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PART-I -- Orders and Notifications by the Government of Tripura.
The High Court, Government Treasury etc.

GOVERNMENT OF TRIPURA
DEPARTMENT OF LABOUR
(Factories & Boilers Organisation)

→ No. F. 7(70)-FB/CIMAH/92/2646

Dated, Agartala, the 2nd January, 2004.

NOTIFICATION

In exercise of the powers conferred by Section 112 read with Section 41B of the Factories Act, 1948 (63 of 1948) the Government of Tripura, having received no objection or suggestion in respect of the draft Rules - "Tripura Major Accident Hazard Control Rules, 2001" published in the extraordinary issue of Tripura Gazette dated 15th September, 2003 under Notification No. F. 7 (70)-FB/CIMAH/92/68-69, dated 8th February, 2003 in the Department of Labour (Factories & Boilers Organisation) as required by Section 115 of the said Act, makes the following Rules.

RULES

Rule 1. Short Title and Commencement--

- (1) These Rules may be called the Tripura Major Accident Hazard Control Rules, 2001.
- (2) They shall come into force on the date of their publication in the Official Gazette as per procedure laid down under the Factories Act, 1948.

Rule 2. Definitions.

In these Rules, unless the context otherwise requires,

- (1) "hazardous chemical" mean--

- i) any chemical which satisfies any of the criteria laid down in Part 1 of Schedule 1 or listed in column 2 of part II of the Schedule ; or
- ii) any chemical listed in column 2 of Schedule 2 ; or
- iii) any chemical listed in column 2 of Schedule 3 ;

(2) "Industrial activity" means, an operation or process carried out in a factory referred to in Schedule 4 involving or likely to involve one or more hazardous chemicals and includes on-site storage or on-site transport which is associated with that operation or process as the case may be ;

(3) "isolated storage" means storage where no other manufacturing process other than pumping of hazardous chemical is carried out and that storage involves at least a quantity of that chemical set out in Schedule 2, but does not include storage associated with a factory specified in Schedule 4 on the same site ;



(4) "Major accident" means an incident involving loss of life inside or outside the site or 10 or more injuries inside and/or one or more injuries outside or release of toxic chemical or explosion or fire or spillage of hazardous chemicals resulting in on-site or 'off-site' emergencies or damage to equipments leading to stoppage of process or adverse effects to the environment.

(5) "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 ;

(6) "Schedule" means Schedule appended to these Rules ;

(7) 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.

Rule 3. Collection, Development and Dissemination of Information.

(1) This rule shall apply to an industrial activity or isolated storage in which a hazardous chemical which satisfies any of the criterion laid down in Part I of Schedule 1 or is listed in Column 2 of Part II of this Schedule is or may be involved.

(2) An occupier of an industrial activity or isolated storage in terms of sub-rule (1) of this Rule, shall arrange to obtain or develop information in the form of Safety Data sheet as specified in Schedule 5. The information shall be made accessible to workers upon request for reference.

(3) The occupier while obtaining or developing Safety Data Sheet as specified in Schedule 5 in respect of the 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 Safety Data Sheet as specified in Schedule 5 as soon as practicable.

(4) 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 of accompanying documents.

Rule 4. Duties of Inspector

The inspector shall--

(1) inspect the industrial activity or isolated storage at least once in a calendar year ;

(2) send annually status report on the compliance of the Rules by occupiers to the Ministry of Environment & Forest through the Directorate General Factory Advice Service and Labour Institutes and Ministry of Labour, Government of India ; and

(3) enforce directions and procedures in respect of industrial activities or isolated storage covered under the Factories Act, 1948 and in respect of pipelines upto a distance of 500 metre from the outside of the perimeter of the factory, regarding--

(i) Notification of the major accidents as per Rules 3(1) & 6(2).



- (ii) Notification of sites as per Rules 8 and 9.
- (iii) Safety Reports and Safety Audits as per Rules 10-12.
- (iv) Preparation of on-site emergency plans as per Rule- 13 and involvement in the preparation of off-site emergency plans in consultation with District Collector or District Emergency Authority.

Rule 5. General Responsibility of the Occupier.

- (1) This Rule shall apply to --
 - (a) an industrial activity in which a hazardous chemical, which satisfies any of the criteria laid down in Part I of Schedule 1 or is listed in Column 2 of Part II of this Schedule is or may be involved ; and
 - (b) isolated storage in which there is involved a quantity of a hazardous chemical listed in Column 2 which is equal to or more than the threshold quantity specified in this Schedule for that chemical in Column 3 thereof.
- (2) An occupier in terms of sub-rule (1) shall provide information on demand 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 and health.

Rule 6. Notification of Major Accidents.

- (1) Where a major accident occurs on a site or in a pipeline, the occupier shall, within 48 hours notify the Inspector and the Chief Inspector of that accident, and furnish thereafter to the Inspector and Chief Inspector a report relating to the accident in instalments, if necessary, in Schedule 6.
- (2) The Inspector and Chief Inspector shall, on receipt of the report in accordance with sub-rule (1) of this Rule, undertake a full analysis of the major accident and send the requisite information to the Ministry of Environment and Forests through the Directorate General Factory Advice Service and Labour Institutes (DGFASLI) and Ministry of Labour, Government of India.
- (3) An occupier shall notify to the Inspector and Chief Inspector steps taken to avoid any repetition of such occurrence on a site.
- (4) The Inspector and Chief Inspector shall compile information regarding major accidents and make available a copy of the same to the Ministry of Environment and Forests through Directorate General Factory Advice Service and Labour Institutes and Ministry of Labour, Government of India.

- (5) The Inspector and Chief Inspector shall inform the occupier in writing of any lacunae which in their opinion needs to be rectified to avoid major accident.

Rule 7. Industrial Activity or Isolated Storage to which Rules 8 to 14 apply.

(1) Rules 8, 9, 13 & 14 shall apply, to an industrial activity, other than isolated storage, in which there is chemical listed in Column 2 of Schedule 3 which is equal to or more than the threshold quantity specified in the entry for that chemical in Column 3.

(2) 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, Schedule- 3 which is equal to or more than the threshold quantity specified in the entry for that chemical in Column 4.

(3) Rules 8 and 9 shall apply to an isolated storage in which there is involved a quantity of hazardous chemical listed in Column 2 of Schedule 2 which is equal to or more than the threshold quantity specified in the entry for that chemical in Column 3.

(4) Rules 10 to 14 shall apply to an isolated storage in which there is involved a quantity of hazardous chemical listed in Column 2 of Schedule 2 which is equal to or more than the threshold quantity specified in the entry for that chemical in Column 4.

Rule 8. Notification of Site.

