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उपयोग, उपभोग ग्रथवा विक्रयार्थ लाया जावे पर ग्रधिसूचना के राजस्थान राज-पत्र में प्रकाशन की तिथि से उनके सम्मुख श्रंकित निर्दिष्ट दर के ग्रनुसार चुंगी कर वसूल किया जावेगाः—

ग्रनुसूची

	<b></b>	सं. नाम <b>व</b> स्तु	दर प्रति
-	1.	चीनी, खांडसारी, मिश्री, पताशा, मुत्शी	2.00 प्रति क्विटल
	2.	गुड़	2.00 प्रति विवटल
تسوو	3.	<b>ऊन व</b> रूई	5.00 प्रति विवटल
	4.	दवाई	2.00 प्रति सैंकड़ा
	5.	कपड़ा (समस्त प्रकार का)	1.50 प्रति सेंकड़ा
	6.	चाय	2.00 प्रति सैंकड़ा
	7.	मनिहारी	2.00 प्रति सैंकड़ा

[सं. टैक्स/एफ. 99 (5) डी.एल.घी./64/1289] स्राज्ञा से, जी. के. गोस्वामी, उप शासन सचिव।

#### LABOUR DEPARTMENT

#### NOTIFICATION

Jaipur, June 7, 1993

G. S. R. 13:--In exercise of the powers conferred by section 112 of the Factories Act, 1948 (Central Act 63 of 1948) the State Government hereby makes the following Rules, the same have been previously published in Rajasthan Gazette part 3 (kha) dated 14 November, 1992 as required by section 115 of the said Act, namely:--

#### RULES

1. Short title and Commencement:—— (i) These rules may be called the Rajasthan Control of Industrial Major Accident Hazards Rules, 1991.

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- (ii) They shall come into force from the date of publication.
- (iii) These rules supplement the rules already notified under the Factories Act, 1948.
- 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 Part I of Schedule 1 and is listed in Column 2 of Part II of this 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 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; or
    - (ii) isolated storage;
  - (c) "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 an installation specified in Schedule 4 on the same site.
  - (d) "major accident" means an occurence (including in particular, a major emission, fire or explosion) involving one or more hazardous chemicals and resulting from

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parti-; one from uncontrolled developments in the course of an industrial activity or owing to ratural events, leading to a serious danger to persons, whether immediate or delayed, inside or outside the irstallation 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 off and includes the whole of an area under the control of occupier;
- 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 indevelop detailed information on hazardous chemical 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.

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- (3) The occupier while obtaining or developing a material safety data sheet as indicated in Schedule 5 in respect of a hazard-ous 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 I of Schedule 1 and is listed in Column 2 of Part II of this 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,

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- (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;

- 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 3; and.
  - (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 15—
  - (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 commenced before that date, is an 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 is liable to be a quantity given in column 3 of

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Schedules 2 and 3 or more of an additional hazardous chemical shall be deemed to be a different activity and shall be notified shall 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).
- Updating of the notification under Rule 7.—Where an activity has been reported in accordance with Rule 7(1) occupier makes a change in it (including 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 to 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 subrules of this Rule, an occupier shall not undertake any industrial activity 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 recort to the Chief Inspector at last 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 the 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 and 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 and hazard assessment, and shall within 1 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

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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.

- piers.— (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 for emergency plan required under snb-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

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Authority designated by the State Government in whose area there is a site on which an occupier carries on an 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 off-site of possible major accidents 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 or subrule (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 its 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

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ed ite area which might be affected by a major accident at any site on which an industrial activity under his 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 subrule (1) of this Rule to inform persons about an industrial activity, before that activity is commerced, 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.
- 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 Chife 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 obligations under this Rule.
- 17. Improvement notice.—(1) If an Inspector is of the opinion that at 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

#### Indicative Criteria

#### Part I

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

S. No	Toxicity	LD50 absorbs orally in rats i kg. body wei	mg/ neous absorp-	by inhalation (4 hours) in rats mg/litre
1.	Extremely	toxic == 50	= 200	0.1-0.5
2.	Highly tox	ic 51-500	201-2000	0.5 - 2.0

