-1,4-beta-mannosidase (β-mannanase)** **(EC No. 3.2.1.78)**	Aspergillus niger	Talaromyces leycettanus	Hydrolysis of mannan to inhibit gel formation during freeze-drying of the instant coffee	Coffee processing	GMP.
31.	**Glucan 1,4-alpha-maltohydrolase (Maltogenic alpha-amylase)** **(EC No 3.2.1.133)**	Bacillus subtilis	Geobacillus stearothermophilus	Anti-staling agent to prevent retrodegradation of starch in baking, industry. Production of tailor-made sweetener syrups with low viscosity, high maltose contents	Bakery products and sweetener syrups	GMP
		Bacillus licheniformis	Geobacillus stearothermophilus	Anti-staling agent to prevent retro-degradation of starch in baking, industry. Production of	As processing aid in bakery, starch processing, brewing and potable alcohol	GMP

				tailor-made sweetener syrups with low viscosity, high maltose contents		
32.	**Carboxypeptidase** **(EC No. 3.4.16.5)**	Aspergillus niger	Aspergillus niger	Used to accelerate the development of flavors and the de-bittering during the ripening process of cheese. debitteringagent in cheese manufacture.	Cheese, enzyme modified cheese, cheese powders and fermented meat	GMP
33.	**Chymotrypsin** **(EC No. 3.4.21.1)**	Bacillus licheniformis	Nocardio psisprasina	Increased digestibility of protein and reduce allergenicity	Protein hydrolysis, yeast processing	GMP.
34.	**Serine protease with trypsin specificity Or (Trypsin)** **(EC No. 3.4.21.4)**	Fusarium venenatum	Fusarium oxysporum	Increased digestibility of protein and reduce allergenicity	Dairy processing protein hydrolysis	GMP
35.	**Acid prolylendopeptidase** **(EC No. 3.4.21.26)**	Aspergillus niger	Aspergillus niger	Degradation of cereal storage proteins to smaller peptides for optimal fermentation beer stability, prevention of chill haze without loss of foam properties	Beer and other cereal based beverages	GMP
36.	**Serine protease (Subtilisin**	Bacillus subtilis	Bacillus amyloliquefaciens	Facilitates protein hydrolysis	Protein processing	GMP

	) **(EC No. 3.4.21.62)**			during processing		
		Bacillus licheniformis	Pyrococcus furiosus	Hydrolysis of proteins	Protein hydrolysis and protein hydrolysates	GMP
		Bacillus subtilis	Bacillus lentus	To catalyze protein hydrolysis	As processing aid in plant protein processing, fish and seafood protein processing, yeast processing, animal protein processing, xanthan gum processing, and microalgae processing	GMP.
37.	**Chymosin** **(EC No. 3.4.23.4)**	Trichoderma reesei	Bos taurus (bovine)	Milk Coagulant, processing aid in cheese manufacturing. Chymosin helps in coagulating milk by hydrolyzing milk protein	Milk or dairy processing, production of cheese, whey and lactose	GMP
		Kluyveromyces lactis	Bovine pro-chymosin	Milk Coagulant	Milk processing	GMP
38.	**Aspergillopepsin I, aspartic protease)** **(EC No. 3.4.23.18)**	Trichoderma reesei	Trichoderma reesei	Catalyses hydrolysis of proteins with broad specificity	Processing of proteins, clarification of fruit and vegetable juices and alcoholic drinks, modification of wheat	GMP

					gluten in bakery products	
39.	**Mucorpepsin (Mucor rennin)** **(EC No. 3.4.23.23)**	Aspergillus oryzae	Rhizomucor miehei	Milk coagulation in cheese making.	Dairy processing	GMP
40.	**Bacillolysin (Bacillus metalloendopeptidase)** **(EC No. 3.4.24.28)**	Bacillus amyloliquefaciens	Bacillus amyloliquefaciens	Protein processing into peptides and hydrolysate	Production of bakery products and other cereal based products (e.g. pasta, noodles, snacks), production of beer and other cereal based beverages, dairy processing, flavouring production, production of cereal based distilled alcoholic beverages, protein processing and yeast processing	GMP
		Bacillus subtilis	Bacillus amyloliquefaciens	Protein processing into peptides and hydrolysate	Production of bakery products and other cereal based products (e.g. pasta, noodles, snacks), production of beer and	GMP

					other cereal based beverages, dairy processing, flavouring production, production of cereal based distilled alcoholic beverages, protein processing and yeast processing	
41.	**Asparaginase** **(EC No 3.5.1.1)**	Aspergillus niger	Aspergillus niger	Reduce acrylamide levels	Production of bakery products and other cereal based products (e.g. pasta, noodles, snacks) potato processing and coffee processing	GMP
		Aspergillus oryzae	Aspergillus oryzae	Reduce acrylamide levels	Baking and other cereal-based processes (bread, pasta, noodles, snacks) coffee processing and potato processing	GMP
		Bacillus subtilis	Pyrococcus furiosus	Reduce acrylamide levels	Baking and other cereal-based processes (bread, pasta, noodles,	GMP

					snacks) coffee and cocoa processing fruit and vegetable processing	
42.	**Glutaminase** **(EC No. 3.5.1.2)**	Bacillus licheniformis	Bacillus licheniformis	In controlling the taste and flavor of fermented foods containing ingredients such as; casein, whey protein, soy and wheat protein	Dairy processing egg processing protein processing yeast processing	GMP
43.	**Acetolactate decarboxylase (Alpha - acetolactate decarboxylase)** **(EC No. 4.1.1.5)**	Bacillus licheniformis	Bacillus brevis	In brewing beverage processes and beverage alcohol (distilling) processes 1) Reduces formation of diacetyl during fermentation and thereby a reduction of the off-flavours 2) Enhances maturation process and thereby reduces production time.	Brewing and other production of cereal based alcoholic beverages	GMP
		Bacillus subtilis	Brevibacillus brevis	Butanoate metabolism and C-5 branched dibasic acid metabolism	In brewing and potable alcohol production	GMP

44.	**Pectin lyase** **(EC No. 4.2.2.10)**	Aspergillus niger	Aspergillus niger	Enhances juice extraction from vegetables and fruits and for juice clarification	Fruit and vegetable processing, production of wine, flavouring production and coffee processing	GMP
45.	**Glucose isomerase** **(EC No. 5.3.1.5)**	Streptomyces rubiginosus	Streptomyces rubiginosus	Reversible isomerization of glucose to fructose	Production of high fructose corn syrup	GMP]

[73][TABLE 12: GENERALLY PERMITTED PROCESSING AIDS

S No.	Name of the processing aid	Functional/ Technological Purpose	Product Category	Residue Level (mg/kg) (Not more than)
1.	Activated carbon	Adsorbent, decolourizing agent	Sugars, oils and fats, juices, [81][alcoholic beverages]	GMP
2.	Ammonium carbonate (INS 503(i))	pH control agent	Cocoa mixes (powders) and cocoa mass/cake	GMP
3.	Ammonium hydroxide (INS 527)	Acidity regulator	All foods	GMP
4.	Ammonium sulphate	Decalcification agent	Edible casings	GMP
5.	Amino acids	Microbial nutrient	Alcoholic beverages including low alcoholic and alcohol free counterparts	GMP
6.	Alum (Aluminiumsulphate or Potassium aluminiumsulphate)	Coagulant		

7.	Argon (INS 938)	Propellent and packaging gas	All foods	GMP
8.	Beta-cyclodextrin (INS 459)	Encapsulating and thickening agent	Butter	GMP
9.	Biotin	Microbial nutrient	All foods	GMP
10.	Bone phosphate (INS 542)	Emulsifier, moisture retention agent	All foods except milk and milk products	GMP
		Sequestrant	All foods	GMP
11.	Calcium carbonate (INS 170 (i))	Polishing agent	All foods	GMP
12.	Calcium chloride	Buffering agent	Alcoholic beverages including low alcoholic and alcohol free counterparts	GMP
13.	Calcium sulfate	Buffering agent		GMP
14.	Calcium and sodium salts of stearic acid	Polishing agent	Confectionery	GMP
15.	Carbon dioxide (INS 290)	Gassing/aerating agent	All foods	GMP
16.	Citric acid (INS 330)	Sequestrant	Oils & fats	GMP
17.	Chlorine dioxide	Water treatment	Alcoholic beverages including low alcoholic and alcohol free counterparts	1 (as available chlorine)
18.	Ethyl acetate	Cell disruption of yeast	Yeast	GMP
19.	Ethyl Alcohol	Carrier solvent ,flavouring agent	All foods	GMP

20.	Ethylene diamine tetra acetic acid	Metal sequestrant	Edible fats and oils and related products	GMP
21.	Furcellaran (INS 407)	Thickener, gelling agent, stabilizer, emulsifier	All foods	GMP
22.	Gibberellic acid	Malting, [81][grain processing steps for fermentation (alcoholic beverages)]	Cereals	GMP
23.	Glucono delta lactone (GDL) (INS 575)	Raising agent, sequestrant	Unripened cheese – Paneer and Chhana	GMP
24.	Glycerin/ Glycerol (INS 422)	Polishing agent	All foods	GMP
25.	Hydrochloric acid (INS 507)	Protein hydrolysing agent	Protein products	GMP
26.	Hydrogenated glucose syrups (INS 965 (ii))	Sweetener, humectant, texturizer, stabilizer, bulking agent	All foods	GMP
27.	HVO (Hydrogenated vegetable oil)	Lubricant for conveyor belts for countline products	All foods	GMP
28.	Icing sugar	Polishing agent	Confectionery	GMP
29.	Indole acetic acid	Malting	Cereals	GMP
30.	Isopropyl alcohol	Glazing agent	All foods	GMP
31.	L-Cysteine (or HCl salt)	Dough conditioner	Flour products	75
32.	Lactic acid	Acidity regulator	Alcoholic beverages	GMP

			including low alcoholic and alcohol free counterparts	
33.	Liquified anhydrous ammonia	Bacterial nutrient	All foods	GMP
34.	Liquid paraffin (INS 905 e)	Polishing agent	Confectionery	GMP
35.	Magnesium hydroxide (INS 528)	pH control agent	All foods	GMP
36.	Magnesium stearate (INS 470(iii))	Polishing agent	Confectionery	GMP
37.	Mono and diglycerides of fatty acids (INS 471)	Emulsifier in extrusion	Extruded foods	GMP
38.	Nicotinamide	Microbial nutrient	All foods	GMP
39.	Nitrogen gas (INS 941)	Foaming agent	All foods	GMP
40.	Oak dust/chips	Ageing agent	Alcoholic beverages including low alcoholic and alcohol free counterparts	GMP
41.	Oxygen (INS 948)	Propellant	All foods	GMP
		Aerating agent	Alcoholic beverages including low alcoholic and alcohol free counterparts	GMP

42.	Paraffin	Coating agent	Cheese and cheese products	GMP
43.	Phospholipids (INS 322 (i))	Emulsifier, antioxidant	All foods	GMP
44.	Phosphoric acid (INS 338)	Acidulant, sequestrant, synergist for antioxidants	All foods	GMP
		Buffering agent	Alcoholic beverages including low alcoholic and alcohol free counterparts	GMP
45.	Polyethylene glycols (INS 1521)	Carrier solvent, excipient	All foods	GMP
46.	Polyglycerol esters of interesterifiedricinoleic acid (INS 476)	Emulsifier	All foods	GMP
47.	Polyoxyethylene 40 stearate (INS 431)	Emulsifier	All foods	GMP
48.	Polyvinyl acetate	Preparation of waxes	Cheese and cheese products	GMP
49.	Potassium carbonate (INS 501(i))	pH control agent	Cocoa mixes (powders) and cocoa mass/cake	GMP
50.	Potassium dihydrogen phosphate (INS 340)	pH control agent	All foods	GMP
51.	Potassium hydroxide	pH control agent	All foods	GMP

	(INS 525)			
52.	Potassium metabisulphite (INS 224)	Antioxidant	Alcoholic beverages including low alcoholic and alcohol free counterparts	Maximum usage level shall not be more than 50 mg/kg
53.	Propylene glycol alginate (INS 405)	Stabilizer, thickener, emulsifier	All foods	GMP
		Foam stabilizer	Alcoholic beverages including low alcoholic and alcohol free counterparts	GMP
54.	Rice starch	Polishing agent	Confectionery	GMP
55.	Salt (NaCl)	Ion exchange	Alcoholic beverages including low alcoholic and alcohol free counterparts	GMP
56.	Silica (INS 551)	Anticaking agent	All foods	GMP
		Soap absorbing agent	Edible vegetable oils	GMP
		Free flowing agent	All foods	GMP
57.	Sodium acid pyrophosphate (SAPP)	Prevention of darkening of frozen uncooked French fries	Frozen vegetables	GMP
58.	Sodium bicarbonate (INS 500 (ii))	pH control agent	All foods	GMP
59.	Sodium calcium polyphosphate silicate	Stabilizer, leavening agent, emulsifier,	All foods	GMP

