

Ministry of Environment and Forests

New Delhi, the 19th January, 2000

NOTIFICATION

S.O.57(E) --Whereas certain draft rules further to amend the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 were published under the notification of the Government of India in the Ministry of Environment and Forests number S.O. 25(E) dated 21st January, 1999 inviting objections and suggestions from all persons likely to be affected thereby before the expiry of the period of sixty days from the date on which the copies of the Gazette containing the said notification are made available to the public;

And whereas copies of the said Gazette were made available to the public on the 4th March, 1999;

And whereas objections and suggestions received from the public in respect of the said draft rules have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sections 6,8 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, namely: -

the Manufacture, Storage and Import of Hazardous Chemical (Amendment) Rules, 2000.

1. (1) These rules may be called the Manufacture, Storage and Import of Hazardous Chemical (Amendment) Rules, 2000.

(2) They shall come into force on the date of their publication in the Official Gazette.
2. In the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 (hereinafter referred to as the said rules), in rule 2,-
 - i. in clause (e) for the words and figure "Schedule-1 and is" the words and figure "Schedule-1 or" shall be substituted;
 - ii. for clause (j), the following clauses shall be substituted, namely;-

'(j) "major accident" means - an incident involving loss of life inside or outside the installation, or ten or more injuries inside and/or one or more injuries outside or release of toxic chemicals or explosion or fire or spillage of hazardous chemicals resulting in on-site or off-site emergencies or damage to equipment leading to stoppage of process or adverse affects to the environment;

(ja) "major accident hazards (MAH) installations" means - isolated storage and industrial activity at a site handling (including transport through carrier or pipeline) of hazardous chemicals equal to or , in excess of the threshold quantities specified in, column 3 of schedule 2 and 3 respectively;

3. In rule 4 of the said rules in sub-rule (1), -

(i) in clause (a), for the words "and is listed", the words "or listed" shall be substituted;

(ii) for clause (b), the following clause shall be substituted, namely:-

"(b) isolated storage of a hazardous chemical listed in Schedule 2 in a quantity equal to or more than the threshold quantity specified in column 3, thereof."

4. In rule 6 of the said rules, in sub-rule (1), in clause (b) for the words and figure "Column 4", the words, figures and brackets "Columns 3 and 4 (rules 10-12 only for column 4)" shall be substituted.

5. In rule 7 of the said rules, for the marginal heading "Notification of sites" the heading "Approval and Notification of sites" shall be substituted.

6. In rule 10 of the said rules, for the marginal heading "Safety Reports" the marginal heading "Safety reports and safety audit reports" shall be substituted.
7. In rule 17 of the said rules, in sub-rule (1) for the words "and is listed" the words "or listed" shall be substituted.
8. In rule 18 of the said rules, in sub-rule (1), for the words "and is listed" the words "or listed" shall be substituted.
9. In the said rules, for Schedule-1 and the entries relating thereto, the following Schedule and entries shall be substituted, namely :-

" SCHEDULE 1

[See rule 2e(i), 4(1)(a), 4(2), 17 and 18]

[Part - I]

(a) Toxic Chemicals: Chemicals having the following values of acute toxicity and which owing to their physical and chemical properties, are capable of producing major accident hazards:

Sr.No	Toxicity	Oral toxicity LD50(mg/kg)	Dermal toxicity LD50(mg/kg)	Inhalation toxicity LC50(mg/l)

1.	Extremely toxic	> 5	<40	< 0.5
2.	Highly toxic	>5-50	>40-200	< 0.5 - 2.0
3.	Toxic	>50-200	> 200-1000	>2-10

(b) Flammable Chemicals:

i. flammable gases: Gases which at 20⁰C and at standard pressure of 101.3 KPa are:-

- a. ignitable when in a mixture of 13 percent or less by volume with air, or
- b. have a flammable range with air of at least 12 percentage points regardless of the lower flammable limits.