(1) An occupier shall not undertake any industrial activity or isolated storage unless he has submitted a written report to the Chief Inspector containing the particulars specified in Schedule 7 at least 90 days before commencing that activity or before such shorter time as the Chief Inspector may agree for the purposes of this sub-rule, and activity in which subsequently there is or is liable to be a threshold quantity given in Column 3 of Schedule 2 & 3 or more of an additional hazardous chemical shall be deemed to be a different activity and shall be notified accordingly.

(2) The Chief Inspector within 60 days from the date of receipt of the report in accordance with sub-rule (1) of this Rule shall examine and on examination of the report if he is of the opinion that contravention of the provisions of the Act or the rules made thereunder has taken place, he may issue notice for obtaining compliance.

Rule 9. Updating of the Site Notification under Rule 8.

Where an activity has been reported in accordance with Rule 8(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 Rules applies which is or is liable to be at the site or in the pipeline or at 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 to the Inspector and the Chief Inspector.

Rule 10. Safety Reports and Safety Audit Reports.

(1) Subject to the following sub-rule of this Rule, an occupier shall not undertake any industrial activity or isolated storage to which this Rule applies, unless he has prepared a Safety Report on that industrial activity containing the information specified in Schedule 8 and has sent a copy of that report to the Chief Inspector at least 90 days before commencing that activity.

→ (2) After the commencement of these Rules, the occupiers of both the new and the existing industrial activities or isolated storage shall arrange to carry out Safety Audit by a competent agency to be accredited by an accreditation Board to be constituted by the Ministry of Labour, Government of India in this behalf.

Further, such auditing shall be carried out as under :--

- (i) Internally once in a year by a team of suitable plant personnel.
- (ii) Externally once in two years by a competent agency accredited in this behalf.
- (iii) In the year when an external audit is carried out, internal audit need not be carried out.

(3) The occupier within 30 days of the completion of the audit, shall send a report to the Inspector and Chief Inspector with respect to the implementation of the audit recommendation.

Rule 11. Updating of Safety 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 or isolated storage 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 Inspector and Chief Inspector at least 90 days before making those modifications.

(2) Where an occupier has made a report in accordance with Rule 10 and sub-rule (1) of this Rule and that industrial activity or isolated storage 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 and hazard assessment, and shall within 30 days or in such longer time as the Chief Inspector may agree in writing, send a copy of the report to the Inspector and the Chief Inspector.

Rule 12 Requirement for further information to be sent to the Inspector and Chief Inspector.

Where in accordance with Rule 10 and 11 an Occupier has sent Safety Report and Safety Audit Report relating to an industrial activity or isolated storage to the Inspector and Chief Inspector, the Inspector and Chief Inspector may by a notice served on the occupier, require him to provide such additional information as may be specified in the notice and the occupier shall send that information to the Inspector and Chief Inspector within 90 days.

Rule 13 Preparation of On-Site Emergency Plan by the Occupier.

(1) The Occupier shall prepare, keep up-to-date and furnish to the Inspector and Chief Inspector an On-Site Emergency Plan for obtaining approval of Chief Inspector. The Plan shall contain details specified in Schedule 9 and detailing how major accidents will be dealt with on the site on which the industrial activity or isolated storage 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 or isolated storage and that every person on the site who is concerned with the plan is informed of its relevant provisions.



- (3) The occupier shall prepare the Emergency Plan required under sub-rule (1) of this Rule--
 - (i) Before the commencement of the industrial activity or isolated storage.
 - (ii) Within 90 days of coming into operation of this Rules in case of an existing industrial activity or isolated storage.
- (4) The Occupier shall ensure that a mock drill of the on-site emergency is conducted at least once in every six months.
- (5) A detailed report of the mock drill conducted under sub-rule (4) shall be made immediately available to the Inspector and Chief Inspector.

Rule 14 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 may be affected by a major accident about.
 - (i) the nature of the major accident hazard ; and
 - (ii) the safety measures and the 'Do's and 'Don'ts 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 or isolated storage before that activity is commenced, except that in respect of an existing industrial activity or isolated storage, the occupier shall comply with the requirements of sub-rule (1) of this Rule within 90 days of coming into operation of these Rules.

Rule 15 Disclosure of Information.

Where for the purpose of evaluating information notified under Rule 6 or Rules 8 to 14, the Inspector or the Chief Inspector 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 disclosing it, as the case may be, shall inform that other person of his obligations under this Rule.

Rule 16 Power of the State Government to Modify the Schedule.

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

Schedule 1
See Rules 2 (1)(i)
Indicative Criteria and List of Chemicals
Part i Indicative Criteria
(a) Toxic Chemicals

Chemicals having 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 rats Mg/Kg Body Weight;	LD 50 by Cutaneous absorption in rats rabbits Mg/Kg body Weight	LC 50 absorbed by inhalation (4 Hours) in rats Mg/Litre.
1.	Extremely Toxic	1-50	1-200	0.1-0.5
2.	Highly Toxic	51-500	201-2000	0.5-2.0



b) **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 degree C or below.
- (ii) *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 ;
- (iii) *Flammable liquids* : Chemicals which have a flash point lower than 65 degree 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 flame, heat or photochemical condition, or which are more sensitive to shocks or friction than dinitrobenzene.

Part II List of Hazardous and toxic Chemicals

<i>Sl. No. (Col. 1.)</i>	<i>Name of Chemicals (Col. 2.)</i>
1.	Acetone
2.	Acetone Cyanohydrine
3.	Acetylene Chloride
4.	Acetylene (Ethyne)
5.	Acrolein (2-Propenal)
6.	Acrylonitrile
7.	Aldicarb
8.	Aldrine
9.	Alkyl Phthalate
10.	Alkyl Alcohol
11.	Allylamine
12.	Alpha Naphthyl Thiourea (ANTU)
13.	Aminodiphenyl -4
14.	Aminophenol-2
15.	Amiton
16.	Ammonia
17.	Ammonium Nitrate
18.	Ammonium Nitrate in fertilisers
19.	Ammonium Sulfamate
20.	Anabasine
21.	Aniline
22.	Anisidine-P
23.	Antimony & Compounds
24.	Antimony Hydride (Stibine)
25.	Arsenic Hydride (Arsine)
26.	Arsenic pentoxide, Arsenic Arsenic (V) Acid & salts