	(INS 452 (i))	nutrient		
60.	Sodium carbonate (INS 500(i))	pH control agent	All foods	GMP
61.	Sodium dihydrogen phosphate (INS 339)	pH control agent	All foods	GMP
62.	Sodium Hydroxide (INS 524)	pH control agent	All foods	GMP
63.	Sodium Hypochlorite	Water treatment	Alcoholic beverages including low alcoholic and alcohol free counterparts	1 (as available chlorine)
64.	Sodium metabisulphite (INS 223)	Dough conditioner	Flour products	60
		Softening agent	Corn kernel	60
		Reducing agent	Alcoholic beverages including low alcoholic and alcohol free counterparts	GMP
65.	Sodium silicate (INS 550 (i))	Anticaking agent	All foods	GMP
66.	Sodium sulphite	Dough conditioner	Flour products	60
67.	Sulphuric Acid (INS 513)	pH control agent	All foods	GMP
68.	Sulphurous acid	Softening agent	Corn kernel	GMP
69.	Sulphur dioxide	Control of nitrosodimethylamine	Malting	750

	(INS 220)	in malting		
70.	Tannic Acid (INS 181)	Clarifying agent, flavouring agent, flavour adjunct	Juices	GMP
71.	Vitamin B12	Microbial nutrient	All foods	
72.	Vitamin C	Microbial nutrient	All foods	
73.	Yeast	Fermenting Agent	Alcoholic beverages including low alcoholic and alcohol free counterparts	GMP.]
74.	Zinc sulphate	Mineral Salt		
[81][75	Calcium hypochlorite	Disinfectant	Water treatment	1 (as available chlorine)]

International Numbering System (INS) for Food Additives-

The following list is only for identifying the food additive and their synonyms as published by the Codex on 23.11.2005 Codex. For the latest updates, JECFA/Codex website may be referred to (www.codexalimentarius.net, www.codexalimentarius.net/web/jecfa.jsp)

A. List sorted by INS number

Sl. No.	INS Number	Food Additive Name	Technical functions
1	**2**	**3**	**4**
1.	100	Curcumins	Colour
2.	100(i)	Curcumin	Colour
3.	100(ii)	Turmeric	Colour
4.	101	Riboflavins	Colour
5.	101(i)	Riboflavin	Colour
6.	101(ii)	Riboflavin 5'-phosphate, sodium	Colour
7.	102	Tartrazine	Colour

8.	103	Alkanet	Colour
9.	104	Quinoline yellow	Colour
10.	107	Yellow 2G	Colour
11.	110	Sunset yellow FCF	Colour
12.	120	Carmines	Colour
13.	121	Citrus red 2	Colour
14.	122	Azorubine / Carmoisine	Colour
15.	123	Amaranth	Colour
16.	124	Ponceau 4R	Colour
17.	125	Ponceau SX	Colour
18.	127	Erythrosine	Colour
19.	128	Red 2G	Colour
20.	129	Allurared AC/Fast Red E	Colour
21.	130	Manascorubin	Colour
22.	131	Patent blue V	Colour
23.	132	Indigotine	Colour
24.	133	Brilliant blue FCF	Colour
25.	140	Chlorophyll	Colour
26.	141	Copper chlorophylls	Colour
27.	141(i)	Chlorophyll copper complex,	Colour
28.	141(ii)	Chlorophyll copper complex, sodium and potassium Salts	Colour
29.	142	Green S	Colour
30.	143	Fast green FCF	Colour
31.	150a	Caramel I-plain	Colour
32.	150b	Caramel II – caustic sulphite	Colour

		process	
33.	150c	Caramel III – ammonia process	Colour
34.	150d	Caramel IV-ammonia sulphite Process	Colour
35.	151	Brilliant black PN	Colour
36.	152	Carbon black (hydrocarbon)	Colour
37.	153	Vegetable carbon	Colour
38.	154	Brown FK	Colour
39.	155	Brown HT	Colour
40.	160a	Carotenes	Colour
41.	160a(i)	Beta-carotene (synthetic)	Colour
42.	160a(ii)	Natural extracts	Colour
43.	160b	Annatto extracts	Colour
44.	160c	Paprika Oleoresins	Colour
45.	160d	Lycopene	Colour
46.	160e	Beta-apo-carotental	Colour
47.	160f	Beta-apo-8’-carotenic acid, methyl or ethyl ester	Colour
48.	161a	Flavoxanthin	Colour
49.	161b	Lutein	Colour
50.	161c	Krytoxanthin	Colour
51.	161d	Rubixanthin	Colour
52.	161e	Violoxanthin	Colour
53.	161f	Rhodoxanthin	Colour
54.	161g	Canthaxanthin	Colour
55.	162	Beet red	Colour

56.	163	Anthocyanins	Colour
57.	163(i)	Anthocyanins	Colour
58.	163(ii)	Grape skin extract	Colour
59.	163(iii)	Blackcurrant extract	Colour
60.	164	Gardenia yellow	Colour
61.	166	Sandalwood	Colour
62.	170	Calcium carbonates	Surface colourant, anticaking agent, stabilizer
63.	170(i)	Calcium carbonate	anticaking agent
64.	170(ii)	Calcium hydrogen carbonate	anticaking agent
65.	171	Titanium dioxide	Colour
66.	172	Iron oxides	Colour
67.	172(i)	Iron oxide, black	Colour
68.	172(ii)	Iron oxide, red	Colour
69.	172(iii)	Iron oxide, yellow	Colour
70.	173	Aluminium	Colour
71.	174	Silver	Colour
72.	175	Gold	Colour
73.	180	Lithol rubine BK	Colour
74.	181	Tannins, food grade	Colour, emulsifier, stabilizer, thickener
75.	182	Orchil	Colour
76.	200	Sorbic acid	Preservative
77.	201	Sodium sorbate	Preservative
78.	202	Potassium sorbate	Preservative
79.	203	Calcium sorbate	Preservative
80.	209	Heptyl p-hydroxybenzoate	Preservative

81.	210	Benzoic acid	Preservative
82.	211	Sodium benzoate	Preservative
83.	212	Potassium benzoate	Preservative
84.	213	Calcium benzoate	Preservative
85.	214	Ethyl p-hydroxybenzoate	Preservative
86.	215	Sodium ethyl p-hydroxybenzoate	Preservative
87.	216	Propyl p-hydroxybenzoate	Preservative
88.	217	Sodium propyl p-hydroxybenzoate	Preservative
89.	218	Methyl p-hydroxybenzoate	Preservative
90.	219	Sodium methyl p-hydroxybenzoate	Preservative
91.	220	Sulphur dioxide	Preservative, antioxidant
92.	221	Sodium sulphite	Preservative, antioxidant
93.	222	Sodium hydrogen sulphite	Preservative, antioxidant
94.	223	Sodium metabisulphite	Preservative, bleaching agent, antioxidant
95.	224	Potassium metabisulphite	Preservative, antioxidant
96.	225	Potassium sulphite	Preservative, antioxidant
97.	226	Calcium sulphite	Preservative, antioxidant
98.	227	Calcium hydrogen sulphite	Preservative, antioxidant
99.	228	Potassium bisulphate	Preservative, antioxidant
100.	230	Diphenyl	Preservative
101.	231	Ortho-phenylphenol	Preservative
102.	232	Sodium o-phenylphenol	Preservative
103.	233	Thiabendazole	Preservative
104.	234	Nisin	Preservative
105.	235	Pimaricin (natamycin)	Preservative

106.	236	Formic acid	Preservative
107.	237	Sodium formate	Preservative
108.	238	Calcium formate	Preservative
109.	239	Hexamethylene tetramine	Preservative
110.	240	Formaldehyde	Preservative
111.	241	Gum guaicum	Preservative
112.	242	Dimethyl dicarbonate	Preservative
113.	249	Potassium nitrite	Preservative, colour fixative
114.	250	Sodium nitrite	Preservative, colour fixative
115.	251	Sodium nitrate	Preservative, colour fixative
116.	252	Potassium nitrate	Preservative, colour fixative
117.	260	Acetic acid, glacial	Preservative, acidity regulator
118.	261	Potassium acetates	Preservative, acidity regulator
119.	261(i)	Potassium acetate	Preservative, acidity regulator
120.	261(ii)	Potassium diacetate	Preservative, acidity regulator
121.	262	Sodium acetates	Preservative, acidity regulator, Sequestrant
122.	262(i)	Sodium acetate	Preservative, acidity regulator, Sequestrant
123.	262(ii)	Sodium diacetate	Preservative, acidity regulator, Sequestrant
124.	263	Calcium acetate	Preservative, stabilizer, acidity Regulator
125.	264	Ammonium acetate	Acidity regulator
126.	265	Dehydroacetic acid	Preservative
127.	266	Sodium dehydroacetate	Preservative
128.	270	Lactic acid (L-, D—and Dl-)	Acidity regulator

129.	280	Propionic acid	Preservative
130.	281	Sodium propionate	Preservative
131.	282	Calcium propionate	Preservative
132.	283	Potassium propionate	Preservative
133.	290	Carbon dioxide	Carbonating agent, Packing agent
134.	296	Malic acid (DL-L-)	Acidity regulator, flavouring agent.
135.	297	Fumaric acid	acidity regulator
136.	300	Ascorbic acid (L)	Antioxidant
137.	301	Sodium ascorbate	Antioxidant
138.	302	Calcium ascorbate	Antioxidant
139.	303	Potassium ascorbate	Antioxidant
140.	304	Ascorbyl palmitate	Antioxidant
141.	305	Ascorbyl stearate	Antioxidant
142.	306	Mixed tocopherols	Antioxidant
143.	307	Alpha-tocopherol	Antioxidant
144.	308	Synthetic gamma-tocopherol	Antioxidant
145.	309	Synthetic delta-tocopherol	Antioxidant
146.	310	Propyl gallate	Antioxidant
147.	311	Octyl gallate	Antioxidant
148.	312	Dodecyl gallate	Antioxidant
149.	313	Ethyl gallate	Antioxidant
150.	314	Guaiac resin	Antioxidant
151.	315	Isoascorbic acid	Antioxidant
152.	316	Sodium isoascorbate	Antioxidant
153.	317	Potassium isoascorbate	Antioxidant

154.	318	Calcium isoascrobate	Antioxidant
155.	319	Tertiary butylhydroquinone	Antioxidant
156.	320	Butylated hydroxyanisole	Antioxidant
157.	321	Butylated hydroxytoluene	Antioxidant
158.	322	Lecithins	Antioxidant, emulsifier
159.	323	Anoxomer	Antioxidant
160.	324	Ethoxyquin	Antioxidant
161.	325	Sodium lactate	antioxidant, synergist, humectant, bulking agent
162.	326	Potassium lactate	antioxidant, synergist, acidity Regulator
163.	327	Calcium lactate	acidity regulator, flour treatment agent
164.	328	Ammonium lactate	acidity regulator, flour treatment agent
165.	329	Magnesium lactate (D-,L-)	acidity regulator, flour treatment agent
166.	330	Citric acid	acidity regulator, synergist for Sequestrant
167.	331	Sodium citrates	acidity regulator, sequestrant emulsifier stabilizer
168.	331(i)	Sodium dihydrogen citrate	acidity regulator, sequestrant emulsifer, stabilizer
169.	331(ii)	Disodium monohydrogen citrate	acidity regulator, stabilizer, sequestrant, emulsifier
170.	331(iii)	Trisodium citrate	acidity regulator, sequestrant, emulsifier, Stabilizer
171.	332	Potassium citrates	acidity regulator, sequestrant, Stabilizer
172.	332(i)	Potassium dihydrogen citrate	acidity regulator, sequestrant, Stabilizer
173.	332(ii)	Tripotassium citrate	acidity regulator, sequestrant, Stabilizer
174.	333	calcium citrates	acidity regulator, firming agent, Sequestrant