Note: - The flammability shall be determined by tests or by calculation in accordance with methods adopted by International Standards Organisation ISO Number 10156 of 1990 or by Bureau of Indian Standards ISI Number 1446 of 1985.

ii. extremely flammable liquids: chemicals which have flash point lower than or equal to 23⁰C and boiling point less than 35⁰C

(iii) very highly flammable liquids: chemicals which have a flash point lower than or equal to 23⁰C and initial boiling point higher than 35⁰C.

(iv) highly flammable liquids: chemicals which have a flash point lower than or equal to 60⁰C but higher than 23⁰C.

(v) flammable liquids: chemicals which have a flash point higher than 60⁰C but lower than 90⁰ C.

(c) Explosives: explosives means a solid or liquid or pyrotechnic substance (or a mixture of substances) or an article.

(a) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings;

(b) which is designed to produce an effect by heat, light, sound, gas or smoke or a combination of these as the result of non-detonative self sustaining exothermic chemical reaction.

PART-II

LIST OF HAZARDOUS CHEMICALS

1. Acetaldehyde
2. Acetic acid
3. Acetic anhydride
4. Acetone
5. Acetone cyanohydrin
6. Acetone thiosemicarbazide
7. Acetonitrile
8. Acetylene
9. Acetylene tetra chloride
10. Acrolein
11. Acrylamide
12. Acrylonitrile
13. Adiponitrile
14. Aldicarb
15. Aldrin
16. Allyl alcohol
17. Allyl amine
18. Allyl chloride
19. Aluminium (powder)
20. Aluminium azide
21. Aluminium borohydride
22. Aluminium chloride
23. Aluminium fluoride
24. Aluminium phosphide
25. Amino diphenyl
26. Amino pyridine
27. Aminophenol-2
28. Aminopterin
29. Amiton
30. Amiton dialate
31. Ammonia
32. Ammonium chloro platinate
33. Ammonium nitrate
34. Ammonium nitrite
35. Ammonium picrate
36. Anabasine
37. Aniline
38. Aniline 2, 4, 6-Trimethyl
39. Anthraquinone
40. Antimonypentafluoride
41. Antimycin A
42. ANTU
43. Arsenic pentoxide
44. Arsenic trioxide
45. Arsenous trichloride
46. Arsine
47. Asphalt
48. Azinpho-ethyl
49. Azinphos methyl
50. Bacitracin

51. Barium azide
52. Barium nitrate
53. Barium nitride
54. Benzal chloride
55. Benzenamine 3-Trifluoromethyl
56. Benzene
57. Benzene sulfonyl chloride
58. Benzene 1-(chloromethyl)-4 Nitro
59. Benzene arsenic acid
60. Benzidine
61. Benzidine salts
62. Benzimidazole, 4, 5-Dichloro-2 (Trifluoromethyl)
63. Benzoquinone-P
64. Benzotrichloride
65. Benzoyl chloride
66. Benzoyl peroxide
67. Benzyl chloride
68. Beryllium (powder)
69. Bicyclo (2, 2, 1) Heptane-2 -carbon itri le
70. Biphenyl
71. Bis (2-chloroethyl) sulphide
72. Bis (Chloromethyl) Ketone
73. Bis (Tert-butyl peroxy) cyclohexane
74. Bis (Terbutylperoxy) butane
75. Bis (2,4,6-Trinitrophenylamine)
76. Bis (Chloromethyl) Ether
77. Bismuth and compounds
78. Bisphenol-A
79. Bitoscanate
80. Boron Powder
81. Boron trichloride
82. Boron trifluoride
83. Boron trifluoride comp. With methylether, 1: 1
84. Bromine
85. Bromine pentafluoride
86. Bromo chloro methane
87. Bromodialone
88. Butadiene
89. Butane
90. Butanone-2
91. Butyl amine tert
92. Butyl glycidal ether
93. Butyl isovalarate
94. Butyl peroxy malente tert
95. Butyl vinyl ether
96. Butyl-n-mercaptan
97. C. I. Basic green
98. Cadmium oxide
99. Cadmium stearate
100. Calcium arsenate

