

The Assam Control of Industrial Major Accident Hazards Rules, 1992

ASSAM

India

The Assam Control of Industrial Major Accident Hazards Rules, 1992

Rule

THE-ASSAM-CONTROL-OF-INDUSTRIAL-MAJOR-ACCIDENT-HAZARD of 1992

- Published on 4 September 1995
- Commenced on 4 September 1995
- [This is the version of this document from 4 September 1995.]
- [Note: The original publication document is not available and this content could not be verified.]

The Assam Control of Industrial Major Accident Hazards Rules, 1992Published vide Notification Assam Gazette, Extraordinary, dated 4-9-1995Last Updated 12th February, 2020

1. Short title, extent and commencement.

(1)These rules may be called the Assam Control of Industrial Major Accident Hazards Rules, 1992.(2)They shall extend to the whole of Assam.(3)They shall come into force on the date of their publication in the official Gazette.

2. Definitions.

- In these rules unless the context otherwise requires-(a)"Hazardous chemical" means-(i)any chemical which satisfies any of the criteria laid down in para I of Schedule 1 and is listed in Column 2 of Part II of the said Schedule; or(ii)any chemical listed in Column 2 of Schedule 2; or(iii)any chemical listed in Column 2 of Schedule 3;(b)"Industrial activity" means-(i)an operation or process carried out in an industrial installation referred to in Schedule 4 involving or likely to involve one of hazardous chemicals and includes on site storage or on site transport which is associated with that operation or process, as the case may be; or(ii)isolated storage;(c)"isolated storage" means storage where no other manufacturing process other than pumping or hazardous chemical is carried out and that storage involves at least a quantity of the chemical set out in Schedule 2, but does not include storage associated with an installation specified in Schedule 4 on the same site;(d)"major accident" means an occurrence (including in particular, a major omission of fire or explosion) involving one or

more hazardous chemicals and resulting from uncontrolled development in the course of an industrial activity or owing to natural events, leading to a serious danger to person, whether, immediate or delayed, inside or outside the installation or damage to property or adverse effects on the environment;(e)"pipeline" means a pipe (together with any apparatus and works associated therewith), or system of pipes (together with any apparatus and works associated therewith) for the conveyance of a hazardous chemical, other than a flammable gas as set out in Column 2 of Part II of Schedule 3 at a pressure of less than 8 bars absolute;(f)"Schedule" means Schedule appended to these Rules;(g)"Site" means any location where hazardous chemicals are manufactured or processed, stored, handled, used, disposed of and includes the whole of an area under the control of occupier;(h)Words and expressions not defined in these Rules but defined or used in the Factories Act, 1948 and the Rules made thereunder have the same meaning as assigned therein.

3. Collection, development and dissemination of information.

(1)This rule shall apply to an industrial activity in which a hazardous chemical which satisfies any of the criteria laid down in Part I of Schedule 1 and is listed in Column 2 of Part II of this Schedule is or may be involved.(2)An occupier who has control of an industrial activity in terms of sub-rule (1) of this rule shall arrange to obtain or develop detailed information on hazardous chemicals in the form of a material safety data sheet as indicated in Schedule 5. The information shall be accessible to workers upon request for reference.(3)The occupier while obtaining or developing a material safety data sheet as indicated in Schedule 5 in respect of a hazardous chemical handled by him shall ensure that the information is recorded accurately and reflects the scientific evidence used in making the hazard determination. In case, any significant information regarding hazard of a chemical is available it shall be added to the material safety data sheet as indicated in Schedule 5 as soon as practicable.(4)Every container of a hazardous chemical shall be clearly labelled or marked to identify,-(a)the contents of the container;(b)the name and address of the manufacturer or importer of the hazardous chemical; and(c)the physical, chemical and toxicological data of the hazardous chemical.(5)In terms of sub-rule (4) of this rule where it is impractical to label a chemical in view of the size of the container or the nature of the package, provision should be made for other effective means like tagging or accompanying documents.

4. General responsibility of the occupiers.

(1)This rule shall apply to-(a)an industrial activity, other than isolated storage, in which a hazardous chemical which satisfies any of the criteria laid in Part 1 of Schedule 1 and is listed in Column 2 of Part II of the Schedule therein is or may be involved; and(b)isolated storage in which there is involved a quantity of a hazardous chemical listed in Column 2 of Schedule 2 which is equal to or more than the quantity specified in the Schedule for that chemical in Column 3 thereof.(2)An occupier who has control of an, industrial activity in terms of sub-rule (1) of this rule shall provide evidence to show that he has-(a)identified the major accident hazards; and(b)taken adequate steps to-(i)prevent such major accidents and to limit their consequences to persons and the environment; and(ii)provide the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety.

5. Notification of major accidents.

(1) Where a major accident occurs on a site the occupier shall forthwith notify the Inspector and the Chief Inspector of that accident, and furnish thereafter to the Chief Inspector a report relating to the accident in instalments, if necessary, in Schedule 6. (2) The Chief Inspector shall on receipt of the report in accordance with sub-rule (1) of this rule, shall undertake a full analysis of the major accident and send the requisite information to the Directorate General Factory Advice Service and Labour Institutes (DGFASLI) and the Ministry of Labour through appropriate channel.

6. Industrial activities to which Rules 7 to 15 apply.

(1)(a) Rules 7 to 9 and 13 to 15 shall apply to an industrial activity, other than isolated storage, in which there is involved a quantity of a hazardous chemical listed in Column 2 of Schedule 3 which is equal to or more than the quantity specified in the entry for that chemical in Column 3. (b) Rules 10 to 12 shall apply to an industrial activity, other than isolated storage, in which there is involved a quantity of a hazardous chemical listed in Column 2 of Schedule 3 which is equal to or more than the quantity specified in the entry for that chemical in Column 4. (c) Rules 7 to 9 shall apply to an isolated storage in which there is involved a quantity of a hazardous chemical listed in Column 2 of Schedule 2 which is equal to or more than the quantity specified in the entry of that chemical in Column 3. (d) Rules 10 to 15 shall apply to an isolated storage in which there is involved a quantity of a hazardous chemical listed in Column 2 of Schedule 2 which is equal to or more than the quantity specified in the entry for that chemical in Column 4. (2) For the purposes of Rules 7 to 26- (a) a "new industrial activity" means an industrial activity which- (i) was commenced after the date of coming into operation of these Rules; or (ii) if commences before that date when industrial activity in which there has been since that date a modification which would be likely to have important implications for major accident hazards, and that activity shall be deemed to have been commenced on the date on which the modification was made; and (b) an "existing industrial activity" means an industrial activity which is not a new industrial activity.

7. Notification of industrial activities.

(1) An occupier shall not undertake any industrial activity unless he has submitted a written report to the Chief Inspector containing the particulars specified in Schedule 7 at least 3 months before commencing that activity or before such shorter time as the Chief Inspector may agree and for the purposes of this sub-rule an activity in which subsequently there is or liable to be a quantity given in Column 3 of Schedules 2 and 3 or more of an additional hazardous chemical shall be deemed to be a different activity and shall be notified accordingly. (2) No report under sub-rule (1) of this rule need to be submitted by the occupier, if he submits a report under Rule 10 (1).

8. Updating of the notification under Rule 7.

- Where an activity has been reported in accordance with Rule 7 (1) and the occupier makes a change in it (including an increase or decrease in the maximum quantity of a hazardous chemical to which

this rule applies which is or is liable to be at the site or in the pipeline or the cessation of the activity) which affects the particulars specified in that report or any subsequent report made under this rule, the occupier shall forthwith furnish a further report of the Chief Inspector.