175.	334	Tartaric acid [L(+)-]	acidity regulator, sequestrant, antioxidant synergist
176.	335	Sodium tartrates	Stabilizer, sequestrant,
177.	335(i)	Monosodium tartrate	Stabilizer, sequestrant
178.	335(ii)	Disodium tartrate	Stabilizer, sequestrant
179.	336	Potassium tartrate	Stabilizer, sequestrant
180.	336(i)	Monopotassium tartrate	Stabilizer, sequestrant
181.	336(ii)	Dipotassium tartrate	Stabilizer, sequestrant
182.	337	Potassium sodium tartrate	Stabilizer, sequestrant
183.	338	Orthophosphoric acid	acidity regulator, antioxidant Synergist
184.	339	Sodium phosphates	acidity regulator, texturizer, sequestrant, stabilizer Emulsifier, water retention agent
185.	339(i)	Monosodium orthophosphate	Acidity regulator, texturizer, Sequestrant, stabilizer, Emulsifier, water retention agent
186.	339(ii)	Disodium orthophosphate	acidity regulator, texturizer, sequestrant, stabilizer Emulsifier, water retention agent
187.	339(iii)	Trisodium orthophosphate	sequestrant, stabilizer, Emulsifier, water retention agent, acidity regulator, Texturizer
188.	340	Potassium Phosphates	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
189.	340(i)	Monopotassium orthophosphate	acidity regulator, texturizer, sequestrant, stabilizer Emulsifier, water retention Agent
190.	340(ii)	Dipotassium orthophosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent

191.	340(iii)	Tripotassium orthophosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
192.	341	Calcium phosphates	acidity regulator, texturizer, water retention agent, flour treatment agent, raising agent, firming agent, anticaking agent
193.	341(i)	Monocalcium orthophosphate	acidity regulator, texturizer, water retention agent, flour treatment agent, firming agent, anticaking agent
194.	341(ii)	Dicalcium orthophosphate	acidity regulator, texturizer, flour treatment agent, raising agent, firming agent, anticaking Agent
195.	341(iii)	Tricalcium orthophosphate	acidity regulator, texturizer, water retention agent, flour treatment agent, firming agent, anticaking agent
196.	342	Ammonium phosphates	acidity regulator, flour treatment agent
197.	342(i)	Monoamonium orthophosphate	acidity regulator, flour treatment agent
198.	342(ii)	Diammonium orthophosphate	acidity regulator, flour treatment agent
199.	343	Magnesium phosphates	acidity regulator, anticaking Agent
200.	343(i)	Monomagnesium orthophosphate	acidity regulator, anticaking Agent
201.	343(ii)	Dimagnesium orthophosphate	acidity regluator, anticaking Agent

202.	343(iii)	Trimagnesium orthophosphate	acidity regulator, anticaking Agent
203.	344	Lecithin citrate	Preservative
204.	345	Magnesium citrate	acidity regulator
205.	349	Ammonium malate	acidity regulator
206.	350	Sodium malates	acidity regulator, humectant
207.	350(i)	Sodium hydrogen malate	acidity regulator, humectant
208.	350(ii)	Sodium malate	acidity regulator, humectant
209.	351	Potassium malates.	acidity regulator
210.	351(i)	Potassium hydrogen malate	acidity regulator
211.	351(ii)	Potassium malate	acidity regulator
212.	352	Calcium malates	acidity regulator
213.	352(i)	Calcium hydrogen malate	acidity regulator
214.	352(ii)	Calcium malate	acidity regulator
215.	353	Metatartaric acid	acidity regulator
216.	354	Calcium tartrate	acidity regulator
217.	355	Adipic acid	acidity regulator
218.	356	Sodium adipates	acidity regulator
219.	357	Potassium adipates	acidity regulator
220.	359	Ammonium adipates	acidity regulator
221.	363	Succinic acid	acidity regulator
222.	364(i)	Monosodium succinate	acidity regulator, flavour Enhancer
223.	364(ii)	Disodium succinate	acidity regulator, flavour Enhancer

224.	365	Sodium fumarates	acidity regulator
225.	366	Potassium fumarates	acidity regulator
226.	367	Calcium fumarates	acidity regulator
227.	368	Ammonium fumarates	acidity regulator
228.	370	1, 4-Heptonolactone	acidity regulator, sequestrant
229.	375	Nicotinic acid	Colour retention agent
230.	380	Ammonium citrates	acidity regulator
231.	381	Ferric ammonium citrate	anticaking agent
232.	383	Calcium glycerophosphate	Thickener, gelling agent, Stabilizer
233.	384	Isopropyl citrates	Antioxidant, Preservative, Sequestrant
234.	385	Calcium disodium ethylene-diamine-tetra-acetate	Antioxidant, Preservative, Sequestrant
235.	386	Disodium ethylene-diamine-tetra-acetate	Antioxidant, Preservative, Sequestrant
236.	387	Oxy stearin	Antioxidant, sequestrant
237.	388	Thiodipropionic acid	Antioxidant
238.	389	Dilauryl thiodipropionate	Antioxidant
239.	390	Distearyl thiodipropionate	Antioxidant
240.	391	Phytic acid	Antioxidant
241.	399	Calcium lactobionate	Stabilizer
242.	400	Alginic acid	Thickener, stabilizer
243.	401	Sodium alginate	Thickener, stabilizer, gelling Agent

244.	402	Potassium alginate	Thickener, stabilizer
245.	403	Ammonium alginate	Thickener, stabilizer
246.	404	Calcium alginate	Thickener, stabilizer, gelling Agent, antifoaming agent
247.	405	Propylene glycol alginate	Thickener, emulsifier
248.	406	Agar	Thickener, gelling agent, Stabilizer
249.	407	Carrageenan and its Na, K, NH4 salts (includes furcellaran)	Thickener, gelling agent, Stabilizer
250.	407a	Processed Euchema Seaweed (PES)	Thickener, stabilizer
251.	408	Bakers yeast glycan	Thickener, gelling agent, Stabilizer
252.	409	Arabinogalactan	Thickener, gelling agent, Stabilizer
253.	410	Carob bean gum	Thickener, Stabilizer
254.	411	Oat gum	Thickener, Stabilizer
255.	412	Guar gum	Thickener, Stabilizer, Emulsifier
256.	413	Tragacanth gum	Thickener, Stabilizer, Emulsifier
257.	414	Gum arabic (acacia gum)	Thickener, Stabilizer
258.	415	Xanthan gum	Thickener, Stabilizer, emulsifier, foaming agent
259.	416	Karaya gum	Thickener, Stabilizer
260.	417	Tara gum	Thickener, Stabilizer
261.	418	Gellan gum	Thickener, Stabilizer, gelling

			Agent
262.	419	Gum ghatti	Thickener, Stabilizer, Emulsifier
263.	420	Sorbitol and sorbitol syrup	Sweetener, Humectant, sequestrant, Texturizer, Emulsifier
264.	421	Mannitol	Sweetener, anticaking agent
265.	422	Glycerol	Humectant, bodying agent
266.	424	Curd lan	Thickener, Stabilizer
267.	425	Konjac flour	Thickener
268.	429	Peptones	Emulsifier
269.	430	Polyoxyethylene (8) stearate	Emulsifier
270.	431	Polyoxyethylene (40) stearate	Emulsifier
271.	432	Polyoxyethylene (20) sorbitan Monolaurate	Emulsifier, dispersing agent
272.	433	Polyoxyethylene (20) sorbitan Monoleate	Emulsifier, dispersing agent
273.	434	Polyoxyethylene (20) sorbitan Monopalmitate	Emulsifier, dispersing agent
274.	435	Polyoxyethylene (20) sorbitan Monostearate	Emulsifier, dispersing agent
275.	436	Polyoxyethylene (20) sorbitan Tristearate	Emulsifier, dispersing agent
276.	440	Pectins	Thickener, emulsifier, Stabilizer, gelling agent
277.	441	Superglycerinated hydrogenated	Emulsifier

		rapeseed oil	
278.	442	Ammonium salts of phosphatidic Acid	Emulsifier
279.	443	Brominated vegetable oil	Emulsifier, stabilizer
280.	444	Sucrose acetate isobutyrate	Emulsifier, stabilizer
281.	445	Glycerol esters of wood resin	Emulsifier, stabilizer
282.	446	Succistearin	Emulsifier
283.	450	Diphosphates	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
284.	450(i)	Disodium diphosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
285.	450(ii)	Trisodium diphosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
286.	450(iii)	Tetrasodium diphosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
287.	450(iv)	Dipotassium diphosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention

			Agent
288.	450(v)	Tetrapotassium diphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent Sequestrant, water retention Agent
289.	450(vi)	Dicalcium diphosphate	acidity regulator, texturizer, sequestrant stabilizer, Emulsifier, water retention Agent
290.	450(vii)	Calcium dihydrogen diphosphate	Emulsifier, raising agent, stabilizer, sequestrant, acidity, regulator, water retention agent
291.	450 (viii)	Dimagnesium diphosphate	acidity regulator, texturizer, sequestrant, stabilizer, Emulsifier, water retention Agent
292.	451	Triphosphates	Sequestrant, acidity regulator Texturizer
293.	451(i)	Pentasodium	Sequestrant, acidity regulator, Texturizer
294.	451(ii)	Pentapotassium triphosphate	Sequestrant, acidity regulator, Texturizer
295.	452	Polyphosphates	acidity regulator, texturizer, sequestrant stabilizer, Emulsifier, water retention Agent

296.	452(i)	Sodium polyphosphate	acidity regulator, texturizer, sequestrant stabilizer, Emulsifier, water retention Agent
297.	452(ii)	Potassium Polyphosphate	acidity regulator, texturizer, sequestrant stabilizer, Emulsifier, water retention Agent
298.	452(iii)	Sodium calcium polyphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
299.	452(iv)	Calcium polyphosphates	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
300.	452(v)	Ammonium polyphosphates	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
301.	458	Gamma Cyclodextrin	Stabilizer, binder
302.	459	Beta-cyclodextrin	Stabilizer, binder
303.	460	Cellulose	Emulsifier, dispersing agent, anticaking agent, texturizer
304.	460(i)	Microcystalline cellulose	Emulsifier, dispersing agent, anticaking agent

305.	460(ii)	Powdered cellulose	Emulsifier dispersing agent, anticaking agent
306.	461	Methyl cellulose	Thickener, Emulsifier, Stabilizer
307.	462	Ethyl cellulose	Binder, filler
308.	463	Hydroxypropyl cellulose	Thickener, Emulsifier, Stabilizer
309.	464	Hydroxypropyl methyl cellulose	Thickener, Emulsifier, Stabilizer
310.	465	Methyl ethyl cellulose	Thickener antifoaming agent, Emulsifier, stabilizer
311.	466	Sodium carboxymethyl cellulose	Thickener, Emulsifier, Stabilizer
312.	467	Ethyl hydroxyethyl cellulose	Thickener, Emulsifier, Stabilizer
313.	468	Croscaramellose	Stabilizer, binder
314.	469	Sodium carboxymethyl cellulose, enzymatically hydrolysed	Thickener, stabilizer
315.	470	Salts of fatty acids (with base Al, Ca, Na, Mg, K, and NH4)	Emulsifier, Stabilizer, anticaking agent
316.	471	Mono-and di-glycerides of fatty acids	Emulsifier, Stabilizer
317.	472a	Acetic and fatty acid esters of glycerol	Emulsifier, Stabilizer Sequestrant
318.	472b	Lactic and fatty acid esters of glycerol	Emulsifier, Stabilizer, Sequestrant

319.	472c	Citric and fatty acid esters of glycerol	Emulsifier, Stabilizer, Sequestrant
320.	472d	Tartaric acid esters of mono and diglycerides of fatty acids	Emulsifier, Stabilizer, Sequestrant
321.	472e	Diacetyltartric and fatty acid ester of glycerol	Emulsifier, Stabilizer, Sequestrant
322.	472f	Mixed tartaric, acetic and fatty acid esters of glycerol	Emulsifier, Stabilizers, Sequestrant
323.	472g	Succinylated monoglycerides	Emulsifier, Stabilizer, Sequestrant
324.	473	Sucrose esters of fatty acids	Emulsifier, Stabilizer, Sequestrant
325.	474	Sucroglycerides	Emulsifier, Stabilizer, Sequestrant
326.	475	Polyglycerol esters of fatty acid	Emulsifier, Stabilizer, Sequestrant
327.	476	Polyglycerol esters of interesteri-fied ricinoleic acid	Emulsifier, Stabilizer, Sequestrant
328.	477	Propylene glycol esters of fatty Acids	Emulsifier, Stabilizer, Sequestrant
329.	478	Lactylated fatty acid esters of glycerol and propylene glycol	Emulsifier, Stabilizer, Sequestrant
330.	479.	Thermally oxidized soya bean oil with mono-and di-glycerides of fatty acids	Emulsifier, Stabilizer, Sequestrant
331.	480	Dioctyl sodium sulphosuccinate	Emulsifier, wetting agent