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े पराचान जुलार रास्ताप्रशिक्ष रास्ताप्रशिक्ष pressure is 20 degree C or below;

at normal pressure is above 20 degree C;

which in the gaseous state at normal pressure and mixed with air

become flammable and the boiling point of which at normal

flash point lower than 23 degree C and the boiling point of which

point lower then 65 degree C and which remain liquid under pres-

sure, where particular processing conditions, such as high pres-

the effect of flame, heat or photo-chemical condition or which are

more sensitive to shocks or friction than dinitrobenzene.

sure and high temperature, may create major accident hazards.

(b) Flammable Chemicals:-(i) Flmmable gases. Chemicals

highly flammable liquids: - Chemicals which have a

(iii) Flammable liquids:- Chemicals which have a flash

Explosives:—Chemicals which may explode under

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Name of the Chemical

PART—II LIST OF HAZARDOUS CHEMICALS

SCHEDULE 1 (Continued)

## (Column-1

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No.

(Column-2)

- Acetone 1.
- 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
- Alpha Naphthyl Thiourea ANTU 12.

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- 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
- Antimony Hydride (Stibine) 24.
- Arsenic Hydride (Arsine) 25.
- Arsenic Pentoxide, Arsenic (V) Acid & Salts 26.
- 27. Arsenic Trioxide, Arsenious (III) Acids & Salts
- 28. Asbestos
- 29. Azinphos-Ethyl
- 30. Azinphos-Methyl
- 31. Barium Azide
- 32. Benzene
- Benzidine 33.
- 34. Benzidine Salts
- 35. Benzoquinone
- Benzoyl Chloride 36.
- 37. Benzoyl Peroxide
- 38. Benzyl Chloride
- 39. Benzyl Cyanide
- 40. Berrllium (Powders, Compounds)
- 41. Biphenyl
- Bis (2-Chloromethyl) Ketone 42.
- 43. Bis (2, 4, 6-Trinitrophenyl) Amine
- Bis (2-Chloroethyl) Sulphide 44.
- 45. Bis (Chloromethyl) Ether
- 2, 2-Bis (tert-Butylperoxy) Butane 46.

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Carbophenothion

Cellulose Nitrate

Chlorates (use in explosives)

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47.	1, 1-Bis (tert-Butylperoxy)	Cyclohexane	,1.3
48.	Bis-1, 2 (Tribromophenox		
49.	Bisphenol	8.6	1.00
50.	Boron & Compounds	\$ c. %	
51.	Bromine		
52.	Bromine Pentafluoride		. 1
53.	Bromoform		. ; . ;
54.	1, 3-Butadiene	10 M 4 K	• • •
55.	Butane	3 10 W W	
56.	N-Butanethiol	And Seven to Seven that	
57.	2-Butanone		
58.	Butoxy Ethanol		. 4)
59.	Butyl Glycidal Ether	N 10 5	.1.5
60.	tert-Butyl Peroxyacetate		
61.	tert-Butyl Peroxyisobutyra	ate	,
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64.	tert-Butyl Peroxypivalate		₽
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66.	C. 11		
67.	C9-Aromatic Hydrocarbon	Fraction	
68.	Cadmium & Compounds		. 1
69.	Cadmium Oxide (fumes)		1
70.	Calcium Cyanide	13. Nov. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	· , · · [
71.	Captan	C.L.	
72.	Captofol	an a light ye	
73.	Carbaryl (Sevin)	Chier	117.
74.	Cabofuran	Figure 1 (2) Stransfer of a	.8)1
75.	Carbon Disulphide		.0)1
76.	Carbon Monoxide		
77.	Carbon Tetrachloride		, ; ; [