<i>Sl. No. (Col. 1.)</i>	<i>Name of Chemicals (Col. 2.)</i>
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 Sulfide
45.	BIS(Chloromethyl) Ketone
46.	BIS (tert-Butylperoxy) Butane-2,2
47.	BIS (tert-Butylperoxy) Cyclohexane-1,1
48.	BIS-1,2 (Tribromophenoxy) Ethane
49.	BIS Phenol
50.	Boron and Compounds
51.	Bromine
52.	Bromine Pentafluoride
53.	Bromoform
54.	Butadine-1,3
55.	Butane
56.	N-Butanethiol
57.	Butanone-2
58.	Butoxy Ethanol
59.	Butyl Glycidal Ether
60.	Butyl Peroxyacetate-Tert
61.	Butyl Peroxyisobutyrate-Tert
62.	Butyl Peroxyisopropyl Carbonate-Tert
63.	Butyl Peroxymaleate-Tert
64.	Butyl Peroxypivalate-Tert
65.	Butyl Vinyl Ether
66.	Butyl n-Mercaptan
67.	Butylamine
68.	C 9-Aromatic Hydrocarbon Fraction
69.	Cadmium & Compounds
70.	Cadmium Oxide (fume)
71.	Calcium Cyanide
72.	Captan
73.	Captofol
74.	Carbaryl (Sevin)
75.	Carbofuran
76.	Carbon Disulfide
77.	Carbon Monoxide



<i>Sl. No. (Col. 1.)</i>	<i>Name of Chemicals (Col. 2.)</i>
78.	Carbon Tetrachloride
79.	Carbophenothion
80.	Cellulose Nitrate
81.	Chlorates (used in explosives)
82.	Chlordane
83.	Chlorfenvinphos
84.	Chlorinated Benzenes
85.	Chlorine
86.	Chlorine-Di-Oxide
87.	Chlorine Oxide
88.	Chlorine Tri-Fluoride
89.	Chlormequet Chloride
90.	Chloroacetal Chloride
91.	Chloroacetaldehyde
92.	Chloroaniline,-2
93.	Chloroaniline,-4
94.	Chlorobenzene
95.	Chlorodiphenyl
96.	Chloroepoxypropane
97.	Chloroethanol
98.	Chloroethyl Chloroformate
99.	Chlorofluorocarbons
100.	Chloroform
101.	Chloroformile-4, Morpholine
102.	Chloromethane
103.	Chloromethyl Ether
104.	Chloromethyl Methyl Ether
105.	Chloronitrobenzene
106.	Chloroprene
107.	Chlorosulfonic acid
108.	Chlorotrinitrobenzene
109.	Chloroxuron
110.	Chromium and Compounds
111.	Cobalt and Compounds
112.	Copper and Compounds
113.	Coumafuryl
114.	Chomaphon
115.	Coumatetralyl
116.	Crenoin
117.	Crimidine
118.	Cumene
119.	Cyanophos
120.	Cyanothoate
121.	Cynuric Fluoride
122.	Cyclohexane
123.	Cyclohexanol
124.	Cyclohexanone
125.	Cycloheximide
126.	Cyclopentadiene
127.	Cyclopentane
128.	Cyclotetramethyle ntetranitramine



<i>Sl. No. (Col. 1.)</i>	<i>Name of Chemicals (Col. 2.)</i>
129.	Cyclotrimethylene Trinitrimine
130.	DDT
131.	Decarbomodiphenyl Oxide
132.	Demeton
133.	Di-Isobutyl Peroxide
134.	Di-n-Propyl Peroxidicarbonate
135.	Di-Sec-Butyl Peroxidicarbonate
136.	Dialifon
137.	Diazodinitrophenol
138.	Diazomethane
139.	Dibenzyl Peroxidicarbonate
140.	Dichloroacetylene-o
141.	Dichlorobezene-o
142.	Dichlorobenzene-p
143.	Dichloroethane
144.	Dichloroethyl Ether
145.	Dichlorophenol,-2,4
146.	Dichlorophenol,-2,6
147.	Dichlorophenoxy Acetic Acid,-2,4 (2,4-D)
148.	Dichloropropane,-1,2
149.	Dichlorosalicylic Acid,-3,5
150.	Dichlorvos (DDVP)
151.	Dicrotophos
152.	Dieldrin
153.	Diepoxybutane
154.	Diethyl Peroxidicarbonate
155.	Diethylene Glycol Dinitrate
156.	Diethylene Triamine
157.	Diethylene glycol Butyl Ether/Diethyleneglycol Butyl Acetate
158.	Diethylenetriamino (DETA)
159.	Diglycidyl Ether
160.	Dihydroperoxypropane,-2,2
161.	Di-Isobutyryl Peroxide
162.	Dimefox
163.	Dimethoate
164.	Dimethyl Phosphoramidocyanidic Acid
165.	Dimethyl phthalate
166.	Dimethylcarbonyl
167.	Dimethylnitrosamine
168.	Dinitrophenol, Salts
169.	Dinitrotoluene
170.	Dinitro-o-Cresol
171.	Dioxane
172.	Dioxathion
173.	Dioxolane
174.	Diphacinone
175.	Diphosphoramidate Octemethyl
176.	Dipropylene Glycolmethylether
177.	Dinulfoton
178.	Endosulfan
179.	Endrin
180.	Epichlorohydrino



<i>Sl. No. (Col. 1.)</i>	<i>Name of Chemicals (Col. 2.)</i>
181.	EPN
182.	Epoxypropane, 1,2
183.	Ethion
184.	Ethyl Carbamate
185.	Ethyl Ether
186.	Ethyl Hexanol-2,1
187.	Ethyl Mercaptan
188.	Ethyl Methacrylate
189.	Ethyl Nitrate
190.	Ethylamine
191.	Ethylene
192.	Ethylene Chlorohydrine
193.	Ethylene Diamine
194.	Ethylene Dibromide
195.	Ethylene Dichloride
196.	Ethylene Glycol Dinitrate
197.	Ethylene Oxide
198.	Ethylene Imine
199.	Ethylthiocyanate
200.	Fensulphothion
201.	Flunexil
202.	Fluro, -4, 2-Hydroxybutyric Acid and Salts Esters and Amides
203.	Fluroacetic Acid and Salts, Esters and Amides
204.	Flurobutyric Acid, -4 and Salts, Esters and Amides
205.	Flurocortonic Acid, -4 and Salts, Ester and Amides
206.	Formaldehyde
207.	Glyconitrile (Hydroxyacetoneitrile)
208.	Guanyl, -1, -4-Nitrosaminoguanyl- I-Tetrazene
209.	Heptachlor
210.	Hexachloro Cyclopentadine
211.	Hexachlorocyclohexane
212.	Hexachlorocyclomethane
213.	Hexachlorodibenzo-p-Dioxin, 1,2,3,7,8,9,
214.	Hexafluoropropane
215.	Hexamethylphosphoramide
216.	Hexamethyl, -3,3,6,9,9-1,2,4,5,-Tetraoxacyclononane
217.	Hexamethyldiamine
218.	Hexane
219.	Hexanitrostibene, -2,2,4,4,6,6,
220.	Hexavalent Chromium
221.	Hydrazine
222.	Hydrazine Nitrate
223.	Hydrochloric Acid
224.	Hydrogen
225.	Hydrogen Bromide (Hydrobromic Acid)
226.	Hydrogen Chloride (liquified gas)
227.	Hydrogen Cyanide
228.	Hydrogen Fluoride
229.	Hydrogen Solonide
230.	Hydrogen Sulfide