332.	481	Sodium lactylate	Emulsifier, Stabilizer
333.	481(i)	Sodium stearoyl lactylates	Emulsifier, Stabilizer
334.	481(ii)	Sodium oleyl lactylate	Emulsifier, Stabilizer
335.	482	Calcium lactylates	Emulsifier, Stabilizer
336.	482(i)	Calcium stearoyl lactylate	Emulsifier, Stabilizer
337.	482(ii)	Calcium oleyl lactylates	Emulsifier, Stabilizer
338.	483	Stearyl tartrate	Flour treatment agent
339.	484	Stearyl citrate	Emulsifier, sequestrant
340.	485	Sodium stearoyl fumarate	Emulsifier
341.	486	Calcium stearoyl fumarate	Emulsifier
342.	487	Sodium laurylsulphate	Emulsifier
343.	488	Ethoxylated mono-and di-glycerides	Emulsifier
344.	489	Methyl glucoside-coconut oil ester	Emulsifier
345.	491	Sorbitan monostearate	Emulsifier
346.	492	Sorbitan tristearate	Emulsifier
347.	493	Sorbitan monolaurate	Emulsifier
348.	494	Sorbitan monooleate	Emulsifier
349.	495	Sorbitan monopalmitate	Emulsifier
350.	496	Sorbitan trioleate	Stabilizer, Emulsifier
351.	500	Sodium carbonates	acidity regulator, raising agent, anticaking agent
352.	500(i)	Sodium carbonate	acidity regluator, raising agent, anticaking agent
353.	500(ii)	Sodium hydrogen carbonate	acidity regulator, raising agent, anticaking agent

354.	500(iii)	Sodium sesquicarbonate	acidity regulator, raising agent, anticaking agent
355.	501	Potassium carbonates	acidity regulator, stabilizer
356.	501(i)	Potassium carbonate	acidity regulator, stabilizer
357.	501(ii)	Potassium hydrogen carbonate	acidity regulator, stabilizer
358.	503	Ammonium carbonates	acidity regulator, raising agent
359.	503(i)	Ammonium carbonate	acidity regulator, raising agent
360.	503(ii)	Ammonium hydrogen carbonate	acidity regulator, raising agent
361.	504	Magnesium carbonates	acidity regulator, anticaking agent, colour retention agent
362.	504(i)	Magnesium carbonate	acidity regulator, anticaking agent, colour retention agent
363.	504(ii)	Magnesium hydrogen carbonate	acidity regulator, anticaking agent, colour retention agent
364.	505	Ferrous carbonate	acidity regulator
365.	507	Hydrochloric acid	acidity regulator acid
366.	508	Potassium chloride	gelling agent
367.	509	Calcium chloride	firming agent
368.	510	Ammonium chloride	flour treatment agent
369.	511	Magnesium chloride	firming agent
370.	512	Stannous chloride	Antioxidant, colour retention Agent
371.	513	Sulphuric acid	acidity regulator
372.	514	Sodium sulphates	acidity regulator
373	515	Potassium sulphates	Acidity regulator

374.	516	Calcium Sulphate	Dough conditioner, Sequestrant, firming agent
375.	517	Ammonium sulphate	Flour treatment agent, stabilizer
376.	518	Magnesium sulphate	firming agent
377.	519	Cupric sulphate	colour fixative, preservative
378.	520	Aluminium sulphate	firming agent
379.	521	Aluminium sodium Sulphate	firming agent
380.	522	Aluminium potassium Sulphate	Acidity regulator, stabilizer
381.	523	Aluminium ammonium Sulphate	Stabilizer, firming agent
382.	524	Sodium hydroxide	acidity regulator
383.	525	Potassium hydroxide	acidity regulator
384.	526	Calcium hydroxide	acidity regulator, firming agent
385.	527	Ammonium hydroxide	acidity regulator
386.	528	Magnesium hydroxide	acidity regulator, colour retention agent
387.	529	Calcium oxide	acidity regulator, colour retention agent
388.	530	Magnesium oxide	anticaking agent
389.	535	Sodium ferrocyanide	anticaking agent
390.	536	Potassium ferrocyanide	anticaking agent
391.	537	Ferrous hexacyanomanganate	anticaking agent
392.	538	Calcium ferrocyanide	anticaking agent
393.	539	Sodium thiosulphate	antioxidant, sequestrant
394.	541	Sodium aluminium phosphate	acidity regulator, emulsifier
395.	541(i)	Sodium aluminium phosphate-acidic	acidity regulator, emulsifier

396.	541(ii)	Sodium aluminium phosphate-basic	acidity regulator, emulsifier
397.	542	Bone phosphate (essentially calcium phosphate, tribasic)	Emulsifier, anticaking agent, water retention agent
398.	550	Sodium silicates	anticaking agent
399.	550(i)	Sodium silicate	anticaking agent
400.	550(ii)	Sodium metasilicate	anticaking agent
401.	551	Silicon dioxide, amorphous	anticaking agent
402.	552	Calcium silicate	anticaking agent
403.	553	Magnesium silicates	anticaking agent, dusting Powder
404.	553(i)	Magnesium silicate	anticaking agent, dusting Powder
405.	553(ii)	Magnesium trisilicate	anticaking agent, dusting Powder
406.	553(iii)	Talc	anticaking agent, dusting Powder
407.	554	Sodium aluminosilicate	anticaking agent
408.	555	Potassium aluminium silicate	anticaking agent
409.	556	Calcium aluminium silicate	anticaking agent
410.	557	Zinc silicate	anticaking agent
411.	558	Bentonite	anticaking agent
412.	559	Aluminium silicate	anticaking agent
413.	560	Potassium silicate	anticaking agent
414.	570	Fatty acids	foam stabilizer, glazing agent,

			antifoaming agent
415.	574	Gluconic acid (D-)	acidity regulator, raising agent
416.	575	Glucono delta-lactone	acidity regulator, raising agent
417.	576	Sodium gluconate	Sequestrant
418.	577	Potassium gluconate	Sequestrant
419.	578	Calcium gluconate	acidity regluator, firming agent
420.	579	Ferrous gluconate	Colour retention agent
421.	580	Magnesium gluconate	acidity regulator, firming agent
422.	585	Ferrous lactate	colour retention agent
423.	586	4-Hexylresorcinol	colour retention agent, Antioxidant
424.	620	Glutamic acid (L (+)-)	flavour enhancer
425.	621	Monosodium glutamate	flavour enhancer
426.	622	Monopotassium glutamate	flavour enhancer
427.	623	Calcium glutamate	flavour enhancer
428.	624	Monoammonium glutamate	flavour enhancer
429.	625	Magnesium glutamate	flavour enhancer
430.	626	Guanylic acid	flavour enhancer
431.	627	Disodium 5'-guanylate	flavour enhancer
432.	628	Dipotassium 5'-guanylate	flavour enhancer
433.	629	Calcium 5'-guanylate	flavour enhancer
434.	630	Inosinic acid	flavour enhancer
435.	631	Disodium 5'-inosinate	flavour enhancer
436.	632	Potassium Inosate	flavour enhancer
437.	633	Calcium 5'-inosinate	flavour enhancer

438.	634	Calcium 5'-ribonucleotides	flavour enhancer
439.	635	Disodium 5'-ribonucleotides	flavour enhancer
440.	636	Maltol	flavour enhancer
441.	637	Ethyl maltol	flavour enhancer
442.	638	Sodium L-Aspartate	flavour enhancer
443.	639	DL-Alanine	flavour enhancer
444.	640	Glycine	flavour enhancer
445.	641	L-Leucine	flavour enhancer
446.	642	Lysin hydrochloride	flavour enhancer
447.	900a	Polydimethylsiloxane	antifoaming agent, anticaking agent, emulsifier
448.	900b	Methylphenylpolysiloxane	antifoaming agent
449.	901	Beeswax, white and yellow	glazing agent, release agent
450.	902	Candeilla Wax	glazing agent
451.	903	Carnaubawax	glazing agent
452.	904	Shellac	glazing agent
453.	905a	Mineral oil, food grade	glazing agent, release agent sealing agent
454.	905b	Petrolatum Petroleumielly	glazing agent, release agent, sealing agent
455.	905c	Petroleum wax	glazing agent, release agent, sealing agent
456.	905c(i)	Microcrystallinewax	glazing agent
457.	905c(ii)	Paraffin wax	glazing agent
458.	906	Benzoin gum	glazing agent

459.	907	Hydrogenated poly-1 decene	glazing agent
460.	908	Rice bran wax	glazing agent
461.	909	Spermaceti wax	glazing agent
462.	910	Wax esters	glazing agent
463.	911	Methyl esters of fatty acids	glazing agent
464.	913	Lanolin	glazing agent
465.	915	Glycerol-, methyl-, or penta-erithrytol esters of colophane	glazing agent
466.	916	Calcium iodate	flour treatment agent
467.	917	Potassium iodate	flour treatment agent
468.	918	Nitrogen oxide	flour treatment agent
469.	919	Nitrosyl chloride	flour treatment agent
470.	920	L-Cysteine and its hydrochlorides-sodium and potassium salts	flour treatment agent
471.	921	L-Cysteine and its hydrochlorides-sodium and potassium salts	flour treatment agent
472.	922	Potassium persulphate	flour treatment agent
473.	923	Ammonium persulphate	flour treatment agent
474.	924a	Potassium bromate	flour treatment agent
475.	924b	Calcium bromate	flour treatment agent
476.	925	Chlorine	flour treatment agent
477.	926	Chlorine dioxide	flour treatment agent
478.	927a	Azodicarbonamide	flour treatment agent
479.	927b	Carbamide (urea)	flour treatment agent
480.	928	Benzoyl peroxide	flour treatment agent,

			Preservative
481.	929	Acetone peroxide	flour treatment agent
482.	930	Calcium peroxide	flour treatment agent
483.	938	Argon	packing gas
484.	939	Helium	packing gas
485.	940	Dichlorodifluoromethane	Propellant, liquid freezant
486.	941	Nitrogen	Packing gas, freezant
487.	942	Nitrous oxide	Propellant
488.	943a	Butane	Propellant
489.	943b	Isobutane	Propellant
490.	944	Propane	Propellant
491.	945	Chloropentafluoroethane	Propellant
492.	946	Octafluorocyclobutane	Propellant
493.	948	Oxygen	packing gas
494.	950	Acesulfame potassium	Sweetener, flavour enhancer
495.	951	Aspartame	Sweetener, flavour enhancer
496.	952	Cyclamic acid (and Na, K, Ca Salts)	Sweetener
497	953	Isomalt (isomaltitol)	Sweetener, anticaking agent, bulking agent, glazing agent
498.	954	Saccharin (and Na, K, Ca salts)	Sweetener
499.	955	Sucralose (trichlorogalactosucrose)	Sweetener
500.	[75][956	--------]	
501.	957	Thaumatin	Sweetener, flavour enhancer
502.	958	Glycyrrhizin	Sweetener, flavour enhancer

503.	959	Neohesperidine dihydrochalcone	Sweetener
504.	960	Stevioside	Sweetener
505.	964	Polyglycitol syrup	Sweetener
506.	965	Maltitol and matitol Syrup	Sweetener, stabilizer, emulsifier
507.	966	Lactitol	Sweetener, texturizer
508.	967	Xylitol	Sweetener, humectant, stabilizer, Emulsifier, thickener
509.	968	Erythritol	Sweetener, flavour enhancer, Humectant
510.	999	Qulillaia extracts	foaming agent
511.	1000	Cholic acid	Emulsifier
512.	1001	Choline salts and esters	Emulsifier
513.	1001(i)	Choline acentate	Emulsifier
514.	1001(ii)	Choline carbonate	Emulsifier
515.	1001(iii)	Choline chloride	Emulsifier
516.	1001(iv)	Choline citrate	Emulsifier
517.	1001(v)	Choline tartrate	Emulsifier
518.	1001(vi)	Choline lactate	Emulsifier
519.	1100	Amylases	flour treatment agent
520.	1101	Proteases	flour treatment agent, stabilizer, tenderizer, flavour enhancer
521.	1101(i)	Protease	flour treatment agent, stabilizer, tenderizer, flavour enhancer
522	1101(ii)	Papain	flour treatment agent, stabilizer, tenderizer, flavour enhancer