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Coumaphos

Cresols

Coumatetralyl

1 2 Chlordane 81. 82. Chlorfenvinphos Chlorinated Benzenes 83. 84. Chlorine 85. Chlorine Dioxide 86. Chlorine Oxide Chlorine Trifluoride 87. 88. Chlormequate Chloride 89. Chloroacetal Chloride 90. Chloroacetal dehyde 91. 2-Chloroaniline 92. 4-Chloroaniline Chlorobenzene 93. 94. Chlorodiphenyl 95. Chloroepoxypropane Chloroethanol 96. Chloroethyl Chloroformate 97. Chlorofluorocarbons 98. 99. Chloroform 100. 4-(Chloroformyl), Morpholine 101. Chloromethane 102. Chloromethyl ether 103. Chloronitrobenzene 104. Chloroprene 105. Chlorosulphonic Acid 106. Chlorotrinitrobenzene 107. Chloroxuron Chromium & Compounds 108. 109. Cobolt & Compounds 110. Copper & Compounds Coumafuryl 111.

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116. Cumene		
117. Cyanophos		
118. Cyanothoate	e in the second	<b>2</b>
119. Cyanuric Fluoride	2 9 2 8	,
120. Cyclohexane		* * *
121. Cyclohexanol		
122. Cyclohexanone		To the
123. Cycloheximide		
124. Cyclopentadiene		. !
125. Cyclopentane	s %.	
126. Cyclotetramethylenetetranitra		.: •!
127. Cyclotrimethylenetrinitramine	V × a a a a a a	• 1
128. DDT		
129. Decabromodiphenyl Oxide		.1. 1
130. Demeton		. ):
131. Di-Isobutyryl peroxide	1 11. 41.	ž
132. Din-propyl Peroxydicarbonate	<b>e</b>	. 1
133. Di-sec-Butyl Peroxydicarbona	ite	
134. Dialifos		
135. Diazodinitrophenol		. 7:
136. Diazomethane	*	
137. Dibenzyl Peroxydicarbonate	t und jū	. : Ç !
138. Dichloroacetylene	man i than a serioff	. 71
139. O-Dichlorobenzene		
140. P-Dichlorobenzene	Sec. 18 - 21 -	
141. Dichloroethane	- 73 - 18 Table	, ,
142. Dichloroethyl Ether		. n. e.e.
143. 2,4-Dichlorophenol		
144. 2,6-Dichlorophenol 145. 2,4-Dichlorophenoxy Acetic	Acid, (2,4-D)	
146. 1,2-Dichloropropane		
147. 3,5-Dichlorosalicylic Acid		
148. Dichlorovos (DDVP)	aliji Seen Jiladi di	
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**EPN** 

Ethion

1,2-Epoxypropane

Ethyl Carbamate

Ethyl Ether

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2 2-Ethyl Hexanol 184. Ethyl Mercaptan 185. Ethyl Methacrylate 186. 187 Ethyl Nitrate 188. Ethylamine 189. Ethylene Ethylene Chlorohydrine 190. 191. Ethylene Diamine 192. Ethylene Dibromide Ethylene Dichloride 193. 194. Ethylene Glycol Dinitrate Ethylene Oxide 195. 196. Ethylene imine 197. Ethylthiocyanate 198. Fensulphothion 199. Fluenetil 4-Fluoro, 2-Hydroxybutyric Acid & Salts, Esters, Amides 200. 201. Fluoroacetic Acid & Salts, Esters, Amides 202. 4-Fluorobutyric Acid & Salts, Esters, Amides 203. 4 Photochrotonic Acid & Salts, Esters, Amides 204. Formaldehyde 205. Glyconitrile (Hydroxyacetonitrile) 206. 1-Guanyl-4-Nitrosaminoguanyl-1-Tetrazene 207. Heptachlor Hexachloro Cyclopentadiene 208. A 1914 1 7 A 209. Hexachlorocyclohexane 210. Hexachlorocyclomethane 211. 1, 2, 3, 7, 8, 9-Hexachlorodibenzo-o-Dioxine 212. Hexafluoropropene 213. Hexamethylphosphoramide 214. 3, 3, 6, 6, 9, 9-Hexamethyl-1, 2, 4, 5-Tetroxacyclononane

216. Hexane

2,2',4,4', 6,6'-Hexanitrostilbene

215. Hexamethylenediamine

Methacryloyl Chloride

Methamidophos

250.