<i>Sl. No. (Col. 1.)</i>	<i>Name of Chemicals (Col. 2.)</i>
231.	Hydroquinone
232.	Iodine
233.	Isobenzan
234.	Isodrin
235.	isophorone Dissocyanate
236.	isopropil Ether
237.	Juglon (5-Hydroxynaphthalene-1,4 Dione)
238.	Lead(inorganic fumes and dusts)
239.	Lead 2,4,6-Trinitoresorcinoxide (Lead Styphnate)
240.	Lead Azide
241.	Leptophos
242.	Lindane
243.	LPG(Liquified Petroleum Gas).
244.	Maleic Anhydride
245.	Manganese and Compounds
246.	Mercapto Benzothiazole
247.	Mercury Alkyl
248.	Mercury Fulminate
249.	Mercury Methyl
250.	Methacrylic Anhydride
251.	Methacrylonitrile
252.	Methacryloyl Chloride
253.	Methamidophos
254.	Methanesulphonyl Fluoride
255.	Methanethiol
256.	Methoxy Ethanol (2-Methyl Cellosolve)
257.	Methoxyethylmercuric Acetate
258.	Methyl Acrylate
259.	Methyl Alcohol
260.	Methyl Amylketone
261.	Methyl Bromide (Bromomethane)
262.	Methyl Chloride
263.	Methyl Chloroform
264.	Methyl Cyclohexene
265.	Methyl Ethyl Ketone Peroxide
266.	Methyl Hydrazine
267.	Methyl Isobutyl Ketone
268.	Methyl Isobutyl Ketone Peroxide
269.	Methyl Isocyanate
270.	Methyl Isothiocyanate
271.	Methyl Mercaptan
272.	Methyl Methacrylate
273.	Methyl Parathion
274.	Methyl Phosphonic Dichloride
275.	Methyl-n, 2,4,6-Tetranitroaniline
276.	Methylene chloride
277.	Methylenebis-4,4 (2-Chloroaniline)
278.	Methyltrichlorosilane
279.	Mevinphos
280.	Molybdenum & Compounds



<i>Sl. No. (Col. 1.)</i>	<i>Name of Chemicals (Col. 2.)</i>
281.	N-Methyl-N-2,4,6-Tetranitroaniline
282.	Naphtha (Coal Tar)
283.	Naphthylamine, 2
284.	Nickel & Compounds
285.	Nickel Tetracarbonyl
286.	Nitroaniline-o
287.	Nitroaniline-p
288.	Nitrobenzene
289.	Nitrochlorobenzene-p
290.	Nitrocyclohexane
291.	Nitroethane
292.	Nitrogen Dioxide
293.	Nitrogen Oxides
294.	Nitrogen Trifluoride
295.	Nitroglycerine
296.	Nitrophenol-p
297.	Nitropropane-1
298.	Nitropropane-2
299.	Nitrosodimethylamine
300.	Nitrotoluene
301.	Octabromophenyl, Oxide
302.	Oleum
303.	Oleylamine
304.	OO-Diethyl S-Ethylsulphonylmethyl
305.	OO-Diethyl S-Ethylsulphonyl methyl Phosphorothioate
306.	OO-Diethyl S-Ethylthiomethyl Phosphorothioate
307.	OO-Diethyl S-isopropylthiomethyl Phosphorodithioate
308.	OO-Diethyl S-propylthiomethyl Phosphorodithioate
309.	Oxyamyl
310.	Oxydisulfoton
311.	Oxygen (liquid)
312.	Oxygen Difluoride
313.	Ozone
314.	Paroxon (diethyl 4- Nitrophenyl Phosphate)
315.	Paraquat
316.	Parathion
317.	Parathion Methyl
318.	Paris Green (Bis Aceto Hexametarsenitetra Copper)
319.	Pentaborane
320.	Pentabromodiphenyl Oxide
321.	Pentabromophenol
322.	Pentachloro Naphthalene
323.	Pentachloroethane
324.	Pentachlorophenol
325.	Pentaerythritol Tetranitrate
326.	Pentane
327.	Peracetic Acid
328.	Perchloroethylene
329.	Perchloromethyl Mercaptan
330.	Pentanone, 2,4-Methyl



<i>Sl. No. (Col. 1.)</i>	<i>Name of Chemicals (Col. 2.)</i>
331.	Phenol
332.	Phenyl Glycidal Ether
333.	Phenylene p-Diamine
334.	Phenylmercury Acetate
335.	Phorate
336.	Phosacetim
337.	Phosalone
338.	Phosolan
339.	Phosgene (Carbonyl Chloride)
340.	Phosmet
341.	Phosphamidon
342.	Phosphine (Hydrogen Phosphide)
343.	Phosphoric Acid and Esters
344.	Phosphoric Acid, Bromoethyl Bromo (2,2,-Dimethylpropyl) Bromoethyl Ester
345.	Phosphoric Acid, Bromoethyl Bromo (2,2,-Dimethylpropyl) Chloroethyl Ester
346.	Phosphoric Acid, Chloroethyl Bromo (2,2,-Dimethoxypropyl) Chloroethylester)
347.	Phosphorous & Compounds
348.	Phostalan
349.	Picric Acid (2,4,6,- Trinitrophenol)
350.	Polybrominated Biphenyls
351.	Potassium Arsenite
352.	Potassium Chlorate
353.	Promurit (1-3,4-Dichlorophenyl) 3-Triazenothiocar boxamide)
354.	Propanesultone-1,3
355.	Propen-1,-2-Chloro-1, 3-Diol-Diacetate
356.	Propylene Dichloride
357.	Propylene Oxide
358.	Prophleneimine
359.	Pyrazoxon
360.	Solonium Hexafluoride
361.	Semicarbazide Hydrochloride
362.	Sodium Arsenite
363.	Sodium Azide
364.	Sodium Chlorate
365.	Sodium Cyanide
366.	Sodium Picramate
367.	Sodium Selenite
368.	Styrene, 1,1,3,2-Tetrachloroethane
369.	Sulfatep
370.	Sulphur Dichloride
371.	Sulphur Dioxide
372.	Sulphur Trioxide
373.	Sulphuric Acid