9. Transitional provision.

- Where, -(a) at the date of coming into operation of these Rules, an occupier who is in control of an existing industrial activity which is required to be reported under Rule 7 (1); or (b) within 6 months after that date an occupier commences any such new industrial activity; it shall be a sufficient compliance with that rule if he reports to the Chief Inspector as per the particulars in Schedule 7 within 3 months after the date of coming into operation of these Rules or within such longer time as the Chief Inspector may agree in writing.

10. Safety reports.

(1) Subject to the following sub-rule of this rule, an occupier shall not undertake any industrial activity to which this rule applies, unless Rule he has prepared a safety report on that industrial activity containing the information specified in Schedule 3 and has sent a copy of that report to the Chief Inspector at least 3 months before commencing that activity. (2) In the case of a new industrial activity which an occupier commences, or by virtue of sub-rule (2)(a)(ii) of Rule 6 is deemed to commence, within 6 months after coming into operation of these Rules, it shall be a sufficient compliance with sub-rule (1) of this rule if the occupier sends to the Chief Inspector a copy of the report required in accordance with that sub-rule within 3 months after the date of coming into operation of these Rules. (3) In the case of an existing industrial activity, until five years from the date of coming into operation of these Rules, it shall be a sufficient compliance with sub-rule (1) of this rule if the occupier on or before 3 months from the date of the coming into operation of these rules sends to the Chief Inspector the information specified in Schedule 7 relating to that activity.

11. Updating of reports under Rule 10.

(1) Where an occupier has made a safety report in accordance with sub-rule (1) of Rule 10, he shall not make any modification to the industrial activity to which that safety report relates which could materially affect the particulars in that report unless he has made a further report to take account of those modifications and has sent a copy of that report to the Chief Inspector at least 3 months before making those modifications. (2) Where an occupier has made a report in accordance with Rule 10, sub-rule (1) of this rule and that industrial activity is continuing, the occupier shall, within three years of the date of the last such report, make a further report which shall have regard in particular to new technical knowledge which has affected the particulars in the previous report relating to safety an hazard assessment and shall within one month or in such longer time as the Chief Inspector may agree in writing, send a copy of the report to the Chief Inspector.

12. Requirements for further information.

- Where in accordance with Rule 10(1) an occupier has sent a safety report relating to an industrial activity to the Chief Inspector, the Chief Inspector may, by a notice served on the occupier, require him to provide such additional information as is specified in the notice and the occupier shall send that information to the Chief Inspector within such time as is specified in the notice or within such extended time as the Chief Inspector may subsequently specify.

13. Preparation of on-site emergency plans by the occupiers.

(1)An occupier who has control of an industrial activity to which this rule applies shall prepare in consultation with the Chief Inspector keep up to date and furnish to the Chief Inspector and the Inspector an on-site emergency plan detailing how major accidents will be dealt with on the site on which the industrial activity is carried on and that plan shall include the name of the person who is responsible for safety on the site and the names of those who are authorised to take action in accordance with the plan in case of an emergency.(2)The occupier shall ensure that the emergency plan prepared in accordance with sub-rule (1) of this rule, takes into account any modification made in the industrial activity and that every person on the site who is affected by the plan is informed of its relevant provisions.(3)The occupier shall prepare the emergency plan required under sub-rule (1) of this rule-(a)in the case of a new industrial activity, before that activity is commenced, except that, in the case of a new industrial activity which is commenced or is deemed to have been commenced before a date 3 months after the coming into operation of these rules, by that date; or(b)in the case of an existing industrial activity within 3 months of coming into operation of these Rules.

14. Preparation of off-site emergency plans.

(1)It shall be the duty of the District Collector or the District Emergency Authority designated by the State Government in whose areas there is a site on which an occupier carries on a n industrial activity to which this rule applies to prepare and keep up-to-date an adequate off-site emergency plan detailing how emergencies relating to a possible major accident on that site will be dealt with and in preparing that plan the Authority shall consult the occupier, the Chief Inspector and such other persons as appear to the Authority to be appropriate.(2)The occupier shall provide the District Collector or the District Emergency Authority with such information relating to the industrial activity under his control as may be necessary to enable the District Collector or the District Emergency Authority to prepare an off-site emergency plan under sub-rule (1) of this rule including the nature, extent and likely effects of off-site of possible major accident as well as any additional information as the District Collector or the District Emergency Authority may require in this regard.(3)The District Collector or the District Emergency Authority shall provide the occupier with information from the off-site emergency plan which relates to his duties under Rule 13 of sub-rule (2) of this rule.(4)The District Collector or the District Emergency Authority shall prepare its emergency plan for any industrial activity required under sub-rule (1) of this rule.(a)in the case of a new industrial activity, before that activity is commenced;(b)in the case of an existing industrial activity, within 6 months of his being notified by the occupier of the industrial activity.

15. Information to be given to persons liable to be affected by a major accident.

(1)The occupier shall take appropriate steps to inform persons outside the site who are likely to be in an area which might be affected by a major accident at any site on which an industrial activity under this control to which this rule applies is carried on either directly or through the District Emergency Authority about-(a)the nature of the major accident hazard; and(b)the safety measures and the correct behaviour which should be adopted in the event of a major accident.(2)The occupier shall take the steps required under sub-rule (1) of this rule to inform persons about an industrial activity, before that activity is commenced except that, in the case of an existing industrial activity in which case the occupier shall comply with the requirements of sub-rule (1) of this rule within 3 months of coming into operation of these Rules.

16. Disclosure of information notified under these Rules.

- Where for the purpose of evaluating information notified under Rule 5 or Rules 7 to 15, the Inspector or the Chief Inspector or the District Emergency Authority discloses that information to some other person, that other person shall not use that information for any purpose except a purpose of the Inspector or the Chief Inspector or the District Emergency Authority disclosing it, as the case may be, and before disclosing that information the Inspector or the Chief Inspector or the District Emergency Authority, as the case may be, shall inform that other person of his obligation under this rule.

17. Improvement notice.

(1)If an Inspector is of the opinion that an occupier-(a)is contravening one or more of these Rules, or(b)has contravened one or more of these Rules in circumstances that make it likely that the contravention will continue or be repeated;he may serve on him a notice (in this rule referred to as "an improvement notice") stating that he is of that opinion, specifying the rule or rules as to which he is of that opinion, giving particulars of the reasons why he is of that opinion and requiring that occupier to remedy the contravention or, as the case may be, the matters occasioning it within such period as may be specified in the notice.(2)A notice served under sub-rule (1) of this rule may (but need not) include directions as to the matters to be taken by the occupier to remedy any contravention or matter to which the notice relates.

18. Power of the State Government to modify the Schedules.

- The State Government may, at any time by notification in the official Gazette, make suitable changes in the Schedules.

Schedule 1

[See Rules 2(a)(i), 3(1), 4(1)(a) and 4(2)(1)] Indicative Criteria and List of Chemicals

Part I

Indicative Criteria(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.