523	1101(iii)	Bromelain	flour treatment agent, stabilizer, tenderizer, flavour enhancer
524	1101(iv)	Ficin	flour treatment agent, stabilizer, tenderizer, flavour enhancer
525	1102	Glucose oxidase	Antioxidant
526	1103	Invertases	Stabilizer
527	1104	Lipases	flavour enhancer
528	1105	Lysozyme	Preservative
529	1200	Polydextroses A and N	bulking agent, stabilizer, thickener, Humectant texturizer
530	1201	Polyvinylpyrrolidone	bodying agent, stabilizer, clarifying agent, dispersing Agent
531	1202	Polyvinylpolypyrrolidone	colour stabilizer, colloidal, Stabilizer
532	1503	Castor oil	release agent
533	1505	Triethyl citrate	foam stabilizer
534	1518	Triacetin	Humectant
535	1520	Propylene glycol	Humectant, Wetting agent, dispersing agent
536	1521	Polyethylene glycol	antifoaming agent
Supplementary List-Modified Starches			
537	1400	Dextrins, roasted starch white and yellow	Stabilizer, thickener, binder
538	1401	Acid-treated starch	Stabilizer, thickener, binder

539	1402	Alkaline treated starch	Stabilizer, thickener, binder
540	1403	Bleached starch	Stabilizer, thickener, binder
541	1404	Oxidised starch	Stabilizer, thickener, binder
542	1405	Starches, enzyme-treated	Thickener
543	1410	Monostarch phosphate	Stabilizer, thickener, binder
544	1411	Distarch glycerol	Stabilizer, thickener, binder
545	1412	Distarch phosphate esterified with sodium trimetaphosphate;	Stabilizer, thickener, binder
546	1413	Phosphated distarch phosphate	Stabilizer, thickener, binder
547	1414	Acetylated distarch phosphate	Emulsifier, thickener, binder
548	1420	Starch acetate esterified with Acetic anhydride	Stabilizer, thickener
549	1421	Starch acetate esterified with vinyl acetate	Stabilizer, thickener
550	1422	Acetylated distarch adipate	Stabilizer, thickener, binder, Emulsifier
551	1423	Acetylated distarch glycord	Stabilizer, thickener
552	1440	Hydroxypropyl starch	Stabilizer, thickener, binder, Emulsifier
553	1442	Hydroxypropyl distarch phosphate	Stabilizer, thickener
554	1443	Hydroxypropyl distarch	Stabilizer, thickener
555	1450	Starch sodium octenyl succinate	Stabilizer, thickener, binder

B.List sorted in alphabetical Order-

Sl. No.	INS Number	Food Additive Name	Technical functions
1.	370	1,4-Heptonolactone	acidity regulator, sequestrant

2.	586	4-Hexylresorcinol	colour retention agent, Antioxidant
3.	950	Acesulfame potassium	Sweetener, flavour enhancer
4.	260	Acetic acid, glacial	Preservative, acidity regulator
5.	472a	Acetic and fatty acid esters of Glycerol	Emulsifier, Stabilizer, Sequestrant
6.	929	Acetone peroxide	flour treatment agent
7.	355	Adipic acid	Acidity regulator
8.	406	Agar	Thickener, gelling agent, Stabilizer
9.	400	Alginic acid	Thickener, stabilizer
10.	[75][-------]	-------]	
11.	103	Alkanet	Colour
12.	129	Allurared AC	Colour
13.	307	Alpha-tocopherol	Antioxidant
14.	173	Aluminium	Colour
15.	523	Aluminium ammonium sulphate	Stabilizer, firming agent
16.	522	Aluminium potassium sulphate	acidity regulator, stabilizer
17.	559	Aluminium sodium silicate	anticaking agent
18.	521	Aluminium sodium sulphate	firming agent
19.	520	Aluminium sulphate	firming agent
20.	123	Amaranth	Colour
21.	264	Ammonium acetate	Acidity regulator
22.	359	Ammonium adipates	Acidity regulator
23.	403	Ammonium alginate	Thickener, stabilizer

24.	503(i)	Ammonium carbonate	acidity regulator, raising agent
25.	503	Ammonium carbonates	acidity regulator, raising agent
26.	510	Ammonium chloride	flour treatment agent
27.	380	Ammonium citrates	Acidity regulator
28.	368	Ammonium fumarate	Acidity regulator
29.	503(ii)	Ammonium hydrogen carbonate	acidity regulator, raising agent
30.	527	Ammonium hydroxide	Acidity regulator
31.	328	Ammonium lactate	acidity regulator, flour treatment agent
32.	349	Ammonium malate	Acidity regulator
33.	923	Ammonium persulphate	flour treatment agent
34.	342	Ammonium phosphates	acidity regulator, flour treatment agent
35.	452(v)	Ammonium polyphosphates	emulsifier raising agent, stabilizer sequestrant, Acidity regulator, water retention agent
36.	442	Ammonium salts of phosphatidic Acid	Emulsifier
37.	517	Ammonium sulphate	flour treatment agent, stabilizer
38.	1100	Amylases	flour treatment agent
39.	160b	Annatto extracts	Colour
40.	323	Anoxomer	Antioxidant
41.	163(i)	Anthocyanins	Colour
42.	163	Anothocyanins	Colour

43.	409	Arabinogalactan	Thickener, gelling agent, Stabilizer
44.	938	Argon	packing gas
45.	300	Ascorbic acid(L-)	Antioxidant
46.	304	Ascorbyl palmitate	Antioxidant
47.	305	Ascorbyl stearate	Antioxidant
48.	951	Aspartame	Sweetener, flavour enhancer
49.	927a	Azodicarbonamide	flour treatment agent
50.	122	Azorubine	Colour
51.	408	Bakers yeast glycan	Thickener, gelling agent, Stabilizer
52.	901	Beeswax, white and yellow	glazing agent, release agent
53.	162	Beet red	Colour
54.	558	Bentonite	anticaking agent
55.	210	Benzole acid	Preservative
56.	906	Benzoin gum	glazing agent
57.	928	Benzoyl peroxide	flour treatment agent, Preservative
58.	160 f	Beta-apo-8’carotenic acid, methyl or enthyl ester	Colour
59.	160e	Beta-apo-Carotenal	Colour
60.	160a(i)	Beta-Carotene (Synthetic)	Colour
61.	459	Beta-cyclodextrin	Stabilizer, binder
62.	163(iii)	Blackcurrant extract	Colour
63.	542	Bone phosphate (essentially calcium	Emulsifier, anticaking agent,

		phosphate, tribasic)	water retention agent
64.	151	Brilliant black PN	Colour
65.	133	Brilliant blue FCF	Colour
66.	1101(iii)	Bromelain	flour treatment agent, stabilizer, tenderizer, flavour enhancer
67.	443	Brominated vegetable oil	Emulsifier, stabilizer
68.	154	Brown FK	Colour
69.	155	Brown HT	Colour
70.	943a	Butane	Propellant
71.	320	Butylated hydroxyanisole	Antioxidant
72.	321	Butylated hydroxytoluene	Antioxidant
73.	629	Calcium 5'-guanylate	flavour enhancer
74.	633	Calcium 5' -inosinate	flavour enhancer
75.	634	Calcium 5' -ribonucleotides	flavour enhancer
76.	263	Calcium acetate	Preservative, stabilizer, acidity Regulator
77.	404	Calcium alginate	Thickener, Stabilizer, gelling agent, antifoaming agent
78.	556	Calcium aluminium silicate	anticaking agent
79.	302	Calcium ascorbate	Antioxidant
80.	213	Calcium benzoate	Preservative
81.	924 b	Calcium bromate	flour treatment agent
82.	170(i)	Calcium carbonate	anticaking agent
83.	170	Calcium carbonate	Surface colourant, anticaking agent, stabilizer

84.	509	Calcium chloride	firming agent
85.	333	Calcium citrates	acidity regulator, firming agent, Sequestrant
86.	450 (vii)	Calcium dihydrogen diphosphate	emulsifier, raising agent, stabilizer sequestrant, acidity regulator water retention agent
87.	385	Calcium disodium ethylene-diamine-tetra-acetate	Antioxidant, Preservative, Sequestrant
88.	538	Calcium ferrocyanide	anticaking agent
89.	238	Calcium formate	Preservative
90.	367	Calcium fumarates	Acidity regulator
91.	578	Calcium gluconate	acidity regulator, firming agent
92.	623	Calcium glutamate	flavour enhancer
93.	383	Calcium	Thickener, gelling agent, Stabilizer
94.	170 (ii)	Calcium hydrogen carbonate	anticaking agent
95.	352 (i)	Calcium hydrogen malate	Acidity regulator
96.	227	Calcium hydrogen	Preservative, antioxidant
97.	526	Calcium hydroxide	acidity regulator, firming agent
98.	916	Calcium iodate	flour treatment agent
99.	318	Calcium isoascorbate	Antioxidant
100.	327	Calcium lactate	acidity regulator, flour treatment agent
101.	399	Calcium lactobionate	Stabilizer

102.	482	Calcium lactylates	Emulsifier, stabilizer
103.	352 (ii)	Calcium malate	Acidity regulator
104.	352	Calcium malates	Acidity regulator
105.	482 (ii)	Calcium oleyl lactylate	Emulsifier, stabilizer
106.	529	Calcium oxide	acidity regulator, colour retention agent
107.	930	Calcium peroxide	flour treatment agent
108.	341	Calcium phosphates	acidity regulator, flour treatment agent, firming agent, Texturizer, raising agent, anticaking agent, water retention agent
109.	452 (iv)	Calcium polyphosphates	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
110.	282	Calcium propionate	Preservative
111.	552	Calcium silicate	anticaking agent
112.	203	Calcium sorbate	Preservative
113.	486	Calcium stearoyl fumarate	Emulsifier
114.	482 (i)	Calcium stearoyl lactylate	Emulsifier, stabilizer
115.	516	Calcium sulphate	flour treatment agent, Sequestrant, firming agent
116.	226	Calcium sulphite	preservative, antioxidant
117.	354	Calcium tartrate	Acidity regulator
118.	902	Candelilla wax	glazing agent

119.	161 g	Canthaxanthin	Colour
120.	150a	Caramel I-plain	Colour
121.	150 b	Caramel II-caustic sulphite process	Colour
122.	150 c	Caramel III-ammonia process	Colour
123.	150 d	Caramel IV-ammonia sulphite process	Colour
124.	927 b	Carbamide (urea)	flour treatment agent
125.	152	Carbon black (hydrocarbon)	Colour
126.	290	Carbon dioxide	carbonating agent, packing gas
127.	120	Carmines	Colour
128.	903	Carnaubawax	glazing agent
129.	410	Carob bean gum	Thickener, stabilizer
130.	160a	Carotenes	Colour
131.	407	Carrageenan and its Na, K,	Thickener, gelling agent,
		NH4 salts (includes furcellaran)	Stabilizer
132.	1503	Castor oil	release agent
133.	460	Cellulose	Emulsifier, anticaking agent, texturizer, dispersing agent
134.	925	Chlorine	flour treatment agent
135.	926	Chlorine dioxide	flour treatment agent
136.	945	Chloropentafluoroethane	Propellant
137.	140	Chlorophyll Copper	Colour
138.	141(i)	Chlorophyll copper complex	Colour
139.	141(ii)	Chlorophyll copper complex sodium and potassium Salts	Colour

140.	1000	Cholic acid	Emulsifier
141.	1001(i)	Choline acetate	Emulsifier
142.	1001(ii)	Choline carbonate	Emulsifier
143.	1001(iii)	Choline chloride	Emulsifier
144.	1001(iv)	Choline citrate	Emulsifier
145.	1001(vi)	Choline lactate	Emulsifier
146.	1001	Choline salt and esters	Emulsifier
147.	1001(v)	Choline tartrate	Emulsifier
148.	330	Citric acid	acidity regulator, Antioxidant, Sequestrant
149.	472 c	Citric and fatty acid esters of glycerol	Emlsifier, Stabilizer, Sequestrant
150.	121	Citrus red 2	Colour
151.	141	Copper chlorophylls	Colour
152.	468	Croscaramellose	Stabilizer, binder
153.	519	Cupric sulphate	colour fixture, preservative
154.	100(i)	Curcumin	Colour
155.	100	Curcumins	Colour
156.	424	Curdlan	Thickener, stabilizer
157.	952	Cyclamic acid (and Na, K, Ca Salts)	Sweetener
158.	265	Dehydroacetic acid	Preservative
159.	472e	Diacetyltartaric and fatty acid esters of glycerol	Emulsifier, Stabilizer, Sequestrant
160.	342(ii)	Diammonium orthophosphate	acidity regulator, flour treatment agent