→	Sl. No. (Col. 1.)	Name of Chemicals (Col. 2.)
	374.	Sulphoxide, 3-Chloropropyloctyl
	375.	Tellurium
	376.	Tellurium Hexafluoride
	377.	Tepp
	378.	Terbufon
	379.	Tetrabromobisphenol-A
	380.	Tetrachloro, 2,2,5,6,2,5- Cyclohexadione-1,4-Dione
	381.	Tetrachlorodibenzo-P dioxin,2,3,7,8(TCDD)
	382.	Tetraethyl Lead
	383.	Tetrafluoroethane
	384.	Tetramethylene-disulphotetramine
	385.	Tetramethyl Lead
	386.	Tetranitromethane
	387.	Thallium & Compounds
	388.	Thionazin
	389.	Thionyl Chloride
	390.	Tripate
	391.	Toluene
	392.	Toluene 2-4 Diisocyanate
	393.	Toluidine-o
	394.	Toluene-2,6-Diisocyanate
	395.	Trans-1,4-Chlorobutene
	396.	Tri-1 (Cyclohexyl) Stannyl-1-1,2,4-Trazole
	397.	Triamino, 1,3,5,2,4,6-Trinitrobenzene
	398.	Tribromophenol, 2,4,6
	399.	Trichloro Acetyl Chloride
	400.	Trichloro Ethane
	401.	Trichloro Napthalene
	402.	Trichloro (Chloromethyl) Silane
	403.	Trichlorodichlorophenyl-silane
	404.	Trichloroethane, 1,1,1
	405.	Trichlorethyl Silane
	406.	Trichloroethylene
	407.	Trichloromethanesulphenyl Chloride
	408.	Trichlorophenol, 2,2,6
	409.	Trichlorophenol, 2,4,5
	410.	Triethylamine
	411.	Triethylenemelamine
	412.	Trimethyl Chloronilano
	413.	Trimethylpropane Phosphite
	414.	Trinitroaniline
	415.	Trinitroaninole, 2,2,4,6
	416.	Trinitrobenzene
	417.	Trinitrobenzoic Acid
	418.	Trinitrocresol
	419.	Trinitrophenetole, 2,5,6



<i>Sl. No. (Col. 1.)</i>	<i>Name of Chemicals (Col. 2.)</i>
420.	Trinitroresorcinol, 2,4,6 (Styphnic Acid)
421.	Trinitrotoluene
422.	Triethocresyl Phosphate
423.	Triphenyltin Chloride
424.	Terpentine
425.	Uranium & Compounds
426.	Vanadium & Compounds
427.	Vinyl Chloride
428.	Vinyl Fluoride
429.	Vinyl Toluene
430.	Warfarin
431.	Xylene
432.	Xylidine
433.	Zinc & Compounds
434.	Zirconium & Compounds

Schedule-2.

(See Rule 2(3))

Threshold quantity for isolated storage

(a) The Threshold quantities set out below relate to each installation or group of installation belonging to the same occupier where the distance between installations is not sufficient to avoid, in foreseeable circumstances, any aggravation of major accident hazards. These threshold 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 threshold 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 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.

But no account shall be taken of any hazardous chemical which is in a vehicle, vessel, aircraft or hovercraft used for transporting it.

Sl. No.	Chemicals	Threshold Quantities (tonnes)	
		For application of Rules 4, 5, 7 to 9	For application of Rules 10 to 15
1	2	3	4
1.	Acrylonitrile	350.	5,000
2.	Ammonia	30.	600
3.	Ammonium nitrate (a)	350.	2,500
4.	Ammonium nitrate fertilizers(b)	1,250.	10,000
5.	Chlorine	10.	25
6.	Flammable gases as Defined in Schedule 1, Paragraph(b)(i)	50.	3,000
7.	Highly flammable Liquids as defined in Schedule 1, Paragraph(b)(ii)	10,000.	10,000
8.	Liquid oxygen	200.	2,000
9.	Sodium Chlorate	25.	250
10.	Sulphur dioxide	20.	500
11.	Sulphur trioxide	15.	100
12.	Carbonyl Chloride	0.75	0.75
13.	Hydrogen Sulphide	5.	50
14.	Hydrogen fluoride	5.	50
15.	Hydrogen cyanide	5.	20
16.	Carbon disulphide	20.	200
17.	Bromine	50.	500
18.	Ethylene Oxide	5.	50
19.	Propylene Oxide	5.	50
20.	2-Propenal (Acrolein)	20.	200
21.	Bromomethane (Methyl Bromide)	20.	200
22.	Methyl Isocyanate	0.15	0.15
23.	Tetraethyl Lead or Tetramethyl lead	5.	50
24.	1,2 Dibromoethane (Ethylene Dibromide)	5.	50
25.	Hydrogen Chloride (Liquified Gas)	25.	250
26.	Diphenyl Methane Di-Isocyanate (MDI)	20.	200
27.	Toluene Di-Isocyanate (TDI)	10.	100

Foot notes

(a) This applies to ammonium nitrate and mixture of ammonium nitrate where the nitrogen content derived from the ammonium nitrate is greater than 28 percent 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 fertilizers and to compound fertilizers where the nitrogen content derived from the ammonium nitrate is greater than 28 percent by weight (a compound fertilizer contains ammonium nitrate together with phosphate and/or potash).

Schedule 3

[(See Rule 2 (1) (5)]

Threshold quantity for Industrial installation

(a) The quantities set-out-below relate to each installation or group of installations belonging to the same occupier where the distance between the installation is not sufficient to avoid in foreseeable circumstances, any aggravation of major-accident hazards. These quantities apply in any case to each group of installation belonging to the same occupier where the distance between the installations is less than 500 metres.

(b) For the purpose of determining the threshold quantity of a hazardous chemical in an Industrial installation, account shall also be taken of any hazardous chemicals 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 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.

But no account shall be taken of any hazardous chemical which is in a vehicle, vessel, aircraft or hovercraft used for transporting it.