Sl. No.	Degree of Toxicity	LD 50 absorbed orally in rate mg./kg. body weight	LD 50 by continues absorption in rate or rabbitsmg./Kg. body weight	LC 50 absorbed by inhalation (4 hours) in ratesmg./litre
1.	Extremely toxic	< = 50	< = 200	0.1-0.5
2.	Highly toxic	51-500	201-2090	0.5-2.0

(b) Highly Flammable Chemicals : (i) Flammable gases : Chemicals which in the gaseous state at normal pressure and mixed with air become flammable and the boiling point of which at normal pressure is 20 degrees C or below; (ii) Highly flammable liquids : Chemicals which have a flash point lower than 23 degrees C and the boiling point of which at normal pressure is above 20 degrees C; (iii) Flammable liquids : Chemicals which have a flash point lower than 65 degrees C and which remain liquid under pressure, where particular processing conditions, such as high pressure and high temperature may create major accident hazards. (c) Explosives : Chemicals which may explode under the effect of flames, heat or photo chemical condition, or which are more sensitive to shocks or friction than dinitrobenzene.

Part II

List of Hazardous Chemicals

Sl.No. Name of the Chemical

(1) (2)

1. Acetone
2. Acetone Cyanohydrine
3. Acetyl Chloride
4. Acetylene (Ethyne)
5. Acrolein (2-Propenal)
6. Acrylonitrile
7. Aldicarb
8. Aldrine

9. Alkyl Phthalate
10. Allyl Alcohol
11. Allylamine
12. Alpha Naphthyl Thiourea (Antu)
13. 4-Aminodiphenyl
14. 2-Aminophenol
15. Amiton
16. Ammonia
17. Ammonium Nitrate
18. Ammonium Nitrate in fertilizers
19. Ammonium Sulfamate
20. Anabasine
21. Aniline
22. P-Anisidine
23. Antimony & Compounds
24. Antimony Hydride (Stibine)
25. Arsenic Hydride (Arsine)
26. Arsenic Pentoxide, Arsenic (V) Acids & Salts
27. Arsenic Trioxide, Arsenious (III) Acids & Salts
28. Asbestos
29. Azinphos-Ethyl
30. Azinphos-Methyl
31. Barium Azide
32. Benzene
33. Benzidine
34. Benzidine Salts
35. Benzoquinone
36. Benzoyl Chloride
37. Benzoyl Peroxide
38. Benzyl Chloride
39. Benzyl Cyanide
40. Beryllium (Powders, Compounds)
41. Biphenyl
42. Bis (2-Chloromethyl) Ketone
43. Bis (2, 4, 6-Trinitrophenyl) Amine
44. Bis (2-Chloroethyl) Sulphide
45. Bis (Chloromethyl) Ether

46. 2, 2-Bis (tert-Butylperoxy) Butane
47. 1, 1-Bis (tert-Butylperoxy) Cyclohexane
48. Bis-1, 2 (Tribromophenoxy)-Ethane
49. Bisphenol
50. Boron & Compounds
51. Bromine
52. Bromine Pentafluoride
53. Bromoform
54. 1,3-Butadiene
55. Butane
56. N-Butanethiol
57. 2-Butanone
58. Butoxy Ethanol
59. Butyl Glycidal Ether
60. tert-Butyl Peroxyacetate
61. tert-Butyl Peroxyisobutyrate
62. tert-Butyl Peroxyisopropyl Carbonate
63. tert-Butyl Peroxymaleate
64. tert-Butyl Peroxypivalate
65. Butyl Vinyl Ether
66. Butylamine
67. C9-Aromatic Hydrocarbon Froction
68. Cadmium & Compounds
69. Cadmium Oxide (Fumes)
70. Calcium Cyanide
71. Cap tan
72. Captofol
73. Carbaryl(Sevin)
74. Cabofuran
75. Carbon Disulphide
76. Carbon Monoxide
77. Carbon Tetrachloride
78. Carbophenothion
79. Cellulose Nitrate
80. Chlorates (use in explosives)
81. Chlordane
82. Chlorfenvinphos

83. Chlorinated Benzenes
84. Chlorine
85. Chlorine Dioxide
86. Chlorine Oxide
87. Chlorine Trifluoride
88. Chlormequate Chloride
89. Chloroacetal Chloride
90. Chloroacetaldehyde
91. 2-Chloroaniline
92. 4-Chloroaniline
93. Chlorobenzene
94. Chorodiphenyl
95. Chloroepoxypropane
96. Chloroethanol
97. Chloroethyl Chloroformate
98. Chlorofluorocarbons
99. Chloroform
100. 4-(Chloroformyl), Morpholine
101. Chloromethane
102. Chloromethyl Ether
103. Chloronitrobenzene
104. Chloroprene
105. Chlorosulphonic Acid
106. Chlorotrini trobenzene
107. Chloroxuron
108. Chromium & Compounds
109. Cobolt & Compounds
110. Copper & Compounds
111. Coumafuryl
112. Coumaphos
113. Coumatetralyl
114. Cresols
115. Crimidine
116. Cumene
117. Cyanophos
118. Cyanothoate
119. Cyanuric Fluoride

120. Cyclohexane
121. Cyclohexanol
122. Cyclohexanone
123. Cyclohexamide
124. Cyclopentadiene
125. Cyclopentane
126. Cyclotetramethylenetetranitramine
127. Cyclotrimethylenetrinitramine
128. DDT
129. Decabromodiphenyl Oxide
130. Demeton
131. DI-Isobutyryl Peroxide
132. DI-n-Propyl Peroxydicarbonate
133. DI-sec-Butyl Peroxydicarbonate
134. Dialifos
135. Diazodini trophenol
136. Diazomethane
137. Dibenzyl Peroxydicarbonate
138. Dichloroacetylene
139. o-Dichlorobenzene
140. p-Dichlorobenzene
141. Dichloroethane
142. Dichloroethyl Ether
143. 2, 4-Dichlorophenol
144. 2, 6-Dichlorophenol
145. 3, 4-Dichlorophenoxy Acetic Acid (2, 4-D)
146. 1, 2-Dichloropropane
147. 3, 5-Dichlorosalicylic Acid
148. Dichlorovos (DDVP)
149. Dicrotophos
150. Dieldrin
151. Diepoxybutane
152. Diethyl Peroxydicarbonate
153. Diethylene Glycol Dinitrate
154. Diethylene Triamine
155. Diethyleneglycol Butyl Ether/Diethyleneglycol Butyl Acetate
156. Diethylenetriamine (Deta)

157. Diglycidyl Ether
158. 2, 2-Dihydroperoxypropane
159. Diisobutyryl Peroxide
160. Dimefox
161. Dimethoate
162. Dimethyl Phosphoramidocyandic Acid
163. Dimethyl Phthalate
164. Dimethylcarbomoyl Chloride
165. Dimethylnitrosamine
166. Dinitrophenol Salts
167. Dinitrotoluene
168. Dinitro-o-Cresol
169. Dioxane
170. Dioxathion
171. Dioxolane
172. Diphacinone
173. Diphosphoramidate Octamethyl
174. Dipropylene Glycolmethylether
175. Disulfoton
176. Endosulfan
177. Endrin
178. Epichlorohydrine
179. Epn
180. 1, 2-Epoxypropane
181. Ethion
182. Ethyl Carbamate
183. Ethyl Ether
184. 2-Ethyl Hexanol
185. Ethyl Mercaptan
186. Ethyl Methacrylate
187. Ethyl Nitrate
188. Ethylamine
189. Ethylene
190. Ethylene Chlorohydrine
191. Ethylene Diamine
192. Ethylene Dibromide
193. Ethylene Dichloride