161.	450 (vi)	Dicalcium diphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
162.	341(ii)	Dicalcium orthophosphate	acidity regulator, flour treatment agent, firming agent, Texturizer
163.	940	Dichlorodifluoromethane	Propellant, liquid freezant
164.	389	Dilauryl thiodipropionate	Antioxidant
165.	450 (viii)	Dimagnesium diphosphate	emulsifier raising agent, stabilizer sequestrant, acidity regulator, water retention agent
166.	343(ii)	Dimagnesium	acidity regulator, anticaking Agent
167.	242	Dimethyl dicarbonate	Preservative
168.	480	Dioctyl sodium sulphosuccinate	Emulsifier, wetting agent
169.	230	Diphenyl	Preservative
170.	450	Diphosphates	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
171.	628	Dipotassium 5'-guanylate	flavour enhancer
172.	450(iv)	Dipotassium diphosphate	Emulsifier, Stabilizer, acidity, regulator, raising agent, Sequestrant, water retention

			Agent
173.	340(ii)	Dipotassium orthophosphate	acidity regulator texturizer, sequestrant, stabilizer, emulsifier water retention agent
174.	336(ii)	Dipotassium tartrate	Stabilizer, sequestrant
175.	627	Disodium 5'-guanylate	flavour enhancer
176.	631	Disodium 5'-inosinate	flavour enhancer
177.	635	Disodium 5'-ribonucleotides	flavour enhancer
178.	450(i)	Disodium diphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
179.	386	Disodium ethylene-diamine-tetra -acetate	Antioxidant, Preservative, Sequestrant
180.	331(ii)	Disodium monohydrogen citrate	acidity regulator, stabilizer, Sequestrant, emulsifier
181.	339(ii)	Disodium orthophosphate	acidity regulator, Sequestrant, emulsifier, Texturizer, Stabilizer, water retention agent
182.	335(ii)	Disodium tartrate	Stabilizer, sequestrant
183.	364(ii)	Disodium succinate	acidity regulator, flavour Enhancer
184.	390	Distearyl thiodipropionate	Antioxidant
185.	639	DL-Alanine	flavour enhancer

186.	312	Dodecyl gallate	Antioxidant
187.	968	Erythritol	Sweetener, flavour enhancer, Humectant
188.	127	Erythrosine	Colour
189.	488	Ethoxylated mono-and di-glycerides	Emulsifier
190.	324	Ethoxyquin	Antioxidant
191.	462	Ethyl cellulose	Binder, filler
192.	313	Ethyl gallate	Antioxidant
193.	467	Ethyl hydroxyethyl cellulose	Thickener, emulsifier, stabilizer
194.	637	Ethyl maltol	flavour enhancer
195.	214	Ethyl-p-hydroxybenzoate	Preservative
196.	143	Fast green FCF	Colour
197.	570	Fatty acids	foam stabilizer, glazing agent, antifoaming agent
198.	381	Ferric ammonium citrate	anticaking agent
199.	505	Ferrous carbonate	Acidity regulator
200.	579	Ferrous gluconate	Colour retention agent
201.	537	Ferrous hexacyanomanganate	anticaking agent
202.	585	Ferrous lactate	Colour retention agent
203.	1101(iv)	Ficin	flour treatment agent, stabilizer, tenderizer, flavour enhancer
204.	161a	Flavoxanthin	Colour
205.	240	Formaldehyde	Preservative
206.	236	Formic acid	Preservative

207.	297	Fumaric acid	Acidity regulator
208.	458	Gamma Cyclodextrin	Stabilizer, binder
209.	164	Gardenia yellow	Colour
210.	418	Gellan gum	Thickener, stabilizer, gelling Agent
211.	574	Gluconic acid (D-)	acidity regulator, raising agent
212.	575	Glucono delta-lactone	acidity regulator, raising agent
213.	1102	Glucose oxidase	Antioxidant
214.	620	Glutamic acid (L(+)-)	flavour enhancer
215.	422	Glycerol	Humectant, bodying agent
216.	445	Glycerol esters of wood resin	Emulsifier, stabilizer
217.	915	Glycerol-, methyl-, or penta-erithrytol esters of colophane	Glazing agent
218.	640	Glycine	Flavour modifier
219.	958	Glycyrrhizin	Sweetener, flavour enhancer
220.	175	Gold	Colour
221.	163 (ii)	Grape skin extract	Colour
222.	142	Green S	Colour
223.	314	Guaiac resin	Antioxidant
224.	626	Guanlic acid	flavour enhancer
225.	412	Guar gum	Thickener, stabilizer
226.	414	Gum arabic (acacia gum)	Thickener, stabilizer
227.	419	Gum ghatti	Thickener, stabilizer, emulsifier
228.	241	Gum guaicum	Preservative
229.	939	Helium	packing gas

230.	209	Heptyl-p-hydroxybenzoate	Preservative
231.	239	Hexamethylene tetramine	Preservative
232.	507	Hydrochloric acid	Acidity regulator
233.	907	Hydrogenated poly-1-decene	glazing agent
234.	463	Hydroxypropyl cellulose	Thickener, Emulsifier, Stabilizer
235.	464	Hydroxypropyl methyl cellulose	Thickener, Emulsifier, Stabilizer
236.	132	Indigotine	Colour
237.	630	Inosinic acid	flavour enhancer
238.	1103	Invertases	Stabilizer
239.	172 (i)	Iron oxide, black	Colour
240.	172(ii)	Iron oxide, red	Colour
241.	172(iii)	Iron oxide, yellow	Colour
242.	172	Iron oxides	Colour
243.	315	Isoascorbic acid	Antioxidant
244.	943b	Isobutane	Propellant
245.	953	Isomalt (isomaltitol)	Sweetener, anticaking agent, bulking agent, glazing agent
246.	384	Isopropyl citrates	Antioxidant, Preservative, Sequestrant
247.	416.	Karaya gum	Thickener, stabilizer
248.	425	Lonjac flour	Thickener
249.	161c	Kryptoxanthin	Colour
250.	920	L-Cysteine and its hydrochlorides-	flour treatment agent

		sodium and potassium salts	
251.	921	L-Cysteine and its hydrochlorides-sodium and potassium salts	flour treatment agent
252.	641	L-Leucine	flavour modifier.
253.	270	Lactic acid (L-, D- and Dl-)	Acidity regulator
254.	472b	Lactic and fatty acid esters of glycerol	Emulsifier, stabilizer,
255.	966	Lactitol	Sweetener, texturizer
256.	478	Lactylated fatty acid esters of glycerol and propylene glycol	Emulsifier
257.	913	Lanolin	glazing agent
258.	344	Lecithin citrate	Preservative
259.	322	Lecithins	Antioxidant, emulsifier
260.	1104	Upases	flavour enhancer
261.	180	Lithol rubine BK	Colour
262.	161b	Lutein	Colour
263.	160d	Lucopene	Colour
264.	642	Lysin hydrochloride	flavour enhancer
265.	1105	Lysozyme	Preservative
266.	504(i)	Magnesium carbonate	acidity regulator, anticaking agent, colour retention agent
267.	504	Magnesium carbonates	acidity regulator, anticaking agent, colour retention agent
268.	511	Magnesium chloride	firming agent
269.	345	Magnesium citrate	Acidity regulator

270.	580	Magnesium gluconate	acidity regulator, firming agent
271.	625	Magnesium glutamate	flavour enhancer
272.	504(ii)	Magnesium hydrogen carbonate	acidity regulator, anticaking agent, colour retention agent
273.	528	Magnesium hydroxide	acidity regulator, colour retention agent
274.	329	Magnesium lactate (D-, L-)	acidity regulator, flour treatment agent
275.	530	Magnesium oxide	anticaking agent
276.	343	Magnesium phosphates	acidity regulator, anticaking Agent
277.	553(i)	Magnesium silicate	anticaking agent, dusting Powder
278.	553	Magnesium Silicates	anticaking agent, dusting Powder
279.	518	Magnesium sulphate	firming agent
280.	553(ii)	Magnesium trisilicate	anticaking agent, dusting Powder
281.	296	Malic acid (D-,L-)	acidity regulator, flavouring Agent
282.	965	Maltitol and maltitol Syrup	Sweetener, Stabilizer, Emulsifier
283.	636	Maltol	flavour enhancer
284.	130	Manascorubin	Colour
285.	421	Mannitol	Sweetener, anticaking agent

286.	353	Metatartaric acid	Acidity regulator
287.	461	Methyl cellulose	Thickener, Emulsifier, Stabilizer
288.	911	Methyl esters of fatty acids	glazing agent
289.	465	Methyl ethyl cellulose	Thickener, Emulsifier, stabilizer, antifoaming agent
290.	489	Methyl glucoside-coconut oil ester	Emulsifier
291.	218	Methyl p-hydroxybenzoate	Preservative
292.	900 b	Methylphenylpolysiloxane	antifoaming agent
293.	460(i)	Microcrystalline cellulose	Emulsifier, anticaking agent, texturizer, dispersing agent
294.	905 c (i)	Microcrystalline wax	glazing agent
295.	905a	Mineral oil, food grade	glazing agent, release agent, sealing agent
296.	472 f	Mixed tartaric, acetic and fatty acid esters of glycerol	Emulsifier, Stabilizer, Sequestrant
297.	306	Mixed tocopherols concentrate	Antioxidant
298.	471	Mono-and di-glycerides of fatty acids	Emulsifier, stabilizer
299.	624	Monoammonium glutamate	flavour enhancer
300.	342 (i)	Monoammonium orthophosphate	acidity regulator, flour treatment agent
301.	341 (i)	Monocalcium orthophosphate	acidity regulator, texturizer, flour treatment agent, raising Agent
302.	343 (i)	Monomagnesium orthophosphate	acidity regulator, anticaking

			Agent
303.	622	Monopotassium glutamate	flavour enhancer
304.	340 (i)	Monopotassium orthophosphate	acidity regulator texturizer, sequestrant stabilizer, emulsifier, water retention Agent
305.	336 (i)	Monopotassium tartrate	Stabilizer, sequestrant
306.	621	Monosodium glutamate	flavour enhancer
307.	339 (i)	Monosodium orthophosphate	acidity regulator texturizer, sequestrant stabilizer, emulsifier, water retention Agent
308.	364 (i)	Monosodium succinate	acidity regulator, flavour Enhancer
309.	335 (i)	Monosodium tartrate	Stabilizer, sequestrant
310.	160a (ii)	Natural extracts	Colour
311.	959	Neohesperidine dihydrochalcone	Sweetener
312.	375	Nicotinic acid	Colour retention agent
313.	234	Nisin	Preservative
314.	941	Nitrogen	packing gas, freezant
315.	918	Nitrogen oxides	flour treatment agent
316.	919	Nitrosyl chloride	flour treatment agent
317.	942	Nitrous oxide	Propellant
318.	411	Oat gum	Thickener, stabilizer
319.	946	Octafluorocyclobutane	Propellant
320.	311	Octyl gallate	Antioxidant