PART I NAMED CHEMICALS

Sl. No.	Chemical	Threshold Quantity		CAS Number
		For application of Rules 6, 8, 9, 14 and 16	For application of Rules of 11 to 13	
(Column 1)	(Column 2)	(Column 3)	(Column 4)	(Column 5)

GROUP I 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 & Salt	500 Kg.		
6.	Arsenic trioxide, Arsenious (III) Acid & Salts	100 Kg.		...
7.	Arsine (Arsenic hydride)	10 Kg.		7784-42-4
8.	Azinphos-ethyl	100 Kg.		2642-71-9
9.	Azinphos-methyl	100 Kg.		86-50-0
10.	Benzidine	1 Kg.		92-87-5
11.	Bezidine salts	1 Kg.		...
12.	Beryllium (powders, compounds)	10 Kg.		...
13.	Bis (2-chloroethyl) Sulphide	1 Kg.		505-60-2
14.	Bis (chloromethyl ether)	1 Kg.		542-88-1
15.	Carbofuran	100 Kg.		1583-66-2
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 ton.		...
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.	Dialifox	100 Kg.		10311-84-9
26.	OO-Diethyl S-Ethylsulphinyl Methyl Phosphorothioate	100 Kg.		2588-05-8
27.	OO-Diethyl S-ethylsulphonylthiomethyl Phosphorothiorate	100 Kg.		2588-06-9
28.	OO-Diethyl S-ethylthiomethyl Phosphorodithioste	100 Kg.		2600-69-3

1	2	3	4	5
29.	OO-Diethyl S-isopropylthiomethyl Phosphorodithioal	100 Kg.	---	78-52-4
30.	OO-Diethyl S-propylthiomethyl Phosphorothioate	100 Kg.		3309-68-0
31.	Dimefox	100 Kg.		115-26-4
32.	Dimethylcarbomoyl chloride	1 Kg.		79-44-7
33.	Dimethylnitrosamine	1 Kg.		62-75-9
34.	Dimethyl Phosphoramidocyanidic Acid	1 Kg.		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.	Ethane	100 Kg.		563-12-2
39.	Fensulfolhion	100 Kg.		115-90-2
40.	Fluonetil	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-Fluorocrotonic acid	1 Kg.		37759-72-1
50.	4-Fluorocrotonic acid, Salts	1 Kg.	...	
51.	4-Fluorocrotonic acid, esters	1 Kg.	...	
52.	4-Fluorocrotonic acid, amides	1 Kg.	...	
53.	4-Fluoro-2-hydroxybutyric acid	1 Kg.	...	
54.	4-Fluoro-2-hydroxybutyric acid, Salts	1 Kg.	...	
55.	4-Fluoro-2-hydroxybutyric acid, ester	1 Kg.	...	
56.	4-Fluoro-2-hydroxybutyric acid, amides	1 Kg.	...	
57.	Glycolonitrile (hydroxyacetonitrile)	100 Kg.		107-16-4
58.	1,2,3,7,8,9-Hexachlorodibenzodioxin	100 Kg.		19408-74-3
59.	Hexamethylphosphoramide	1 Kg.		680-31-9
60.	Hydrogen selenide	10 Kg.		7783-07-5
61.	Isobenzan	100 Kg.		279-78-9
62.	Isodrin	100 Kg.		465-73-6
63.	Juglone (5-Hydroxynaphthalene-1,4 dione)	100 Kg.		481-39-0
64.	4,4'-Methylenebis (2-chloroaniline)	10 Kg.		101-14-4
65.	Methyl isocyanate	150 Kg.	150 kg.	624-83-9
66.	Mevinphos	100 Kg.		7786-34-7
67.	2-Naphthylamine	1 Kg.		91-59-8
68.	Nickel metal, Oxides, carbonates, Sulphide, as powders	1 ton	
69.	Nickel Tetracarbonyl	10 Kg.		13463-39-3
70.	Oxydisulfoton	100 Kg.		2497-07-6
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	100 Kg.		298-00-0
75.	Pentaborane	100 Kg.		19624-22-7
76.	Phorate	100 Kg.		298-02-2
77.	Phosacetim	100 Kg.		4104-14-7
78.	Phosegene (carbonyl chloride)	750 Kg.	750 Kg.	75-44-5
79.	Phosphamidom	100 Kg.		13171-21-6
80.	Phosphine (Hydrgen phosphide)	100 Kg.		7803-51-2

1	2	3	4	5
81.	Promurit (1,-3,4-Dichlorophenyl 3-triazeneticarboxamide)	100 Kg.		5836-73-7
82.	1,3-propanesultone	1 Kg.		1120-71-4
83.	1-Propen-2-chloro-1, 3-diol diacetate	10 Kg.		10118-72-6
84.	Pyrazoxon	100 Kg.		108-34-9
85.	Selenium hexafluoride	10 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 Ton.		10545-99-0
90.	Tellurium Hexafluoride	100 Kg.		7783-80-4
91.	TEPP	100 Kg.		107-49-3
92.	2,3,7,8-Tetrachlorodibenzop-dioxin (TCDD)	1 Kg.		1746-01-6
93.	Tetramethylenedisu.photetramine	1 Kg.		80-12-6
94.	Thionazin	100 Kg.		297-97-2
95.	Tirpate (2,4-Dimethyl-1,3-dithiofane 2-carboxaldehyde O-methylcarbomoyloxime)	100 Kg.		26419-73-8
96.	Trichloromethane-Sulphenyl Chloride	100 Kg.		594-42-3
97.	1-Tricyclohexyl stannyl-1H-1,2,4-triazole	100 Kg.		411083-11-8
98.	Triethylenemelamine	10 Kg.		51-18-3
99.	Warfarin	100 Kg.		81-81-2
Group 2-Toxic chemicals (Quantity> 1 tonne)				
100.	Acetone cyanohydrin (2-Cyanopropan-2-01)	200 T.		75-86-5
101.	Acrolein (2-Propenal)	20 T.		107-02-8
102.	Acrylonitri e	20 T.	200 T.	107-13-1
103.	Allyl alcohol (2-propen-1-01)	200 T.		107-18-6
104.	Allylamine	200 T.		107-11-9
105.	Ammonia	50 T.	500 T.	7664-41-7
106.	Bromine	40 T.	500 T.	7726-95-6
107.	Carbon disulphide	20 T.	200 T.	75-15-0
108.	Chlorne	10 T.	25 T.	7782-50-5
109.	Diphenyl methane di-isocyanate (MDI)	20 T.	200 T.	101-68-8
110.	Ethylene dibromide (1,2-Dibromomethane)	5 T.	50 T	106-93-4
111.	Ethylenimine	50 T.		151-56-4
112.	Formaldehyde (concentration >=90%)	5 T.	50 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 Sulfide	5 T.	50 T.	7783-06-4
117.	Methyl bromide (Bromomethane)	20 T.	200 T.	74-83-9
118.	Nitrogen Oxides	50 T.		11104-93-1
119.	Propyleneimine	50 T.		75-55-8
120.	Sulphur dioxide	20 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.	200 T.	75-74-1
124.	Toluene di-isocyanate (TDI)	10 T.	100 T.	584-84-9
Group 3-Highly reactive chemicals				
125.	Acetylene (ethyne)	5 T.		74-86-2
126.	a. Ammonium nitrate (1)	350 T.	2500 T.	6484-52-2
	b. Ammonium nitrate in the form of fertilizer (2)	1250 T.		...
127.	2,2-Bis (tert-butylperoxy) butane (concentration >=70%)	5 T.		2187-23-9