101. Calcium carbide
102. Calcium cyanide
103. Camphechlor Toxaphene)
104. Cantharidin
105. Captan
106. Carbachol chloride
107. Carbaryl
108. Carbofuran (Furadan)
109. Carbon tetrachloride
110. Carbon disulphide
111. Carbon monoxide
112. Carbophenothion
113. Carvone
114. Cellulose nitrate
115. Chloroicetic acid
116. Chlordane
117. Chlorofenvinphos
118. Chlorinated benzene
119. Chlorine
120. Chlorine oxide
121. Chlorine trifluoride
122. Chlormeplos
123. Chlormequat chloride
124. Chloroacetal chloride
125. Chloroacetaldehyde
126. Chloroaniline-2
127. Chloroaniline-4
128. Chlorobenzene
129. Chloroethyl chloroformate
130. Chloroform
131. Chloroformyl morpholine
132. Chloromethane
133. Chloromethyl methylether
134. Chloronitrobenzene
135. Chlorophacinone
136. Chlorosulphonic acid
137. Chlorothiophos
138. Chloroxuron
139. Chromic acid
140. Chromic chloride
141. Chromium powder
142. Cobalt carbonyl
143. Cobalt Nitrilmethylidyne compound
144. Cobalt (powder)
145. Colchicine
146. Copper and compounds
147. Copperoxydiloride
148. Counialuryl
149. Couniaphos
150. Couniatertralyl

151. Crimidine
152. Crotenaldehyde
153. Crotonaldehyde
154. Cumene
155. Cyano-en bromide
156. Cyano-en iodide
157. Cyariophos
158. Cyanothoate
159. Cyamiric fluoride
160. Cyclo hexylanline
161. Cyclohexane
162. Cyclobexatione
163. Cycloheximide
164. Cyclopentadiene
165. Cyclopentane
166. Cyclotetramethylenetetranitramine
167. Cyclotrimethylenetrinitramine
168. Cypermethrin
169. DDT
170. Decahorane (1:4)
171. Demeton
172. Demelon S-Methyl
173. Di-n-propyl peroxydicarbonate (Conc = 80%)
174. Dialifos
175. Diazodinitrophenol
176. Dibenzyl peroxydicarbonate (Conc > 90%)
177. Diborane
178. Dichloroacetylene
- 179, Dichlorobenzalkonium chloride
180. Dichloroethyl ether
181. Dichloromethyl phenylsilane
182. Dichlorophenol-2.6
183. Dichlorophenol-2.4
184. Dichlorophenoxy acetic acid
185. Dichloropropane-2,2
186. Dichlorosalicylic acid-3,5
187. Did-lo-rvos (DDVP)
188. Dicrotophos
189. Dieldrin
190. Diepoxy butane
191. Diethyl carbamazine citrate
192. Diethyl chlorophosphate
193. Diethyl ethanolamine
194. Diethyl peroxydicarbonate (Conc 330%)
195. Diethyl phenylene diamine
196. Diethylamine
197. Diethyfeneglvcol
198. Diethylene glycol dinitrate
199. Diethylene triamine
200. Diethleneglyrol butyl ether