321.	182	Orchil	Colour
322.	231	Ortho-phenylphenol	Preservative
323.	338	Orthophosphoric acid	acidity regulator, antioxidant, Synergist
324.	948	Oxygen	packing gas
325.	387	Oxy stearin	Antioxidant, sequestrant
326.	1101(ii)	Papain	flour treatment agent, Stabilizer, tenderizer, flavour
327.	160c	Paprika oleoresins	Colour
328.	905 c (ii)	Paraffin wax	glazing agent
329.	131	Patent blue V	Colour
330.	440	Pectins	Thickener, Stabilizer, gelling Agent
331.	451 (ii)	Pentapotassium triphosphate	Sequestrant, acidity regulator, Texturizer
332.	451 (i)	Pentasodium triphosphate	Sequestrant, acidity regulator, Texturizer
333.	429	Peptones	Emulsifier
334.	905 b	Petrolatum (petroleum jelly)	glazing agent, release agent, sealing agent
335.	905 c	Petroleum wax	glazing agent, release agent, sealing agent
336.	391	Phytic acid	Antioxidant
337.	235	Pimaricin (natamycin)	Preservative
338.	1200	Polydextroses A and N	bulking agent, Stabilizer, thickener, Humectant,

			texturizer
339.	990a	Polydimethylsiloxane	antifoaming agent, anticaking agent, emulsifier
340.	1521	Polyethylene glycol	antifoaming agent
341.	475	Polyglycerol esters of fatty acids	Emulsifier
342.	476	Polyglycerol esters of interesterified Ricinoleic acid	Emulsifier
343.	964	Polyglycitol syrup	Sweetener
344.	432	Polyoxyethylene (20) sorbitan monolaurate	Emulsifier, dispersing agent
345.	433	Polyoxyethylene (20) sorbitan Mono-oleate	Emulsifier, dispersing agent
346.	434	Polyoxyethylene (20) sorbitan monopalmitate	Emulsifier, dispersing agent
347.	435	Polyoxyethylene (20) sorbitan monostearate	Emulsifier, dispersing agent
348.	436	Polyoxyethylene (20) sorbitan tristearate	Emulsifier, dispersing agent
349.	431	Polyoxyethylene (40) stearate	Emulsifier
350.	430	Polyoxyethylene (8) stearate	Emulsifier
351.	452	Polyphosphates	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
352.	1202	Polyvinylpolypyrrolidone	colour stabilizer, Colloidal, Stabilizer

353.	1201	Polyvinylpyrrolidone	bodying agent, Stabilizer, clarifying agent, dispersing Agent
354.	124	Ponceau 4R	Colour
355.	125	Ponceau SX	Colour
356.	261 (i)	Potassium acetate	Preservative, acidity regulator
357.	261	Potassium acetates	Preservative, acidity regulator
358.	357	Potassium adipates	Acidity regulator
359.	402	Potassium alginate	Thickener, stabilizer
360.	555	Potassium aluminium silicate	anticaking agent
361.	303	Potassium ascorbate	Antioxidant
362.	212	Potassium benzoate	Preservative
363.	228	Potassium bisulphite	Preservative, antioxidant
364.	924 a	Potassium bromate	flour treatment agent
365.	501 (i)	Potassium carbonate	acidity regulator, stabilizer
366.	501	Potassium carbonates	acidity regulator, stabilizer
367.	508	Potassium chloride	Gelling agent
368.	332	Potassium citrates	acidity regulator, Sequestrant, Stabilizer
369.	261 (ii)	Potassium diacetate	Preservative, acidity regulator
370.	332 (i)	Potassium dihydrogen citrate	acidity regulator, Sequestrant, Stabilizer
371.	536	Potassium ferrocyanide	anticaking agent
372.	366	Potassium fumarates	Acidity regulator
373.	577	Potassium gluconate	Sequestrant

374.	501 (ii)	Potassium hydrogen carbonate	acidity regulator, stabilizer
375.	351 (i)	Potassium hydrogen malate	Acidity regulator
376.	525	Potassium hydroxide	Acidity regulator
377.	632	Potassium Inosate	flavour enhancer
378.	917	Potassium iodate	flour treatment agent
379.	317	Potassium isoascorbate	Antioxidant
380.	326	Potassium lactate	Antioxidant, synergist, acidity Regulator
381.	351 (ii)	Potassium malate	Acidity regulator
382.	351	Potassium malates	Acidity regulator
383.	224	Potassium metabisulphite	Preservative, antioxidant
384.	252	Potassium nitrate	Preservative, colour fixative
385.	249	Potassium nitrite	Preservative, colour fixative
386.	922	Potassium persulphate	flour treatment agent
387.	340	Potassium phosphates	acidity regulator, Sequestrant, emulsifier, Texturizer, Stabilizer, water retention agent
388.	452 (ii)	Potassium polyphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
389.	283	Potassium propionate	Preservative
390.	560	Potassium silicate	anticaking agent
391.	337	Potassium sodium tartrate	Stabilizer, sequestrant
392.	202	Potassium sorbate	Preservative

393.	515	Potassium sulphates	Acidity regulator
394.	225	Potassium sulphite	Preservative, antioxidant
395.	336	Potassium tartrates	Stabilizer, sequestrant
396.	460 (ii)	Powdered cellulose	Emulsifier, anticaking agent, texturizer, dispersing agent
397.	407 a	Processed Euchema seaweed	Thickener, stabilizer
398.	944	Propane	Propellant
399.	280	Propionic acid	Preservative
400.	310	Propyl gallate	Antioxidant
401.	216	Propyl p-hydroxybenzoate	Preservative
402.	1520	Propylene glycol	Humectant, wetting agent, dispersing agent
403.	405	Propylene glycol alginate	Thickener, emulsifier
404.	477	Propylene glycol esters of fatty acids	Emulsifier
405.	1101 (i)	Protease	flour treatment agent, Stabilizer, tenderizer, flavour Enhancer
406.	1101	Proteases	flour treatment agent, Stabilizer, tenderizer, flavour Enhancer
407.	999	Quillaia extracts	foaming agent
408.	104	Quinoline yellow	Colour
409.	128	Red 2G	Colour
410.	161 f	Rhodoxanthin	Colour

411.	101 (i)	Riboflavin	Colour
412.	101 (ii)	Riboflavin 5' -phosphate, sodium	Colour
413.	101	Riboflavins	Colour
414.	908	Rice bran wax	glazing agent
415.	161 d	Rubixanthin	Colour
416.	954	Saccharin (and Na, K, Ca salts)	Sweetener
417.	470	Salts of fatty acids (with base Al, Ca, Na, Mg, K and NH4)	Emulsifier, Stabilizer, anti caking agent
418.	166	Sandalwood	Colour
419.	904	Shellac	glazing agent
420.	551	Silicon dioxide, amorphous	anticaking agent
421.	174	Silver	Colour
422.	262 (i)	Sodium acetate	Preservative, acidity regulator, Sequestrant
423.	262	Sodium acetates	Preservative, acidity regulator, Sequestrant
424.	356	Sodium adipates	Acidity regulator
425.	401	Sodium alginate	Thickener, Stabilizer, gelling Agent
426.	541	Sodium aluminium phosphate	acidity regulator, emulsifier
427.	541 (i)	Sodium aluminium phosphate-acidic	acidity regulator, emulsifier
428.	541 (ii)	Sodium aluminium phosphate-basic	acidity regulator, emulsifier
429.	554	Sodium alumino-silicate	anticaking agent
430.	301	Sodium ascorbate	Antioxidant

431.	211	Sodium benzoate	Preservative
432.	452 (iii)	Sodium calcium polyphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
433.	500(i)	Sodium carbonate	acidity regulator, raising agent, anticaking agent
434.	500	Sodium carbonates	acidity regulator, raising agent, anticaking agent
435.	466	Sodium carboxymethyl cellulose	Thickener, Emulsifier, Stabilizer
436.	469	Sodium carboxymethyl, cellulose, enzymatically, hydrolysed	Thickener, stabilizer
437.	331	Sodium citrates	acidity regulator, Sequestrant, emulsifier, stabilizer
438.	266	Sodium dehydroacetate	Preservative
439.	262 (ii)	Sodium diacetate	Preservative, acidity regulator, Sequestrant
440.	331 (i)	Sodium dihydrogen citrate	acidity regulator, Sequestrant, emulsifier, stabilizer
441.	215	Sodium ethyl p-hydroxybenzoate	Preservative
442.	535	Sodium ferrocyanide	anticaking agent
443.	237	Sodium formate	Preservative
444.	365	Sodium fumarates	Acidity regulator

445.	576	Sodium gluconate	Sequestrant
446.	500 (ii)	Sodium hydrogen carbonate	acidity regulator, raising agent, anticaking agent
447.	350 (i)	Sodium hydrogen malate	acidity regulator, humectant
448.	222	Sodium hydrogen sulphite	Preservative, antioxidant
449.	524	Sodium hydroxide	Acidity regulator
450.	316	Sodium isoascorbate	Antioxidant
451.	638	Sodium L-Aspartate	flavour enhancer
452.	325	Sodium lactate	antioxidant synergist, Humectant, bulking agent
453.	481	Sodium lactylates	Emulsifier, stabilizer
454.	487	Sodium laurylsulphate	Emulsifier
455.	350 (ii)	Sodium malate	acidity regulator, humectant
456.	350	Sodium malates	acidity regulator, humectant
457.	223	Sodium metabisulphite	Preservative, bleaching agent, Antioxidant
458.	550 (ii)	Sodium metasilicate	anticaking agent
459.	219	Sodium methyl p-hydroxybenzoate	Preservative
460.	251	Sodium nitrate	Preservative, colour fixative
461.	250	Sodium nitrite	Preservative, colour fixative
462.	232	Sodium o-phenylphenol	Preservative
463.	481 (ii)	Sodium oleyl lactylate	Emulsifier, stabilizer
464.	339	Sodium phosphates	acidity regulator, Sequestrant, emulsifier, Texturizer, Stabilizer, water retention

			agent
465.	452 (i)	Sodium polyphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
466.	281	Sodium propionate	Preservative
467.	217	Sodium propyl p-hydroxybenzoate	Preservative
468.	500 (iii)	Sodium sesquicarbonate	acidity regulator, raising agent, anticaking agent
469.	550 (i)	Sodium silicate	anticaking agent
470.	550	Sodium silicates	anticaking agent
471.	201	Sodium sorbate	Preservative
472.	485	Sodium stearoyl fumarate	Emulsifier
473.	481 (i)	Sodium stearoyl lactylate	Emulsifier, stabilizer
474.	514	Sodium sulphates	Acidity regulator
475.	221	Sodium sulphite	Preservative, antioxidant
476.	335	Sodium tartrates	Stabilizer, sequestrant
477.	539	Sodium thiosulphate	Antioxidant, sequestrant
478.	200	Sorbic acid	Preservative
479.	493	Sorbitan monolaurate	Emulsifier
480.	494	Sorbitan mono-oleate	Emulsifier
481.	495	Sorbitan monopalmitate	Emulsifier
482.	491	Sorbitan monostearate	Emulsifier
483.	496	Sorbitan trioleate	Stabilizer, emulsifier
484.	492	Sorbitan tristearate	Emulsifier

485.	420	Sorbitol and sorbitol syrup	Sweetener, Humectant, sequestrant, Texturizer, Emulsifier
486.	909	Spermacetic wax	glazing agent
487.	512	Stannous chloride	Antioxidant, colour retention agent
488.	484	Stearyl citrate	Emulsifier, sequestrant
489.	483	Stearyl tartrate	flour treatment agent
490.	960	Stevioside	Sweetener
491.	363	Succinic acid	Acidity regulator
492.	472g	Succinylated monoglycerides	Emulsifier, Stabilizer, Sequestrant
493.	446	Succi stearin	Emulsifier
494.	955	Sucralose	Sweetener
495.	474	Sucroglycerides	Emulsifier
496.	444	Sucrose acetate isobutyrate	Emulsifier, stabilizer
497.	473	Sucrose esters of fatty acids	Emulsifier
498.	220	Sulphur dioxide	Preservative, antioxidant
499.	513	Sulphuric acid	acidity regulator
500.	110	Sunset yellow FCF	colour
501.	441	Superglycerinated hydrogenated rapeseed oil	Emulsifier
502.	309	Synthetic delta-tocopherol	Antioxidant
503.	308	Synthetic gamma-tocopherol	Antioxidant
504.	553 (iii)	Talc	anticaking agent, dusting powder