1	2	3	4	5
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.	Tert-butyl Peroxyisopropyl Carbonate (concentration >=80%)	5 T.		2372-21-6
132.	Tert-butyl Peroxymaleate (concentration >=80%)	5 T.		1931-62-0
133.	Tert-butyl Peroxypivalate (concentration >=77%)	50 T.		927-07-1
134.	Dibenzyl Peroxydicarbonate (concentration >=98%)	5 T.		2144-45-8
135.	Di-sec-butyl Peroxydicarbonate (concentration >=80%)	5 T.		19910-65-7
136.	Diethyl Peroxydicarbonate (concentration >=30%)	50 T.		14666-78-5
137.	2,2 Dihydroperoxypropane (concentration >=30%)	5 T.		2614-76-8
138.	Di-isobutryl peroxide (concentration >=50%)	50 T.		3437-84-1
139.	Di-n-propyl Peroxydicarbonate (concentration >=80%)	5 T.		16066-38-9
140.	Ethylene oxide	5 T.		75-21-8
141.	Ethyl nitrate	50 T.	50 T.	625-58-1
142.	3,3,6,6,9,9-Hexamethyl-1,2,4,5, tetraoxacyclonane;(concentration >=75%)	50 T.		22387-33-7
143.	Hydrogen	2 T.	50 T.	1333-74-0
144.	Liquid Oxygen	200 T.	2000 T	7782-44-7
145.	Methyl ethyl Ketone Peroxide (concentration >=60%)	5 T.		1338-23-4
146.	Methyl isobutyl ketone Peroxide (concentration >=60%)	50 T.		37206-20-5
147.	Peracetic acid (concentration >=60%)	50 T.		79-21-0
148.	Propylene oxide	5 T.	50 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-trinito Phenyl) amine	50 T.		131-73-7
152.	Chlorotrinitrobenzene	50 T.		28280-61-9
153.	Cellulose nitrate (containing >=12.6% nitrogen)	50 T.		9004-70-0
154.	Cyclotetramethylene Tetranitramine	50 T.		2691-41-0
155.	Cyclotrimethylenetri Nitroamine	50 T.		121-82-4
156.	Diazodinitrophenol	10 T.		7008-81-3
157.	Diethylene glycol dinitrate	10 T.		693-21-0
158.	Dinitrophenol, salts	50 T.		
159.	Ethylene glycol Dinitrate	10 T.		628-96-6
160.	1-Guanyl-4 nitrosamineoguanyl-1 tetrazene	10 T.		109-27-3
161.	2,2', 4,4', 6,6'-Hexanitrostilbene	50 T.		20062-22-0
162.	Hydrazine nitrate	50 T.		13464-97-6

1	2	3	4	5
163.	Lead azide	50 T.		13424-46-9
164.	Lead styphnate (lead 2,4,6-trinitroresorcinoxide)	50 T.		15245-44-0
165.	Mercury fulminate	10 T.		628-86-4
166.	N-Methyl-N,2,4,6-trinitroaniline	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.		82-71-3
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.		25377-32-6
176.	Trinitrobenzoic acid	50 T.		35860-50-5
177.	Trinitrocresol	50 T.		28905-71-7
178.	2,4,6-Trinitrophenetol	50 T.		4732-14-3
179.	2,4,6-Trinitrotoluene	50 T.	50 T.	118-96-7

Part -II (Classes of Chemicals not specifically named in Part-I)

Sl.No.	Classes of Chemicals	Threshold Quantity	
		For application of Rules 5,7,8,12 and 13.	For application of Rules 9 to 11
1	2	3	4

Group-5-Flammable Chemicals.

1. Flammables gases :

Chemical 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 :

Chemical 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 flash point lower than 65 degree C and which remain liquid under pressure, where particular processing conditions, such as high pressure and high temperature, may create major accident hazards.

25 T.

200 T.

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% by weight and aqueous solutions of ammonium nitrate where the concentration of ammonium nitrate is greater than 90% by weight.

(2) This applies to straight ammonium fertilizers and to compound fertilizers where the nitrogen content derived from the ammonium nitrate is greater than 28% 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 by the chemical Abstracts Service.

SCHEDULE 4

(See Rule 2(2))

Industrial installations within the meaning of Rule 2(2)

- 1. Factories involving in production, processing or treatment of organic or inorganic chemicals using for this purpose, among others,
- a) Alkylation
 - b) Amination by amonolysis
 - c) Carbonylation
 - d) Condensation
 - e) Dehydrogenation
 - f) Estefication
 - g) Halogenation & manufacture of halogens
 - h) Hydrogenation
 - i) Oxidator
 - j) Polymerization
 - k) Sulphonation
 - l) Desuphurization, manufacture and transformation of sulphur-containing compounds
 - m) Nitration and manufacture of nitrogen-containing compounds
 - n) Manufacture of phosphorus-containing compounds
 - o) Formulation of pesticides and of pharmaceutical products
 - p) Distillation
 - q) Extraction
 - r) Solvation
 - s) Mixing
 - t) Hydrolysis.
2. Factories involving in distillation, refining or other processing of petroleum or petroleum products.
3. Factories involving in total or partial disposal of solid or liquid chemicals by incineration or chemical decomposition.
4. Factories involving in production, processing, or treatment of energy gases for example, LPG, LNG, SNG.
5. Factories involving in dry distillation of coal or lignite.
6. Factories involving in production of metals or non-metals by a wet process or by means of electrical energy.

SCHEDULE 5

Format of a Safety Data Sheet

(See Rule 3 (2) and (3))

Format of a Safety Data Sheet

1. IDENTITY OF MATERIAL

Product Name		Chemical Designation		
Trade Name		Synonyms		
Formula	Label Class	Category	CAS Number	UN Number
Regulated Identification		Shipping Name Codes/Label		HAZCHEM Code
		Hazardous Waste Identification Number		



Hazardous Ingredients	CAS Number
1.	
2.	
3.	
4.	