201. Diglycidyl ether
202. Digitoxin
203. Dibydroperoxypropane (Conc- 30%)
204. Diisobutyl peroxide
205. Dinietox
206. Dimethoate
207. Dimethyl dichlorosilane
208. Dimethyl hydrazine
209. Dimethyl nitrosoamine
210. Dimethyl P phenylene diamine
211. Dunethyl phosphoramidi cyanidic acid (TABUM)
212. Dimethyl phosphorochloridothioate
213. Dirnethyl sufolane (DMS)
214. Dirnethyl sulphide
215. Dimethylamine
216. Dimethylaniline
217. Dimethylcarbonyl chloride
218. Dimetilan
219. Dinitro O-cresol
220. Dinitrophenol
221. Dinitrotoluene
222. Dinoseb
223. Dinoterb
224. Dioxane-p
225. Dioxathion
226. Dioxine N
227. Diphacinone
228. Diphosphoramidate octagnethyl
229. Diphenyl methane di-isocyanate (MDI)
230. Dipropylene Colycol Butyl ether
231. Dipropylene glycolmethylether
232. Disec-butyl peroxydicarbonate (Conc > 80%)
233. Disufoton
234. Dithiazamine iodide
235. Dithiobiurate
236. Endosulfan
237. Endothion
238. Endrin
239. Epichlorohydrine
240. LPN
241. Ergocalciferol
242. Ergotamine tartarate
243. Ethanesulfenyl chloride, 2 Oloro
244. Ethanol 1-2 dichloracolte
245. Ethion
246. Ethoprophos
247. Ethyl acetate
248. Ethyl alcohol
249. Ethyl benzene
250. Ethyl bis amine

251. Ethyl-bromide
252. Ethyl carbamate
253. Ethyl ether
254. Ethyl hexanol-2
255. Ethyl mercaptan
257. Ethyl methacrylate
258. Ethyl nitrate
259. Ethyl thiocyanate
260. Ethylamine
261. Ethylene
262. Ethylene chlorohydrine
263. Ethylene dibromide
264. Ethylene diamine
265. Ethylene diamine hydrochloride
266. Ethylene flourohydrine
267. Ethylene glycol
268. Ethylene glycol dinitrate
269. Ethylene oxide
270. Ethylenimine
271. Ethylene di chloride
272. Femamiphos
273. Fernitrothion
274. Fensulphothion
275. Pluemetil
276. Fluorine
277. Fluoro 2-hydroxy butyric acid amid salt ester
278. Fluoroacetamide
279. Fluoroacetic acid amide salts and esters
280. Fluoroacetylchloride
281 Fluorobutyric acid amide salt esters
292. Fluorocrotonic acid amides salts esters
293. Fluorouracil
294. Fonofos
295. Formaldehyde
286. Formetanate hydrochloride
287. Formic acid
289. Formoparanate
289. Formothion
290. Fosthlotan
291. Fuberidazole
292. Furan
293. GAlium Trichloride
294. Glyconitrile (Hydroxyacetonitrile)
295. Guanyt-4-nitrosaminoguynyl- 1-tetrazene
296. Heptachlor
298. Hexachlorobenzene
299. Hexachlorocyclohexan (Lindane)
300. Hexachlorocyclopentadiene
301. Hexachlorodibenzo-p-dioxin
302. Hexachloronapthalene

303. Hexafluoropropanone sesquihydrate
304. Hexamethyl phosphoroamide
305. Hexamethylene diamine N N dibutyl
306. Hexane
307. Hexanitrostilbene 2 2 4 4 6 6
308. Hexene
309. Hydrogen selenide
310. Hydrogen sulphide
311. Hydrazipe
312. Hydrazine nitrate
313. Hydrochloric acid (Gas)
314. Hydrogen
315. Hydrogen bromide
316. Hydrogen cyanide
317. Hydrogen fluoride
318. Hydrogen peroxide
319. Hydroquinone
320. Indene
321. Indium powder
322. Indomethacin
323. Iodine
324. Iridium tetrachloride
325. Ironpentacarbonyl
326. Iso benzan
327. Isoamyl alcohol
328. Isobutyl alcohol
329. Isobutyro nitrile
330. Isocyanic acid 3 4-dichlorophenyl ester
331. Isodrin
331. Isofluorophosphate
333. Isophorone diisocyanate
334. Isopropyl alcohol
335. Isopropyl chlorocarbonate
336. Isopropyl formate
337. Isopropyl methyl pyrazolyl dimethyl carbamate
338. Juglone (5-Hydroxy Naphthalene- 1, 4 dione)
339. Ketene
340. Lactonitrile
341. Lead arsenite
342. Lead at high temp (molten)
343. Lead azide
344. Lead styphanat
e 345. Leptophos
346. Lenisite
347. Liquified petroleum gas
348. Lithium hydride
349. N-Dinitrobenzene
350. Magnesium powder or ribbon
351. Malathion
352, Maleic anhydride