194. Ethylene Glycol Dinitrate
195. Ethylene Oxide
196. Ethylene Imine
197. Ethylthiocyanate
198. Fensulphothion
199. Fluenetil
200. 4-Fluoro, 2-Hydroxybutyric Acid & Salts, Esters, Amides
201. Fluoroacetic Acid & Salts, Esters, Amides
202. 4-Fluorobutyric Acid & Salts, Esters, Amides
203. 4-Fluorochrotonic Acid & Salts, Esters, Amides
204. Formaldehyde
205. Glyconitrile (Hydroxyacetonitrile)
206. 1 -Guanyl-4-Nitrosaminoguanyl-1-Tetrazene
207. Heptachlor
208. Hexachloro Cyclopentadiene
209. Hexachlorocyclohexane
210. Hexachlorocyclomethane
211. 1, 2, 3, 7, 8, 9-Hexachlorodibenzo-p-Dioxine
212. Hexafluoropropene
213. Hexamethylphosphoramide
214. 3,3,6,6,9,9-Hexamethyl-1,2,4,5,-Tetroxacyclononane
215. Hexamethylenediamine
216. Hexane
217. 2,2',4,4',6,6'-Flexanitrostilbene
218. Hexavalent Chromium
219. Hydrazine
220. Hydrazine Nitrate
221. Hydrochloric Acid
222. Hydrogen
223. Hydrogen Bromide (Hydrobromic Acid)
224. Hydrogen Chloride (Liquefied Gas)
225. Hydrogen Cyanide
226. Hydrogen Fluoride
227. Hydrogen Selenide
228. Hydrogen Sulphide
229. Hydroquinone
230. Iodine

231. Isobenzan
232. Isodrin
233. Isophorone Diisocyanate
234. Isopropyl Ether
235. Juglone (5-Hydroxynaphthalene-1,4-Dione)
236. Lead (inorganic fumes & dusts)
237. Lead 2,4,6-Trinitroresorcinoxide (Lead Styphnate)
238. Lead Azide
239. Letophos
240. Lindane
241. Liquefied Petroleum Gas (LPG)
242. Maleic Anhydride
243. Manganese & Compounds
244. Mercapto Benzothiazole
245. Mercury Alkyl
246. Mercury Fulminate
247. Mercury Methyl
248. Methacrylic Anhydride
249. Methacrylonitrile
250. Methacryloyl Chloride
251. Methamidophos
252. Methanesulphonyl Fluoride
253. Methanethiol
254. Methoxy Ethanol (2-Methyl Cellosolve)
255. Methoxyethylmercuric Acetate
256. Methyl Acrylate
257. Methyl Alcohol
258. Methyl Amylketone
259. Methyl Bromide (Bromomethane)
260. Methyl Chloride
261. Methyl Chloroform
262. Methyl Cyclohexene
263. Methyl Ethyl Ketone Peroxide
264. Methyl Hydrazine
265. Methyl Isobutyl Ketone Peroxide
266. Methyl Isobutyl Ketone Peroxide
267. Methyl Isocyanate

268. Methyl Isothiocyanate
269. Methyl Mercaptan
270. Methyl Methacrylate
271. Methyl Parathion
272. Methyl Phosphonic Dichloride
273. N-Methyl, 2,4,6-Tetranitroaniline
274. Methylene Chloride
275. 4/4-Methylenebis (2-Chloroaniline)
276. Methyltrichlorosilane
277. Mevinphos
278. Molybdenum & Compounds
279. N-Methyl-N,2,4,6-N-Tetranitroaniline
280. Naphtha (Coal Tar)
281. 2-Naphthylamine
282. Nickel & Compounds
283. Nickel Tetracarbonyl
284. O-Nitroaniline
285. P-Nitroaniline
286. Nitrobenzene
287. P-Nitrochlorobenzene
288. Nitrocyclohexane
289. Nitroethane
290. Nitrogen Dioxide
291. Nitrogen Oxides
292. Nitrogen Trifluoride
293. Nitroglycerine
294. P-Nitrophenol
295. 1-Nitropropane
296. 2-Nitropropane
297. Nitrosodimethylamine
298. Nitrotolune
299. Octabromophenyl Oxide
300. Oleum
301. Oleylamine
302. OO-Diethyl S-Ethylsulphinylmethyl Phosphorothioate
303. OO-Diethyl S-Ethylsulphonylmethyl Phosphorothioate
304. OO-Diethyl S-Ethylthiomethyl Phosphorothioate

305. OO-Diethyl S-Isopropyl thiomethyl Phosphorodithioate
306. OO-Diethyl S-Propylthiomethyl Phosphorodithioate
307. Oxyamyl
308. Oxydisulfoton
309. Oxygen (Liquid)
310. Oxygen Difluoride
311. Ozone
312. Paraoxon (Diethyl 4-Nitrophenyl Phosphate)
313. Paraquat
314. Parathion
315. Parathion Methyl
316. Paris Green (Bis Aceto Hexametaarsenitoteracopper)
317. Pentaborane
318. Pentabromodiphenyl Oxide
319. Pentabromophenol
320. Pentachloro Naphthalene
321. Pen tachloroethane
322. Pentachlorophenol
323. Pentaerythritol Tetranitrate
324. Pentane
325. Peracetic Acid
326. Perchloroethylene
327. Perchloromethyl Mercaptan
328. 2-Pentanone, 4-Methyl
329. Phenol
330. Phenyl Glycidial Ether
331. Phenylene P-Diamine
332. Phenylmercury Acetate
333. Phorate
334. Phosacetim
335. Phosalane
336. Phosfolan
337. Phosgene (Carbonyl Chloride)
338. Phosmet
339. Phosphamidon
340. Phosphine (Hydrogen Phoshii E)
341. Phosphoric Acid and Esters

342. Phosphoric Acid Bromoethyl Bromo (2, 2-Dimethyl-propyl)Bromoethyl Ester
343. Phosphoric Acid Bromoethyl Bromo (2, 2-Dimethyl-propyl)Chloroethyl Ester
344. Phosphoric Acid, Chloroethyl Bromo (2, 2-Dimethoxyl-propyl)Chloi Oethyl Ester
345. Phosphorus & Compounds
346. Phostalan
347. Picric Acid (2, 4, 6-Trinitrophenol)
348. Polybrominated Biphenyls
349. Potassium Arsenite
350. Potassium Chlorate
351. Promurit (1-(3,4-Dichlorophenyl)-2-Triazene Thiocarboxamide)
352. 1,3-Propanesultone
353. 1-Propen,-2-Chloro-1,3-Diol-Diacetate
354. Propylene Dichloride
355. Propylene Oxide
356. Propyleneimine
357. Pyrazoxon
358. Selenium Hexafluoride
359. Semicarbazide Hydrochloride
360. Sodium Arsenite
361. Sodium Azide
362. Sodium Chbrate
363. Sodium Cyanide
364. Sodium Picramate
365. Sodium Selenite
366. Styrene, 1,1,2,2-Tetrachloroethane
367. Sulfotep
368. Sulphur Dichloride
369. Sulphur Dioxide
370. Sulphur Trioxide
371. Sulphuric Acid
372. Sulphoxide, 3-Chloropropyloctyl
373. Tellurium
374. Tellurium Hexafluoride
375. Tepp
376. Terbufos
377. alpha-Terabromobisphenol
378. 2 2 5 6-Tetrachloro-2, 5-Cyclohexadiene-y, 4-Dione