251.

252. 253 254. 255. 256. 257. 258. 259. 260. 261. 262, 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284.

285.

-							-	
	,							same Since Brown
	218.	Hexavalent Chromium				7		
	219.	Hydrazine				ALI		
	220.	Hydrizine Nitrate	45			7. 4		
	221.	Hydrochloric Acid	5			7 .7		
	222.	Hydrogen						
	223.	Hydrogen Bromide (Hydrobromic A	(cid		L '	. : 3	<b>1</b> E.S.	
	224.	Hydrogen Chloride (Liquefied Gas)	***		4" :	113	.1 !	
	2 <b>2</b> 5.	Hydrogen Cyanide					191.	,
	226.	Hydrogen Fluoride				·		
	227.	Hydrogen Selenide						
	228.	Hydrogen Sulphide						
	229.	Hydroquinone				. 4		
8	230.	Iodine						
	231.	Isobenzan				2		
	232.	Isodrin				, T		
	233.	Isophorone Diisocyanate				: 1		
	234	Isopropyl Ether		<b>`</b> .{		12 -	, P. 1.	
	235.	Juglone (5-Hydroxynaphthalene-1),	4-D	ione)	1 - 0	1	.[. ]	
	236.	Lead (inorganic fumes & dusts)			E - F	6 5 2 gal		
	237.	Lead 2, 4, 6-Trinitroresorcinoxide (	(Lead	1 Sty	phna	te)		
	238.	Lead Azide	-			1		
	239.	Leptophos	* - 1		i 9			
	240.	Lindane	- x -	•		1 [	; e,	
	241.	Liquefied Petroleum Gas (LPG)		9				
	242.	Maleic Anhydride			10	1		
	243.	Manganese & Compounds	*	*		,		
	244.	Mercapto Benzothiazole	**	9 (1	*:			3
	245.	Mercury Alkyl	20 20 m <sup>28</sup>	1				
	246.	Mercury Fulminate						
	247.	Mercury Methyl		a) ()	2 -			
	2481	Methacrylic Anhydride			2 13		. 1.	
	249.	Methacrylonitrile			V.	2 6 4		
	1000 110 <b>-</b> 11 - 11					4.3	- 110	

52 1

286.	Nitrobenzene	
287.	P-Nitrochlorobenzene	
288.	Nitrocyclohexane	.480
289.	Nitroethane State Andrew State State	
290.	Nitrogen Dioxide	
291.	Nitrogen Oxides	
292.	PM - C1	
293.	Nitroglycerine	
294.	P-Nitrophenol	.000
295.	1-Nitropropane	
296.	2-Nitropropane	
297.	Nitrosodimethylamine	
298.	Nitrotolune	
299.	Octabromophenyl oxide	
300.	Oleum	. N. y ::
301.	Oleylamine	.\0.
302.	00-Diethyl S-Ethylsulphinylmethyl Phosphorothio	. 5 ()
303.	00-Diethyl S-Ethylsulphonylmethyl Phosphorothioat	e
304.	00-Diethyl S-Ethylthiomethyl Phosphorothioafe	770
305.	00-Diethyl S-Isopropylthiomethyl Phosophorodithio	. 0 A
306.	00-Diethyl S-Propylthiomethyl Phosphorodithic	oate
307.	Oxyamyl	
308.	Oxydisulfoton	
309.	Oxygen (Liquia)	
310.	Oxygen Diffuoride	
311.	Ozone	77.
	Paraoxon (Dietnyl 4-Nitropnenyl Phosphate),	• . 7
313.	Paraquat Parathion	:
	Y A	16,3
315.	Parathion Methyl	
316.		per)
317.	Tentaporane	
318.	Pentabromodiphenyl Oxide	
319.		
320.	Pentahloro Naphthalene	oc an carm to

.460 0.00 125V . . . 175 .000 261. 26. 1.00 100 20 . 266. 267 300 260. 27 st 15 ite 27 274. 275 276. 277. 278. 272. 280 281 26.