353. Malononitrile
354. Manganese Tricarbonyl cyclopentadiene
355. Mechlor ethamine
356. Mephospholan
357. Mercuric chloride
358. Mercuric oxide
359. Mercury acetate
360. Mercury fulminate
361. Mercury methyl chloride
362. Mesitylene
363. Methacrolein diacetate
364. Methacrylic anhydride
365. Methacrylonitrile
366. Methacryloyl oxyethyl isocyanate
367. Methanidophos
368. Methane
369. Methanesulphonyl fluoride
370. Methidathion
371. Methiocarb
372. Methonyl
373. Methoxy ethanol (2-methyl cellosolve)
374. Methoxyethyl mercuric acetate
375. Methyacrylol chloride
376. Methyl 2-chloroacrylate
377. Methyl alcohol
378. Methyl amine
379. Methyl bromide (Bromomethane)
380. Methyl chloride
381. Methyl chloroform
382. Methyl chloroformate
383. Methyl cyclohexene
384. Methyl disulphide
385. Methyl ethyl ketone peroxide (Conc. 60%)
386. Methyl formate
387. Methyl hydrazine
388. Methyl isobutyl ketone
389. Methyl isocyanate
390. Methyl isothiocyanate
391. Methyl mercuric dicyanamide
392. Methyl Mercaptan
393. Methyl Methacrylate
394. Methyl phencapton
395. Methyl phosphonic dichloride
396. Methyl thiocyanate
397. Methyl trichlorosilane
398. Methyl vinyl ketone
399. Methylene bis (2-chloroaniline)
400. Methylene chloride
401. Methylenebis-4, 4(2-chloroaniline)
402. Metolcarb

403. Mevinphos
404. Mezacarbate
405. Mitomycin C
406. Molybdenum powder
407. Monocrotophos
408. Morpholine
409. Muscinol
410. Mustard gas
411. N-Butyl acetate
412. N-Butyl alcohol
413. N-Hexane
414. N-Methyl-N, 2, 4, 6-Tetranitroaniline
415. Naphtha
416. Naphtha solvent
417. Naphthalene
418. Naphthyl amine
419. Nickel carbonyl/nickel tetracarbonyl
420. Nickel powder
421. Nicotine
422. Nicotine sulphate
423. Nitric acid
424. Nitric oxide
425. Nitrobenzene
426. Nitrocellulose (dry)
427. Nitrochlorobenzene
428. Nitrocyclohexane
429. Nitrogen
430. Nitrogen dioxide
431. Nitrogen oxide
432. Nitrogen trifluoride
433. Nitroglycerine
434. Nitropropane-1
435. Nitropropane-2
436. Nitroso dimethyl amine
437. Nonane
438. Norbormide
439. O-Cresol
440. O-Nitro Toluene
441. O-Toluidine
442. O-Xylene
443. O/P Nitroaniline
444. Oleum
445. OO Diethyl s ethyl sulph. methyl ph
446. OO Diethyl s propylthio methyl phosphorothioate
447. OO Diethyl s thioethylsulfonmethylphosphorothioate
448. OO Diethyl s ethylsulphonmethylphosphorothioate
449. OO Diethyl s ethylthiomethylphosphorothioate
450. Organo rhodium complex
451. Orotic acid
452. Osmium tetroxide