379. 2 3 7 8-Tetrachlorodibenzo-li-Dioxin (TCDD)
380. Tetraethyl Lead
381. Tetrafluoroethane
382. Tetramethylenedisulphotetramine
383. Tetranitromethane
384. Tetranitromethane
385. Thallium & Compounds
386. Thionazin
387. Thionyl Chloride
388. Tirpate
389. Toluene
390. Toluene-2-4-Diisocyanate
391. o-Toluidine
392. Toluene 2,6-Diisocyanate
393. T rans-1,4 Chlorobutene
394. 1-Tri.(Cyclohexyl) Stannyl-1H-1,2,4-Triazole
395. 1 3 5-Triamino-2,4,6-Trinitrobenzene
396. 2 4 6-Tribromophenol
397. Trichloro Acetyl Chloride
398. Trichloro Ethane
399. Trichloro Naphthalene
400. Trichlorochloromethylsilane
401. Trichlorodichlorophenylsilane
402. 1, 1,1-Trichloroethane
403. Trichloroethyllane
404. Trichloroethylene
405. Trichloromethanesulphenyl Chloride
406. 2,2,6-Trichlorophenol
407. 2,4,5-Trichlorophenol
408. Triethylamine
409. Triethylenemelamine
410. Trimethyl Chlorosilane
411. Trimethylolpropane Phosphite
412. Trinitroaniline
413. 2,4,6-T rinitroanisole
414. Trinitrobenzene
415. Trinitrobenzoic Acid

416. Trinitrocresol
417. 2,4,6-Trinitrophenetole
418. 2,4,6-Trinitroresorcinol (Styphnic Acid)
419. Trinitrotoluene
420. Triophthocresyl Phosphate
421. Triphenyltin Chloride
422. Turpentine
423. Uranium & Compounds
424. Vanadium & Compounds
425. Vinyl Chloride
426. Vinyl Fluoride
427. Vinyl Toluene
428. Warfarin
429. Xylene
430. Xylidine
431. Zinc & Compounds
432. Zirconium & Compounds

Schedule 2

[See Rules 2(a)(ii), 4(1)(b), 4(2)(1) and 6(1)(c) and (d)] Isolated storage of Installation other than those covered by Schedule 4(a) The quantities is out below relate to each installation or group of installations belonging to the occupier where the distance between installations is not sufficient to avoid in foreseeable circumstances any aggravation of major accident hazards. These quantities apply in any case to each of the installations belonging to the same occupier where the distance between the installations is less than 500 metres. (b) For the purpose of determining the quantity of a hazardous chemical at an isolated storage account shall also be taken of any hazardous chemical which is—(i) in that part of any pipeline under the control of the occupier having control of the site, which is within 500 metres of that site and connected to it; (ii) at any other site under the control of the occupier any part of the boundary of which is 500 metres of the said site; and (iii) in any vehicle, vessel, aircraft or hovercraft under the control of the same occupier which is used for storage purpose, either at the site or within 500 metres of it; but no account shall be taken of any hazardous chemical which is in a vehicle, vessel, aircraft or hovercraft for transporting it.

Sl. No.	Chemical or groups of chemicals	Quantity (tonnes)	
For application of Rules 4, 5 and 7 to 9	For application of Rules 10 to 15		
(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)
1.	Acrylonitrile	350	5000
2.	Ammonia	60	600

3.	Ammonium nitrate (a)	350*	2500*
4.	Ammonium nitrate fertilizers (b)	1250	10000
5.	Chloride	10	25
6.	Flammable gases as defined in Schedule 1, paragraph (b) (i)	50	300
7.	Highly flammable liquid as defined in Schedule 1, paragraph(b) (ii)	10000	100000
8.	Liquid Oxygen	200	2000
9.	Sodium Chlorate	25	250
10.	Sulphur dioxide	20	500
11.	Sulphur trioxide	15	100

* Where this chemical is in a state which gives it properties capable of creating a major accident hazard. Foot Notes : (a) This applies to ammonium nitrate and mixtures of ammonium nitrate where the nitrogen content derived from the ammonium nitrate is greater than 2 per cent by weight and to aqueous solutions of ammonium nitrate where the concentration of ammonium nitrate is greater than 90 per cent by weight. (b) This applies to straight ammonium nitrate fertilisers and to compound fertilisers where the nitrogen content derived from the ammonium nitrate is greater than 28 per cent by weight (a compound fertiliser contains ammonium nitrate together with phosphate and/or potash).

Schedule 3

[See Rules 2(a)(iii), 5 and 6(1)(a) and (b)] List of hazardous chemicals for application of Rules 5 and 7 to 15(a) The quantities set out below relate to each installation or group of installations belonging to the same occupier where the distance between the installations is not sufficient to avoid in foreseeable circumstances, any aggravation of major accident hazards. These quantities apply in any case to each group of installations belonging to the same occupier where the distance between the installations is less than 500 metres. (b) For the purpose of determining the quantity of hazardous chemical in an industrial installation, account shall also be taken of any hazardous chemical which is—(i) in that part of any pipeline under the control of the occupier having control of the site, which is within 500 metres of that site and connected to it; (ii) at any other site under the control of the same occupier any part of the boundary of which is within 500 metres of the said site; and (iii) in any vehicle, vessel, aircraft or hovercraft under the control of the same occupier which is used for storage purpose either at the site or within 500 metres of it.

Part I

Named Chemicals

Sl. No.	Chemicals	Quantity	CAS No.
For application of		For application of Rules 10 to 12	

Rules 5, 7 to 9
and 13 to 15

(1)	(2)	(3)	(4)	(5)
	Group 1-Toxic Chemicals :			
1.	Aldicarb	100 Kg	.....	116-06-3
2.	4-Aminodiphenyl	1 Kg	.....	92-67-1
3.	Amiton	1 Kg	.....	78-53-5
4.	Anabasine	100 Kg	.....	494-52-0
5.	Arsenic pentoxide, Arsenic (v) Acid & Salts	500 Kg	.....
6.	Asenic Trioxide, Arsenious (III) acid & Salts	100 Kg	.....
7.	Arrsne :(Arsenic hydride)	10 Kg	.....	7784-42-1
8.	Aziniphos-ethyl	100 Kg	.....	2642-71-9
9.	Aziniphos-methyl	100 Kg	.....	86-50-0
10.	Benzidine	1 Kg	.....	92-87-5
11.	Benzidine salts	1 Kg	.....
12.	Becoryllium (powders, compounds)	10 Kg	.....
13.	Bis (2 chloroethyl) sulphide	1 Kg	.....	505-60-2
14.	Bis (chloromethyl) ether	1 Kg	.....	542-88-1
15.	Carboturan	100 Kg	.....	1563-66-2
16.	Carbophenothion	100 Kg	.....	786-19-6
17.	Chlorfenvinphos	100 Kg	.....	470-90-6
18.	4-(Chloroformyl) morpholine	1 Kg	.....	15159-40-7
19.	Chloromethyl methyl ether	1 Kg	.....	107-30-2
20.	Cobalt metal, Oxides, Carbonates, Sulphides, as powders	1 kg	.....
21.	Crimidine	100 Kg	.....	535-89-7
22.	Cyanthoate	100 Kg	.....	3734-95-0
23.	Cycloheximide	100 Kg	.....	66-81-9
24.	Demeton	100 Kg	.....	8065-48-3
25.	Dralifos	100 Kg	.....	10311-84-9
26.	oo-Diethyl, S-ethylsulphinyl methyl phosphorthioate	100 Kg	.....	2588-05-8
27.	oo-Diethyl S-ethylsulphonyl methyl phosphorthioate	100 Kg	.....	2588-06-9
28.	oo-Diethyl S-ethylthiomethyl phosphordithioates	100 Kg	.....	2600-69-3
29.	oo-Diethyl S-isoprophlthymethyl phosphorodithioate	100 Kg	.....	78-52-4
30.	oo-Diethyl S-propylthiomethyl phosphorothioate	100 Kg	.....	3309-68-0