505.	181	Tannins, food grade	Colour, Emulsifier, Stabilizer, thickener
506.	417	Tara gum	Thickener, stabilizer
507.	334	Tartaric acid (L(+)-)	acidity regulator, Sequestrant, antioxidant synergist
508.	472 d	Tartaric acid esters of mono and di-glycerides of fatty acids	Emulsifier, Stabilizer, sequestrant
509.	102	Tartrazine	Colour
510.	319	Tertiary butylhydroquinone	antioxidant
511.	450(v)	Tetrapotassium diphosphate	emulsifier, raising agent, stabilizer sequestrant, acidity regulator, water retention agent
512	450 (iii)	Tetrasodium diphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Seque-strant, water retention agent
513.	957	Thaumatin	Sweetener, flavour enhancer emulsifier
514.	479	Thermally oxidized soya bean oil with mono-and di-glycerides of fatty acids	Emulsifier
515.	233	Thiabendazole	Preservative
516.	388	Thiodipropionic acid	antioxidant
517.	171	Titanium dioxide	Colour
518.	413	Tragacanth gum	Thickener, Stabilizer, emulsifier
519.	1518	Triacetin	Humectant
520.	341 (iii)	Tricalcium orthophosphate	acidity regulator, texturizer, flour treatment agent, raising agent, firming agent,

			anticaking agent, water retention agent
521.	1505	Triethyl citrate	foam stabilizer
522.	343 (iii)	Trimagnesium orthophosphate	acidity regulator, anticaking Agent
523.	451	Tri phosphates	Sequestrant, acidity regulator, Texturizer
524.	332 (ii)	Tripotassium citrate	acidity regulator, Sequestrant, Stabilizer
525.	340 (iii)	Tripotassium orthophosphate	acidity regulator, texturizer, sequestrant stabilizer, Emulsifier, water retention Agent
526.	331 (ii)	Trisodium citrate	acidity regulator, Sequestrant, emulsifier, Stabilizer
527.	450 (ii)	Trisodium diphosphate	Emulsifier, Stabilizer, acidity regulator, raising agent, Sequestrant, water retention Agent
528.	339 (iii)	Trisodium orthophosphate	acidity regulator, Sequestrant, emulsifier, Texturizer, Stabilizer, water retention agent
529.	100 (ii)	Turmeric	Colour
530.	153	Vegetable carbon	Colour
531.	161 e	Violoxanthin	Colour

532.	910	Wax esters	glazing agent
533.	415	Xanthan gum	Thickener, stabilizer
534.	967	Xylitol	Sweetener, Humectant, stabilizer, Emulsifier, thickener
535.	107	Yellow 2G	Colour
536.	557	Zinc silicate	anticaking agent
Supplementary List-Modified Starches			
537.	1422	Acetylated di-starch adipate	Stabilizer, thickener, binder
538.	1423	Acetylated distarch glycerol	Stabilizer, thickener
539.	1414	Acetylated distarch phosphate	Emulsifier, thickener
540.	1401	Acid-treated starch	Stabilizer, thickener, binder
541.	1402	Alkaline treated starch	Stabilizer, thickener, binder
542.	1403	Bleached starch	Stabilizer, thickener, binder
543.	1400	Dextrins roasted starch white and yellow	Stabilizer, thickener, binder
544.	1411	Di-starch glycerol	Stabilizer, thickener, binder
545.	1412	Di-starch phosphate esterified with sodium trimetaphosphate; esterified with phosphorus oxychloride	Stabilizer, thickener, binder
546.	1443	Hydroxypropyl di-starch glycerol	Stabilizer, thickener
547.	1442	Hydroxypropyl di-starch phosphate	Stabilizer, thickener
548.	1440	Hydroxypropyl starch	Emulsifier, thickener, binder
549.	1410	Monostarch phosphate	Stabilizer, thickener, binder
550.	1404	Oxidized starch	Emulsifier, thickener, binder
551.	1413	Phosphated di-starch phosphate	Stabilizer, thickener, binder

552.	1420	Starch acetate esterified with acetic anhydride	Stabilizer, thickener
553.	1421	Starch acetate esterified with vinyl acetate	Stabilizer, thickener
554.	1450	Starch sodium octenyl succinate	Stabilizer, thickener, binder,
555.	1405	Starches, enzyme-treated	thickener

Note: The principal regulations were published in the Gazette of India, Extraordinary, Part-III, Section 4 *vide* notification number F. No. 2-15015/30/2010, dated the 1st August, 2011 and subsequently amended *vide* notification numbers:

1. F.No. 4/15015/30/2011, dated 7th June, 2013;

2. F.No. P. 15014/1/2011-PFA/FSSAI, dated 27th June, 2013;

3. F. No. 5/15015/30/2012, dated 12th July, 2013;

4. F.No. P. 15025/262/2013-PA/FSSAI, dated 5th December, 2014;

5. F.No. 1-83F/Sci. Pan- Noti/FSSAI-2012, dated 17th February, 2015;

6. F.No. 4/15015/30/2011, dated 4th August, 2015;

7. F.No. P.15025/264/13-PA/FSSAI, dated 4th November, 2015;

8. F.No. P. 15025/263/13-PA/FSSAI, dated 4th November, 2015;

9. F.No. P. 15025/261/2013-PA/FSSAI, dated 13th November, 2015;

10. F.No. P. 15025/208/2013-PA/FSSAI, Dated 13th November, 2015;

11. F.No. 7/15015/30/2012, dated 13th November, 2015;

12. F.No. 1-10(1)/Standards/SP9Fish and Fisheries Products)/FSSAI-2013, dated 11th January, 2016;

13. No. 3-16/Specified Foods/Notifcation(Food Additives)/FSSAI-2014, dated 3rd May, 2016.;

14. F.No. 15-03/Enf/FSSAI/2014, dated 14th June, 2016;

15. No. 3-14F/Notification (Nutraceuticals)/FSSAI-2013, dated 13th July, 2016;

16. F.No. 1-12/Stnadards/SP (Sweets, Confectionery)/FSSAI-2015, dated 15th July, 2016;

17. F.No. 1-120(1)/Standards/Irradiation/FSSAI-2015, dated 23rd August, 2016;

18. F. No. 11/09/Reg/Harmoniztn/2014, dated 5th September, 2016;

19. F.No. Stds/CPLQ.CP/EM/FSSAI-2015, dated 14th September, 2016;

20. F.No. 11/12 Reg/Prop/FSSAI-2016, dated 10th October, 2016;

21. F.No. 1-110(2)/SP (Biological Hazards)/FSSAI/2010, dated 10th October, 2016;

22. F.No. Stds/SP (Water & Beverages)/Notif (2)/FSSAI-2016, dated 25th October, 2016;

23. F.No. 1-11(1)/Standards/SP (Water & Beverages)/FSSAI-2015, Dated 15th November, 2016;

24. F.No. P.15025/93/2011-PFA/FSSAI, Dated 2nd December, 2016;

25. F.No. P. 15025/6/2004-PFS/FSSAI, dated 29th December, 2016;

26. F.No. Stds/O&F/Notification(1)/FSSAI-2016, dated 31st January, 2017;

27. F.No. 1-12/Standards/2012-FSSAI, dated 13th February, 2017;

28. F.No. 1-10(7)/Standards/SP (Fish & Fisheries Products)/FSSAI-2013, dated 13th February, 2017;

29. F. No. Stds /SCSS&H/ Notification (02)/FSSAI-2016, dated 15th May, 2017;

30. F. No. Stds/03/Notification (LS)/ FSSAI-2017, dated 19th June, 2017;

31. F.No. 1/Additives/Stds/14.2/Notification/FSSAI/2016, dated 31st July, 2017;

32. F.No. Stds/F&VP/Notification(01)/FSSAI-2016, dated 2nd August, 2017;

33. F.No. 1-94(1)/FSSAI/SP(Labelling)/2014, dated 11th September, 2017;

34. F.No. Stds/M&MPIP(1)/SP/FSSAI-2015, dated 12th September, 2017;

35. No. Stds/SP (Water & Beverages)/Noti(1)/FSSAI-2016,dated 15th September,2017;

36. F.No.1-10(8)/Standards/SP (Fish and Fisheries Products)/FSSAI-2013, dated 15th September, 2017;

37. File No. 2/Stds/CPL & CP/Notification/FSSAI-2016, dated 18th September, 2017;

38. F.No. A-1(1)/Standards/MMP/2012, dated 12th October, 2017;

39. F. No. Stds/O&F/Notification (3)/FSSAI-2016, dated 12th October, 2017;

40. F. No. 2/Stds/CPL & CP/Notification/FSSAI-2016(part), dated 24th October, 2017;

41. F.No. A-1/Stadnards/Agmark/2012-FSSAI(pt.I), dated 17th November, 2017;

42. F.No. 1/Additives/Stds/BIS Notification/FSSAI/2016, dated 17th November, 2017;

43. F.No. Stds/O&F/Notification (5)/FSSAI-2016, dated 20th February, 2018;

44. F.No. Stds/01-SP(fortified & Enriched Foods)-Reg/FSSAI-2017, dated 13th March, 2018;

45. F.No. 1/Infant Nutrition/Stds/Notification/FSSAI/2016, dated 13th March, 2018;

46. F. No.1-110(3)/SP (Biological Hazards)/FSSAI/2010, dated 21st March, 2018;

47. F.No. Stds/SCSS&H/ Notification (03)/FSSAI-2016, dated 10th April, 2018;

48. No. Stds/CPL&CP/Notification/FSSAI-2016, dated 4th May, 2018;

49. F.No. Stds/SP(SCSSH)/Ice lollies notification/FSSAI-2018, dated 20th July, 2018;

50. F.No. Stds/SP(Water & Beverages)/Notif(3)/FSSAI-2016, dated 20th July, 2018;

51. F.No. Stds/CPL&CP/ Draft Notification/FSSAI-2017, dated 31st July, 2018;

52. File No.1/Additional Additives/Stds/Notification/FSSAI/2016, dated 8th November, 2018;

53. F.No. Stds/03/Notification (CFOI&YC)/FSSAI-2017, dated 16th November, 2018;

54. File No. Stds/O&F/Notification(7)/FSSAI-2017, dated 19th November, 2018;

55. F.No. Stds/M&MP/Notification(02)/FSSAI-2016, dated 19th November, 2018;

56. F. No. Stds/F&VP/Notifications(04)/FSSAI-2016, dated 19th November, 2018;

57. File No. 1-116/Scientific Committee (Noti.)/2010-FSSAI, dated 26th November, 2018;

58. F. No. 02-01/Enf-1(1)/FSSAI-2012, dated 29th January, 2019;

59. F.No. Stds/F&VP/Notification (07)/FSSAI-2018, dated 05th July, 2019;

60. F.No.Stds/O&F/Notification(10)/FSSAI-2017, dated 05th July, 2019;

61. F.No. Stds/SP (Water & Beverages)/Notification(5) FSSAI-2018, dated 30th October, 2019;

62. F.No. M&MP/Misc. Stds/Notification(03)/FSSAI-2018, dated 28th November, 2019;

63. F.No.1-110/SP (Biological Hazards)/Amendment-1/FSSAI/2018, dated 23rd June, 2020;

64. F No. Stds/CPL & CP/Notification/01/FSSAI-2018, dated 9th July, 2020;

65. F.No. Stds/ M&MPIP (3)/SP/FSSAI-2018, dated 9th July, 2020;

66. File No. Stds/CPL & CP/Notification/01/FSSAI-2017, dated 9th July, 2020;

67. F.No.A-1/Standards/Agmark/2012-FSSAI(p+1), dated 23rd July, 2020;

68. F.No. Stds/M&MP/Notification(04)/FSSAI-2019, dated 2nd September, 2020;

69. F.No. Stds/Additives-1/Notification/FSSAI/2018, dated 16th September, 2020;

70. F.No. 1/Additional Additives-III/Stds/Notification/FSSAI/2017, dated 9th October, 2020;

71. F. No. Stds/Processing aids/Notification/FSSAI/2018, dated 9th October, 2020;

72. F. No. 1-116/Scientific Committee/Notif./2010-FSSAI, dated 29th December, 2020;

73. F. No. 1-116/Scientific Committee/Notif.27/2010-FSSAI(E), dated 4th March, 2021;

74. F. No. Stds/O&F/Notification (5)/FSSAI-2017, dated 18th March, 2021;

75. F. No. 1-116/Scientific Committee/Notif.28.4/2010-FSSAI (1), dated 26th July, 2021;

76. F. No. 1-116/Scientific Committee/Notif.28.4/2010-FSSAI(1) (Pt.F), dated 3rd November, 2021;

77. F. No. Stds/SC/A-1.34/N-1, dated 15th November, 2021;

78. F. No. M&MP/Notification(05)/FSSAI-2019,dated 27th December, 2021;

79. F. No. 1-116/Scientific Committee/Notif.28.4/2010-FSSAI(2), dated 13th September, 2022;

80. F. No. STD/FA/A-1.30/No.1/2020-FSSAI(P-I), dated 27th October, 2022;

81. F. No. Std/Notifications/35.1/2021, dated 11th January, 2023; and

82. F.No. STD/FA/A-1.30/No.1/2020-FSSAI, dated 21st February, 2023.