453. Oxabain
454. Oxamyl
455. Oxetane, 3, 3,-bis(chloromethyl)
456. Oxidiphenoxarsine
457. Oxy disuffoton
458. Oxygen (liquid)
459 Oxygen difluoride
460. Ozone
461. P-nitrophenol
462. Paraffin
463. Paraoxon (Diethyl 4 Nitrophenyphosphate)
464. Paraquat
465. Paraquat methosulphate
466. Parathion
467. Parathion methyl
468. Paris green
469. Penta borane
470. Penta chloro ethane
471. Penta chlorophenol
472. Pentabromophenol
473. Pentachloro naphthalene
474. Pentadecyl-amine
475. Pentaerythaiotol tetranitrate
476. Pentane
477. Pentanone
478. Perchloric acid
479. Perchloroethylene
480. Peroxyacetic acid
481. Phenol
482. Phenol, 2, 2-thiobis (4, 6-Dichloro)
483. Phenol, 2, 2-thiobis (4 chloro 6 methyl phenol)
484. Phenol, 3-(1-methyl ethyl)-methylcarbamato
485. Phenyl hydrazine hydrochloride
486. Phenyl mercury acetate
487. Phenyl silatrane
488. Phenyl thiourea
489. Phenylene P-diamine
490. Phorate
491. Phosazetin
492. Phosfolan
493. Phosgene
494. Phosmet
495. Phosphamidon
496. Phosphine
497. Phosphoric acid
498. Phosphoric acid dimethyl (4-methl thio) phenyl
499. Phosphorothioic acid dimethyl S(2-Bis) Ester
500. Phosphorothioic acid methyl (ester)
501. Phosphorothioic acid, 00 Dimethyl S-(2-methyl)
502. Phosphorothioic, methyl-ethyl ester

503. Phosphorous
504. Phosphorous oxychloride
505. Phosphorous pentaoxide
506. Phosphorous trichloride
507. Phosphorous penta chloride
508. Phthalic anhydride
509. Phylloquinone
510. Physostigmine
511. Physostigmine salicylate (1:1)
512. Picric acid (2,4,6-trinitrophenol)
513. Picrotoxin
514. Piperdine
515. Piprotal
516. Pirinifos-ethyl
517. Platinous chloride
518. Platitnim tetrachloride
519. Pottasium arserute
520. Potassium chlorate
521. Potassium cyanide
522. Potassium hydroxide
523. Potassium nitride
524. Potassium nitrite
525. Potassium peroxide
526. Potassium silver cyanide
527. Powdered metals and mixtures
528. Promecarb
529. Promurit
530. Propanesultone
531. Propargyl alcohol
532. Propargyl bromide
533. Propen-2-chloro-1,3-diou diacetate
534. Propiolactone bela
535. Propionitrile
536. Propionitrile, 3-chloro
537. Propiophenone, 4-amino
538. Propyl chloroformate
539. Propylene dichloride
540. Propylene gglycol, allylether
541. Propylene imine
542. Propylene oxide
543. Prothoate
544. Pseudosumene
545. Pyrazoxon
546. Pyrene
547. Pyridine
548. Pyridine, 2-methyl-3 -vinyl
549. Pyridine, 4-nitro-I -oxide
550. Pyridine, 4-nitro- I -oxide
551. Pyriminil
552. Quinaliphos

553. Quinone
554. Rhodium trichloride
555. Salcomine
556. Sarin
557. Selenious acid
558. Selenium Hexafluoride
559. Selenium oxychloride
560. Semicarbazide hydrochloride
561. Silane (4-amino butyl) diethoxy-meth
562. Sodium
563. Sodium anthra-quinone-1-sulphonaie
564. Sodium arsenate
565. Sodium arsenite
566. Sodium azide
567, Sodium cacodylate
568. Sodium chlorate
569. Sodium cyanide
570. Sodium fluoro-acetate
571. Sodium hydroxide
572. Sodium pentachloro-phenate
573. Sodium picramate
574. Sodium selenate
575. Sodium selenite
576. Sodium sulphide
577. Sodium tellorite
578. Stannane acetoxy triphenyl
579. Stibine (Antimony hydride)
580. Strychnine
581. Strychnine aulphate
582. Styphinic acid (2.4.6-trinitroresorcinol)
583. Styrene
584. Sulphotec
585. Sulphoxide 3-chloropropyl octyl
586. Sulphur dichloride
587. Sulphur dioxide
588. Sulphur monochloride
589. Sulphur tetrafluoride
590. Sulphur trioxide
591. Sulphuric acid
592. Tellurium (Powder)
593. Tellurium hexafluoride
594, TEPP (Tetraethyl pyrophosphate)
595. Terbufos
596. Tert-Butyl alcohol
597. Tert-Butyl peroxy carbonate
598. Tert-Butyl peroxy isopropyl
599. Tert-Butyl peroxyacetate (Conc \geq 70%)
600. Tert-Butyl peroxyvalate(Conc \geq 77%)
601. Tert-Butyperoxyiso-butyrate
602. Terta hydrofuran