2. PHYSICAL AND CHEMICAL PROPERTIES

Physical State (gas-liquid- Solid-)	Boiling Point in Degree C	Vapour Pressure at 35 Degree C mm Hg
Appearance	Melting/Freezing Point In Degree C	Evaporation Rate at 30 Degree C

Odour	Vapour Density (air= 1)	Solubility Water at 30 Degree C
Others (Corrosivity etc.)	Specific Gravity (Water= 1)	pH

3. FIRE AND EXPLOSIVE HAZARDS DATA

Explosion/Flammability	Flash Point (Deg.) C LEL %	Autoignition Temperature Degree C
	Flash Point (Deg.) C UEL %	TDG Flammability (Classification)

4. REACTIVE HAZARDS

Stability	Impact	(Hazardous Combustion product)
	Static Discharge	(Hazardous Decomposition products)
	Reactivity	(Conditions to avoid)
Hazardous Polymerisation	May/May not Occur	(Conditions to avoid)
Incompatibility	(Materials to avoid)	

5. HEALTH HAZARD DATA

Routes of Entry	(Inhalation, skin, mucuous Membranes and eye Contact and ingestion)		
Effects of Exposure/symptoms			
LD 50 (in rat) (Orally or percutaneous absorption) (mg/Kg. body weight)	LC50 (in rat) (mg/l)/4hrs.		
Permissible Limit (PEL)	Exposure	ppm, mg/cu. m	Short term Exposure Limit (STEL) ppm mg/cu. m
Threshold Value (TLV) OF ACGIH	Limit	ppm, mg/cu. m	Odour Threshold ppm mg/cu. m
Emergency Treatment			

6. HAZARD SPECIFICATION

NFPA Hazard Signal	Health	Flammability	Stability	Special
Known Hazards				
Combustible Liquid		Water Reactive Material		Irritant
Flammable Material		Oxidiser		Sensitizer
Pyrophoric Material		Organic Peroxide		Carcinogen
Explosive Material		Corrosive Material		Mutagen
Unstable Material		Compressed Gas		Others(Specify)

7. SAFE USAGE DATA

Ventilation	General/Mechanical Local Exhaust
Protective Equipment Required	Eyes (Specify)
	Respiratory (Specify)
	Gloves (Specify)
	Clothing (Specify)
	Others (Specify)
Precautions	Handling & Storage
	Others (Specify)

8. EMERGENCY RESPONSE DATA

Fire	Fire Extinguishing Media
	Special procedures
	Unusual Hazards
Exposure (inhalation, skin and eye contact, ingestion)	First Aid Measures
Spills	Steps to be taken
	Waste Disposal Method



9. ADDITIONAL INFORMATION ,IF ANY :-

10. SOURCES USED

Reference to books, journals, etc.

11. MANUFACTURER/SUPPLIER DATA

Firm's Name	Standard packing
Mailing Address	
Telephone Number	
Telex Number	Other
Telegraphic Address	Other
Contact Person in Emergency	Emergency Tel., in Transit areas.

Acronyms and Glossary of terms :-

CAS : Chemical Abstract Service Registration Number :

UN Number : United Nations Number.

HAZCHEM Code : Hazardous Chemical Code.

TDG Flammability : Transport of Dangerous Goods-Flammability Classification by United Nations.

NFPA : National Fire Protection Association USA.

LD50 and LC50 represent the dose in mg/kg of body weight and the concentration in mg./l for 4 hours having lethal effect on 50% of the animals (rats treated), respectively

PEL : Permissible Exposure Limit as laid down in the statute.

TLV : Threshold Limit Value as laid down by the American Conference of Governmental Industrial Hygienists, (ACGIH), USA.

STEL : Short Term Exposure Limit as laid down in the statutes or by the ACGIH.

GUIDELINES : All efforts should be made to fill in all the columns. No column should be left blank. In case certain information is not available the same should be indicated against the respective item.

SCHEDULE 6

(See Rule 5 (1))

Information to be Furnished Regarding Notification of a Major Accident

Report Number.....
of the particular accident.

1. General Data

- (a) Number of the site
- (b) Name and address of the occupier
(Also state the telephone/telex number)
- (c) (i) Registration number
- (ii) Licence Number
(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 Code 1998 at the five digit level.

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2. Type of major accident explosion

Fire		Emission of Hazardous Chemical	
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3. Description of the major accident

(a) Date, shift and hour of the accident.

(b) Department/Section and exact place where the accident took place.

(c) The process/operation under taken 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 of the accident.

The hazardous chemical involved.

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 _____

-- damage is still present _____

-- danger no longer exists _____

(b) Out side the establishment

--Casualties _____	Killed _____
	Injured _____
	Poisoned _____



- Persons exposed to the major accident : _____
- material damage : _____
- damage to environment : _____
- damage is still present : _____
- danger no longer exists : _____

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

8. 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 8 (1))

Information to be furnished for the Notification of site

Particulars to be included in 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 triggering any major accident ;
 - (c) a brief description of the measures taken ;
8. Information related 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) are 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 chemicals,
 - (c) a description of the processes or storages involving the hazardous chemicals, the maximum amount of such a hazardous chemical in the given process or storage and an indications 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 B
(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 processes, 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 chemicals, namely--
 - (a) chemicals (quantities, substance data on physical and chemic 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 Hazardous chemical
 - (a) type of accident.
 - (b) system elements or foreseen event 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 safely, 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 accident, 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).
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10. Information of 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 of possible accident sequences.
 - d) coordination 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.

SCHEDULE 9
(See Rule 13 (1))

DETAILS TO BE FURNISHED IN THE ON-SITE EMERGENCY PLAN

1. Name and address of the person furnishing the information.
2. Key personnel of the organisation and responsibilities assigned to them in case of Emergency.
3. Outside organisations if involved in assisting during on-site Emergency.
 - a) Type of accidents
 - b) Responsibility assigned
4. Details of liason arrangement between the organisations
5. Information on the preliminary hazard analysis
 - a) Type of accidents
 - b) System elements or events that can lead to a major accident
 - c) Hazards
 - d) Safety relevent components
6. Details about the site
 - a) Location of dangerous substances
 - b) Seat of Key personnel
 - c) Emergency control room.
7. Description of hazardous chemicals at plant site
 - a) Chemicals (Quantities and toxicological data)
 - b) Transformation if any which could occur
 - c) Purity of hazardous chemicals.



8. Likely dangers to the plant
9. Enumerate effects of :
 - i) Stress and strain caused during normal operation
 - ii) fire and explosion inside the plant and effect if any, of fire and explosion out side.
10. Details regarding :-
 - i) warning alarm & safety and security systems
 - ii) alarm and hazard control plans in line with disaster control and hazard control planning, ensuring the necessary technical and organisational precautions.
 - iii) Reliable measuring instruments, control units and servicing of such equipments
 - iv) Precautions in designing of the foundation and load bearing parts of the building
 - v) Continuous surveillances of operations.
 - vi) Maintenance and repair work according to the generally recognised rules of good engineering practices.
11. Details of communication facilities available during emergency and those required for an off-site emergency.
12. Details of fire fighting and other facilities available and those required for an off-site Emergency.
13. Details of first aid and Hospital services available and its adequacy.

By order of the Governor

S. Sailo

Commissioner and Secretary to the
Government of Tripura.