31.	Dimefox	100 Kg	.....	115-26-4
32.	Dimethylcarbamoyl chloride	1 Kg	.....	79-44-7
33.	Dimethylnitrosamine 1 K, 62-75-9		.....
34.	Dimethyl phosphoramidocyanidic acid	1 t	.....	63917-41-9
35.	Diphacinone	100 Kg	.....	82-66-6
36.	Disulfoton	100 Kg	.....	298-04-4
37.	EPN	100 Kg	.....	2104-64-5
38.	Ethion	100 Kg	.....	563-12-2
39.	Fensulfothion	100 Kg	.....	115-90-2
40.	Fluometil	100 Kg	.....	4301-50-2
41.	Fluoroacetic acid	1 Kg	.....	144-49-0
42.	Fluoroacetic acid, salts	1 Kg	.....
43.	Fluoroacetic acid, esters	1 Kg	.....
44.	Fluoroacetic acid, amides	1 Kg	.....
45.	4-Fluorobutyric acid	1 Kg	.....	462-23-7
46.	4-Fluorobutyric, acid, salts	1 Kg	.....
47.	4-Fluorobutyric, esters	1 Kg	.....
48.	4-Fluorobutyric acid, amides	1 Kg	.....
49.	4-Fluorocronotic acid	1 Kg	.....	37759-72-1
50.	4-Fluorocronotic acid, salts	1 Kg	.....
51.	4-Fluorocronotic acid, esters	1 Kg	.....
52.	4-Fluorocronotic acid amides	1 Kg	.....
53.	4-Fluoro-2-hydroxybutyric acid	1 Kg	.....
54.	4-Fluoro-hydroxybutyric acid, salts	1 Kg	.....
55.	4-Fluoro-2-hydroxybutyric acid esters	1 Kg	.....
56.	4-Fluoro-2-hydroxybutyric acid, amides	1 Kg	.....
57.	Glycolonitrite (hydroxyacetonitrite)	100 Kg	.....	107-16-1
58.	1, 2, 3, 7, 8, 9 Hexachlorodibenzo-p-dioxin	100 Kg	.....	19408-74-3
59.	Hexamethylphosphoramide	1 Kg	.....	680-31-9
60.	Hydrogen selenide	10 Kg	.....	7783-07-5
61.	Isobenzan	100 Kg	.....	297-78-9
62.	Isodrin	100 Kg	.....	465-73-6
63.	Jugione (5-Hydroxynaphthalene-1, -dione	100 Kg	.....	481-39-0
64.	4,4'-Methylenebi (2-chloroanniline)	10 Kg	.....	101-14-4
65.	Methyl isocyanate	150 Kg	150 Kg	624-83-9
66.	Mevinphos	100 Kg	.....	7786-34-7

67.	2-Napathylamine	1 Kg	.....	91-59-8
68.	Nickel metal, oxides, carbonates sulphide, as powders	1 t	.....
69.	Nickel tetracarbonyl	10 Kg	.....	13463-39-3
70.	Oxydisulfoton	100 Kg	.....	24970-7-6
71.	Oxygen difluoride	10 Kg	.....	7783-41-7
72.	Paraoxon (diethyl 4-nitrophenyl phosphate	100 Kg	.....	311-45-5
73.	Parathion	100 Kg	.....	56-38-2
74.	Parathion-methyl	10 Kg	.....	98-00-0
75.	Pentaborane	100 Kg	.....	19624-22-7
76.	Phorate	100 Kg	.....	298-02-2
77.	Phasacetim	100 Kg	.....	4104-14-7
78.	Phosgene (carbonyl chloride)	750 Kg	750 Kg	75-44-5
79.	Phosphamidon	100 Kg	.....	13171-21-6
80.	Phospaine (Hydrogen Phosphide)	100 Kg	.....	7803-51-2
81.	Promurit (1-(3,4-Dichlorophenyl) 1-3-triazene-thio carboxamide	100 Kg	.....	5836-73-7
82.	1,3-Propanesultone	1 Kg	.....	1120-71-4
83.	1-Prope-2-chloro-1,3-diol diacetate	10 Kg	.....	0118-72-6
84.	Pyrazoxon	100 Kg	.....	108-34-9
85.	Selenium hexafluoride	100 Kg	.....	7783-79-1
86.	Sodium selenite	100 Kg	.....	10102-18-8
87.	Stibine (Antimony hydride)	100 Kg	.....	7803-52-3
88.	Sulfotop	100 Kg	.....	3689-24-5
89.	Sulphur dichloride	1 t	.....	10545-99-0
90.	Tellurium hexafluoride	100 Kg	.....	7783-80-4
91.	TEPP	100 Kg	.....	107-49-3
92.	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1 Kg	.....	1746-01-6
93.	Tetramethylenedisulphotetramine	1 Kg	.....	0-12-6
94.	Thionazin	100 Kg	.....	297-97-2
95.	Tirpate (2,4-Dimethyl-1,3-dithiolane 2-carboxaldehyde o-methyl-carbomoyloxime)	100 Kg	.....	26419-73-8
96.	Trichloromethane sulphenyl chloride	100 Kg	.....	594-42-3
97.	1-Tri (cyclohexyl) stannane 1,1,1,2,4-triazole	10 Kg	.....	41083-11-8
98.	Triethylenemelamine	13 Kg	.....	51-18-3
99.	Warfarin	100 Kg	.....	81-81-2
	Group 2- Toxic Chemicals:(Quantity VI tonne)			

100.	Acetone cyanohydrin (2-Cyariopropan 2-ol)	200 Kg	.....	75-86-5
101.	Acrolein (2-Propenal)	20 t	.....	107-02-8
102.	Acrylonitrile	20 t	200 t	107-18-1
103.	Allyl alcohol (2-Propen 1 -ol)	200 t	.....	107-18-6
104.	Allylamine	200 t	.....	107-11-9
105.	Ammonia	50 t	50 t	7666-41-7
106.	Bromine	40 t	.....	7726-95-0
107.	Carbon disulphide	20 t	200 t	75-15-9
108.	Chlorine	10 t	25 t	778-50-5
109.	Diphenyl Methane diisocyanate (MDI)	20 t	.....	101-68-8
110.	Ethylene dibromide 1,2-Dibromomethane)	5 t	.....	106-93-4
111.	Ethyleneimine	50 t	.....	151-56-4
112.	Formaldehyde (concentration=90%)	5 t	.....	50-00-0
113.	Hydrogen chloride (liquefied gas)	25 t	250 t	7647-01-0
114.	Hydrogen cyanide	5 t	20 t	74-90-8
115.	Hydrogen fluoride	5 t	50 t	7664-39-3
116.	Hydrogen Sulphide	5 t	50 t	7783-06-4
117.	Methyl bromide (Bromomethane)	20 t	.....	74-83-9
118.	Nitrogen oxides	50 t	.....	11104-93-1
119.	Propyleneimine	50 t	.....	75-55-8
120.	Sulphur dioxide	10 t	250 t	7446-09-5
121.	Sulphur trioxide	15 t	75 t	7446-11-9
122.	Tetraethyl lead	5 t	.....	78-00-2
123.	Tetramethyl lead	5 t	.....	75-74-1
124.	Toluene diisocyanate (TDI)	10 t	.....	584-84-9
Group 3-Highly Reactive Chemicals:				
125.	Acetylene (ethyne)	5 t	.....	74-86-2
126.	(a) Ammonium nitrate (1)	350 t	25.00 t	6484-52-2
	(b) Ammonium nitrate in the form of fertiliser (2)	1,250 t	.....
127.	2,2-Bis (tert-butyl-peroxy) butane (concentration >=70%)	5 t	.....	2167-23-9
128.	1 -1 -Bis (tert-butyl)-peroxy) cyclohexane (concentration>=80%)	5 t	.....	3006-86-8
129.	Tert-Butyl peroxyacetate (concentration >= 70%)	5 t	.....	107-71-1
130.	Tert-Butyl Peroxyisobutyrate (concentration >= 80%)	5 t	.....	109-13-7
131.		5 t	.....	2372-21-6