60-3. Tetra methyl lead
604. Tetra nitromethane
605. Tetra-chlorodibenzo-p-dioxin, 1,2,3,7,8,(TCDD)
606. Tetraethyl lead
607. Tetrafluoriethyne
608. Tetramethylene disulphotetramine
609. Thallic oxide
610. Thallium carbonate
611. Thallium sulphate
612. Thallous chloride
613. Thallous malonate
614. Thallous sulphate
615. Thiocarbazide
616. Thiocynarnicacid, 2-(Benzothiazolyethio) methyl
617. Thiofamox
618. Thiometon.
619. Thionazin
620. Thionyl chloride
621. Thioplienol
622. Thiosenlicarbazide
623. Thiourea (2-chloro-phenyl)
624. Thiourea (2-methyl phenyl)
625. Tirpate (2.4-diinetlivi-1,3-di-thiolane)
626. Titanium powder
627. Titanium tetra-chloride
628. Toluene
629, Toluene 2.4-di isocyanate
630. Toluene 2,6-di isocyanate
631. Trans-1,4-di chloro-butene
632. Tri nitro anisole
633. Tri (Cyclohexyl) methylstannyl 1,2,4 triazole
634. Tri (Cyclohexyl) stannyl- I H- 1,2,3-triazole
635. Triaminotrinitrobenzene
636. Triamphos
637. Triazophos
638. Tribromophenol 2,4,6
639. Trichloro naphthalene
640. Trichloro chloromethyl silane
641. Trichloroacetyl chloride
642. Trichlorodichlorophenylsilane
643. Trichloroethyl silane
644. Tricbloroethylene
645. Trichloromethane sulphenyl chloride
646. Trichloronate
647. Trichlorophenol 2, 3, 6
648. Trichlorophenol 2, 4, 5
649. Trichlorophenyl silane
650. Trichlorophon
651. Triethoxy silane
652. Triethylamine

- 653. Triethylene melamine
- 654. Trimethyl chlorosilane
- 655. Trimethyl propane phosphite
- 656. Trimethyl tin chloride
- 657. Trinitro aniline
- 658. Trinitro benzene
- 659. Trinitro benzoic acid
- 660. Trinitro phenetole
- 661. Trinitro-m-cresol
- 662. Trinitrotoluene
- 663. Tri orthocresyl phosphate
- 664. Triphenyl tin chloride
- 665. Tris (2-chloroethyl) amine
- 666. Turpentine
- 667. Uranium and its compounds
- 668. Valinomycin
- 669. Vanadium pentaoxide
- 670. Vinyl acetate monomer
- 671. Vinyl bromide
- 672. Vinyl chloride
- 673. Vinyl cyclohexane dioxide
- 674. Vinyl fluoride
- 675. Vinyl norbornene
- 676. Vinyl toluene
- 677. Vinylidene chloride
- 678. Warfarin
- 679. Warfarin sodium
- 780. Xylene dichloride
- 681. Xylidine
- 682. Zinc dichloropentanitrile
- 683. Zinc phosphate
- 684. Zirconium & compounds

10. In Schedule 2 of the said rules,-

- i. Under the sub-heading " Threshold quantities (tonnes)",-
 - a. for the existing entries, the following shall be substituted, namely:- " For application of rules 4,5,7 to 9 and 13 to 15";
 - b. for existing entries, the following shall be substituted, namely:- "For application of rules 10 to 12";
- (ii). for serial number 7 and the entries relating thereto the following serial number and entries shall be substituted, namely:-

7.	Extremely flammable liquids as defined in Schedule 1, paragraph (b) (ii)	5000	50,000"
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- i. after serial number 27 and the entries relating thereto, the following serial numbers and entries shall be inserted, namely:-

"28	Very Highly flammable liquids as defined in Schedule 1, paragraph (b)(iii)	7,000	7,000
29	Highly Flammable liquids as defined in Schedule 1, paragraph (b)(iv)	10.000	10,000
30	Flammable liquids as defined in Schedule-1, paragraph(b)(v)"	15,000	1,00,000

10. In schedule 3 of the said rules,-

- i. in PART-1, in Group-4 relating to Explosive substances against serial numbers 150,160, 163, 164, and 165, in column 3 , for the existing entries, the figures and letter "100 kg" shall respectively be substituted.
- ii. for Part-II and the entries relating thereto the following shall be substituted, namely:-

" PART -II

Classes of substances as defined in PART-I, Schedule-1 and not specifically named in PART-I of this Schedule.

1	2	3	4
Group 5 - Flammable substances			
1.	Flammable Gases	15T	200T
2.	Extremely flammable liquids	1000T	5000T
3.	Very Highly flammable liquids	1500T	10000T
4.	Highly Flammable liquids which remains liquid under pressure	25T	200T
5.	Highly Flammable liquids	2500T	20000T
6.	Flammable liquids	5000T	50000T"

10. In Schedule 4 of the said rules, in serial number 4 after the words "production, processing" the word "use" shall be inserted.

11. In Schedule 5 of the said rules, -

- i. against serial number 3, in column 2, for the words "State Pollution Control Board" the words "State Pollution Control Board or Committee" shall be substituted;
- ii. against serial number 5 , in column 3, for the words "inside a port", the words "inside a port {covered under the Dock Workers (Safety, Health and Welfare) Act, 1986}" shall be substituted;
- iii. against serial number 6, in column 3, the words "and pipelines including inter-state pipelines" shall be omitted.
- iv. against serial number 7, in column 3, for the existing entries, the following entries shall be substituted, namely:-

"Enforcement of directions and procedures regarding: -

- a. Notification of major accidents as per rule 5(1) and 5(2)

(b) Approval and Notification of Sites as per rule 7;

(c) Safety report and safety audit reports as per rule 10 to12;

- a. acceptance of On-Site Emergency plans as per rule 13;

(e) assisting the District Collector in the preparation of Off-Site emergency plans as per serial number 9 of this Schedule;

- i. against serial number 8, in column 3, after the brackets, letter and words, "(b) The Calcium Carbide Rules, 1987," the following shall be inserted, namely:-

"and in respect of Industrial installation and isolated storages dealing with hazardous chemicals and pipelines including inter-state pipelines regarding:-

- a. Notification of major accidents as per rule 5;
- b. Approval and notification of Sites as per rule 7;
- c. Safety report and safety audit reports as per rules 10 to 12;

(d) acceptance of On-Site Emergency plans as per rule 13;

- a. assisting the District Collector in the preparation of Off-Site emergency plans as per serial number 9 of this Schedule."

(vi)against serial number 10 , in column 2, for the words brackets and letters "Directorate of Explosive Safety (DES)", the words, brackets and letters "Centre for Environment and Explosive Safety (CEES)" shall be substituted.

(Dr. V. Rajagopalan)

Jt. Secretary to the Govt. of India

Note:- The principal rules were published in the Gazette of India vide number S.O. 966(E), dated 27.11.89 and subsequently amended vide:-

- (i) GSR 584 dated 9.6.90 ,
- (ii) S.O. 115(E) dated 5.2.90 and
- (iii) S.O. 2882 dated 3.10.94.