	Tert-Butyl Peroxyisopropyl carbonate (concentration $\geq 80\%$)			
132.	Tert-Butyl peroxy maleate (concentration $\geq 80\%$)	5 t	.....	1931-62-0
133.	Tert-Butyl Peroxy pivalate (concentration $\geq 77\%$)	50 t	.....	927-07-1
134.	Dibenzyl peroxydicarbonate (concentration $\geq 90\%$)	5 t	.....	2144-45-8
135.	Di-sec-butyl peroxydicarbonate (concentration $\geq 80\%$)	5 t	.....	19910-5-7
136.	Diethyl peroxydicarbonate (concentration ≥ 30 per cent)	50 t	.....	14666-78-5
137.	2,2-Dihydroperoxypropane (concentration ≥ 30 per cent)	5 t	.....	2614-76-8
138.	Di-isobutryl peroxide (concentration ≥ 50 per cent)	50 t	.....	3437-84-1
139.	Di-n-propyl peroxydicarbonate (concentration $\geq 80\%$)	5 t	.....	16066-38-9
140.	Ethylene oxide	5 t	50 t	75-21-8
141.	Ethyl nitrate	50 t		625-58-1
142.	3, 3, 6, 6, 9, 9-Hexamethyl-1, 2, 4, 5-tetroxacyclonane (concentration ≥ 75 per cent)	50 t	.....	22397-33-7
143.	Hydrogen	2 t	50 t	1333-74-0
144.	Liquid oxygen	200 t	.....	7782-44-7
145.	Methyl ethyl Ketone peroxide (concentration \geq 0%)	5 t	.....	133-23-4
146.	Methyl isobutyl ketone peroxide (concentration $\geq 60\%$)	50 t	.....	37206-20-51
147.	Peracetic acid (concentration $\geq 60\%$)	50 t	.....	79-21-0
148.	Propylene oxide	5 t	.....	75-56-9
149.	Sodium chlorate	25 t	.....	7775-09-9
	Group 4-Explosive Chemicals :			
150.	Barium azide	50 t	.....	18810-58-7
151.	Bis (2,4,6-trinitro phenyl) amine	50 t	.....	131-73-7
152.	Chlorotrinitrobenzene	50 t	.....	28260-61-9
153.	Cellulose nitrate (containing $\geq 12.6\%$ nitrogen)	50 t	.....	9004-70-0
154.	Cyclotetramethylene tetranitramine	50 t	.....	2891-41-0
155.	Cyclotrimethylenetrinitroamine	50 t	.....	121-82-4
156.	Diazodinitrophenol	10 t	.....	7008-81-3
157.	Diethylene glycol dinitrate	10 t	.....	693-21-0
158.	Dinitrophenol salt 50 t		.....

159.	Ethylene glycol dinitrate	10 t	.....	628-96-6
160.	1-Guanyl-4-nitroamineoguanyl-1-tetrazene	10 t	.....	109-27-3
161.	2,2',4,4',6,6';Hexanitrostibene	50 t	.....	20062-22-0
162.	Hydrazine nitrate	50 t	.....	13464-97-6
163.	Lead azide	50 t	.....	13424-46-9
164.	Lead styphnate (lead 2,4,6-trinitroresorcinol)	50 t	.....	15245-44-0
165.	Mercury fulminate	10 t	.....	628-86-4
166.	N-Methyl-N 2,4,6-tetranitroaniline	50 t	.....	479-45-8
167.	Nitroglycerine	10 t	10 t	55-63-0
168.	Pentaerythritol tetranitrate	50 t	.....	78-11-5
169.	Picric acid (2,4,6-Trinitrophenol)	50 t	.....	88-89-1
170.	Sodium picramate	50 t	.....	831-52-7
171.	Styphnic acid (2,4,6-Trinitroresorcinol)	50 t	.....	82-7-13
172.	1,3,5-Triamino-2,4,6-Trinitrobenzene	50 t	.....	3058-38-6
173.	Trinitroaniline	50 t	.....	26952-42-1
174.	2, 4, 6-Trinitroanisole	50 t	.....	606-35-9
175.	Trinitrobenzene	50 t	.....	25377-31-6
176.	Trinitrobenzoic acid	50 t	.....	35860-50-5
177.	Trinitrocresol	50 t	.....	28905-71-7
178.	2,4,6-Trinitrophenetole	50 t	.....	4732-14-3
179.	2,4,6-Trinitrotoluene	50 t	50 t	188-96-7

Part II

Classes of Chemicals not specifically named in Part I

Sl. No.	Classes of Chemicals	Quantity	CAS No.
For application of Rules 5, 7 to 9 and 13 to 15	For application of Rules 10 to 12		
(1)	(2)	(3)	(4)
	Group 5-Flammable Chemicals :		
1.	Flammable gases:-Chemicals which in gaseous state at normal pressure and mixed with air become flammable and the boiling point of which at normal pressure is 20 degree C or below	15 t	200 t
2.	Highly flammable liquids:-Chemicals which have a flash point lower than 23 degree C and the boiling point of which at normal pressure is above 20 degree C	1000 t	50,000 t

3. Flammable liquids:-Chemicals which have a flashpoint lower than 65 degree C and which remain liquid underpressure, where particular processing conditions, such as highpressure and high temperature, may create major accident hazards

Footnotes. - (1) This applies to ammonium nitrate and mixtures of ammonium nitrate where the nitrogen content derived from the ammonium nitrate is greater than 28 per cent by weight and aqueous solutions of ammonium nitrate where the concentration of ammonium nitrate is greater than 90 per cent by weight.(2)This applies to straight ammonium fertilisers and to compound fertilisers where the nitrogen content derived from the ammonium nitrate is greater than 28 per cent by weight (a compound fertiliser contains ammonium nitrate together with phosphate and/or potash). *CAS Number (Chemical Abstracts Service Number means the number assigned to the Chemical assigned to the Chemical by the Chemical Abstract Service.

Schedule 4

[See Rule 2(b)(i)]Industrial installation within the meaning of Rule 2(b)(i)

1. Installations for the production, processing or treatment of organic or inorganic chemical using for this purpose, among others :

(a)alkylation.(b)animation by amonolysis.(c)carbonylation.(d)condensation.(e)dehydrogenation.(f)estefication.(g)halogenation & manufacture of halogens.(h)hydrogenation.(i)hydrolysis.(j)oxidation.(k)polymerisation.(l)sulphonation.(m)desulphurization and manufacture and transformation of sulphur containing compounds.(n)nitration and manufacture of nitrogen-containing compounds.(o)manufacture of phosphorous-containing compounds.(p)formulation of pesticides and of pharmaceutical products.(q)distillation.(r)extraction.(s)salvation.(t)mixing.

2. Installations for distillation, refining or other processing of petroleum or petroleum products.

3. Installations for the total or particle disposal of solid or liquid chemicals by incineration or chemical decomposition.

4. Installations for the production, processing or treatment of energy gases, for example, LPG, LNG, SNG.

5. Installations for the dry distillation of coal or lignite.

6. Installations for the production of metals or non-metals by a wet process or by means of electrical energy.

Schedule 5

[See Rule 3 (2) and (3)]Safety Data Sheet

1.Chemical Identity:

Chemical Name

Synonyms

Formula

Regulated Identification-

Hazardous Ingredient

1.

2.

2.Physical and Chemical Data:

Boiling Ranga/Point °C

Melting/Freezing Point °C

Vapour Density (Air=1)

Specific Gravity

3.Fire and Explosion Hazard Data:

Flammability Yes/No.

TDG Flammability

Explosion Sensitivity to Impact

Combustible Liquid

Flammable Material

Pyrepheric Material

4.Reactivity Data:

Chemical Stability

Incompatibility with other Material

Reactivity

Hazardous Reaction Products

5.Health Hazard Data :

Routes of Entry

Effects of Exposure/Symptoms

Emergency Treatment

TLV (ACGIII) Permissible

Exposure Limit LD 50

NRPA

6.Preventive Measures:

Personnel Protective Equipment Handling and Storage Precautions

7.Emergency and First Aid Measure:

Fire

Fire

Exposure

Spills

8.Additional information/References:

.....

9.Manufacturer/Suppliers Data:

Contact Person in Emergency

Name of Firm.....

Mailing Address :Telephone/Telex Nos. TelegraphicAddress.....

Local Bodiesinvolved.....

Standard Packing.....

Tremear Details/Ref.....

Other.....

10.Disclaimer :

Information contained in this material datasheet is believed to be reliable but no representation guaranteed application or results to be obtained from them. It is up to the manufacturer/seller to ensure that the information

manufactured/handled or sold by him, as the case may be. The Government makes no warranties expressed or implied.

Schedule 6

[See Rule 5 (1)] Information to be furnished regarding notification of a major accident Report No. of the particular accident.....

1. General data :

(a) Name of the site..... (b) Name and address of the occupier..... (Also state the telephone/telex No.) (c) (i) Registration No. (ii) Licence No. (as may have been allotted under any statute applicable to the site e.g. the Factories Act) (d) (i) Nature of industrial activity (mention what is actually manufactured, stored, etc.) (ii) National Industrial Classification 1987 at the four digits level

2. Type of major accident:

Explosion Fire Emission of hazards

3. Description of the major accident.

(a) Date, shift and hours of the accident. (b) Department/Section and exact place where the accident took place. (c) The process/operation undertaken in the Department/Section where the accident took place. (Attach a flow chart, if necessary). (d) The circumstances of the accident and the hazardous chemical involved.

4. Emergency measures taken and measures envisaged to be taken to alleviate short-term effects due to the accident.

5. Causes of the major accident:

Known (to be specified)..... Not known Information will be supplied as soon as possible.....

6. Nature and extent of damage-

(a) within the establishment casualties
:..... Killed..... Injured..... Poisoned Persons exposed to the major accident..... Material damage..... Damages still present..... Danger no longer exists..... (b) Outside the establishment casualties :..... Killed..... Injured..... Poisoned Persons exposed to the major accident..... Material damage..... Damage to environment..... Damages still present..... Danger no longer exists.....

7. Data available for assessing the effects of the accident on persons and environment.

Steps already taken or envisaged-(a)to alleviate medium or long term effects of the accident,(b)to prevent recurrence of similar major accident,(c)any other relevant information.

Schedule 7

[See Rule 7 (i)]Information to be furnished for the Notification of Activities SitesParticulars to be included in a notification of site:

- 1. The name and address of the occupier making the notification.**
- 2. The full postal address of the site where the notifiable industrial activity will be carried on.**
- 3. The area of the site covered by the notification and of any adjacent site which is required to be taken into account by virtue of Schedule 2 (b) and Schedule 3 (b).**
- 4. The date on which it is anticipated that the notifiable industrial activity will commence or if it has already commenced a statement to that effect.**
- 5. The name and maximum quantity liable to be on the site of each hazardous chemical for which notification is being made.**
- 6. Organisation structure, namely, organisation diagram for the proposed industrial activity and set up for ensuring safety and health.**
- 7. Information relating to the potential for major accidents, namely:-**

(a)identification of major accident hazards;(b)the condition of events which could be significant in bringing one about;(c)a brief description of the measures taken.

8. Information relating to the site namely :

(a)a map of the site and its surrounding area to a scale large enough to show any features that may be significant in the assessment of the hazard or risk associated with the site :(i)area likely to be affected by the major accident;(ii)population distribution in the vicinity;(b)a scale plan of the site showing the location and quantity of all significant inventories of the hazardous chemical;(c)a description of the processes or storage involving the hazardous chemicals, the maximum amount of such a hazardous chemical in the given process or storage and an indication of the conditions under

which it is normally held;(d)the maximum number of persons likely to be present on site.

9. The arrangement for training of workers and equipment necessary to ensure safety of such workers.

Schedule 8

[See Rule 10 (1)]Information to be furnished in a safety report

1. The name and address of the person furnishing the information.

2. Description of the industrial activity, namely:-

(a)site.(b)construction design.(c)protection zones (explosion protection, separation distances).(d)accessibility of plant.(e)maximum number of persons working on the site and particularly of those persons exposed to the hazard.

3. Description of the process, namely:-

(a)technical purpose of the industrial activity.(b)basic principles of the technological process,(c)process and safety related data for the individual process stages.(d)process description.(e)safety-related types of utilities.

4. Description of the hazardous chemical, namely:-

(a)chemicals (quantities, substance, data on physical and chemical properties, safety-related data on explosive limits, flash-point, thermal stability, toxicological data and threshold limit values, lethal concentrations).(b)the form in which the chemicals may occur or into which they may be transformed in the event of abnormal conditions.(c)the degree of purity of the hazardous chemical.

5. Information on the preliminary hazard analysis, namely:-

(a)type of accident,(b)system elements or foreseen events that can lead to a major accident,(c)hazards,(d)safety-relevant components.

6. Description of safety-relevant units, among others :

(a)special design criteria.(b)controls and alarms.(c)pressure relief systems.(d)quick acting valves.(e)collecting tanks/dump tanks.(f)sprinkler systems.(g)fire protection.

7. Information on the hazard assessment, namely:-

(a)identification of hazards.(b)the causes of major accidents.(c)assessment of hazards according to their occurrence frequency.(d)assessment of accident consequences.(e)safety systems.(f)Known accident history.

8. Description of information on organisational systems used to carry on industrial activity safety, namely:-

(a)maintenance and inspection schedules.(b)guidelines for the training of personnel.(c)allocation and delegation of responsibility for plant safety.(d)implementation of safety procedures.

9. Information on assessment of the consequences of major accidents, namely:-

(a)assessment of the possible release of hazardous chemicals or of energy.(b)possible dispersion of released chemicals.(c)assessment of the effects of the releases (size of the affected area, health effects, property damage).

10. Information on the mitigation of major accidents, namely:-

(a)fire brigade.(b)alarm systems.(c)emergency plan containing system of organisation used to fight the emergency, the alarm and the communication routes, guidelines for fighting the emergency, examples for possible accident sequences.(d)co-ordination with the District Collector or the District Emergency Authority and its off-site emergency plan.(e)notification of the nature and scope of the hazard in the event of an accident.(f)antidotes in the event of a release of a hazardous chemical.