285

1.83

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2 321. Pentachloroethane 322. Pentachlorophenol 323. Pentaerythritol Tetranitrate 324. Pentane 325. Peracetic Acid 326. Perchloroethylene Perchloromethyl Mercaptan 327. 328. 2-Pentanone, 4-Methyl 329. Phenol 330. Phenyl Glycidal Ether 331. Phenylene P-Diamine 332. Phenylmercury Acetate 333. Phorate 334. Phosacetim 335. Phosalane 336. Phesfolan Phosgene (Carbonyl Chloride) 337. 338. Phosmet 339. Phosphamidon Phosphine (Hydrogen Phosphide) 340. 341. Phosphoric Acid and Esters Phosphoric Acid, Bromoethyl Bromo (2, 2-Dimethylpropyl) 342. Bromoethyl Ester Phosphoric Acid, Bromoethyl Bromo 343. (2, 2-Dimethylpropyl) Chloroethyl Ester Phosphoric Acid, Chloroethyl Bromo 344. (2, 2-Dimethoxylpropyl) Chloroethyl Ester Phosphorous & Compounds 345. 346. Phostalan Picric Acid (2, 4, 6-Trinitrophenol) 347. 348. Polybrominated Biphenyls 349. Potassium Arsenite 350. Potassium Chlorate Promurit [1-(3, 4-Dichloropheny)-3-Triazenethiocarboxa-351.

	Example and a series of the se	
352.	1, 3-Propanesultone	γ <b>γ</b> »
	1-Propen, 2-Chloro-1, 3-Diol-Diacetate	
	Propylene Dichloride	
	Propylene Oxide	
	Propyleneimine	
357.	8:1	1.4
	Selenium Hexafluoride	* * *
	Semicarbazide Hydrochloride	
	Sodium Arsenite	
361.	and the same of th	
362.	Sodium Chlorate	
	Sodium Cyanide	
364.	Sodium Picramate	
	Sodium Selenite	f i
366.	Styrene, 1, 1, 2, 2-Tetrachloroethane	
367.	Sulfotep	
368.	Sulphur Dichloride	
369.	Sulphur Dioxide	6
370.	Sulphur Trioxide	
371.	Sulphuric Acid	
372.	Sulphoxide, 3-Chloropropyloctyl	ž.
373.	Tellurium	
374.	Tellurium Hexafluoride	
375.	Tepp	•
376.	Terbufos	
37 <b>7</b> .	Alpha-Tetrabromobisphenol	5 8 8 1
378.	2,2,5,6,-Tetrachloro-2, 5-Cyclohxadiene-1, 4-D	ione
379.	2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD)	
380.	Tetraethyl Lead	
381.	Tetrafluoroethane	
382.	Tetramethylenedisulphotetramine	1 .
883.	Tetramethyl Lead	
384,	Tetranitromethane	
385.	Thallium & Compounds	4

386. Thionazin

387. Thionyl Chloride

388. Tirpate

389. Toluene

390. Toluene-2-4-Diisocyanate

391. 0-Toluidine

392. Toluene 2, 6-Diisocyanate

393. Trans-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. Trichloroehthyl Silane

404. Trichloroethylene

405. Trilhcoromethanesulphenyl Chloride

406. 2,2,6-Trichlorophenol

407. 2.4.5-Trichlorophenol

408. Triethylamine

409. Triethylenemelamine

410. Trimethyl Chlorosilane

411. Trimethylolpropane Phosphite

412. Trinitroaniline

413. 24.6-Trinitroanisole

414. Trinitrobenzene

415. Trinitrobenzoice Acid

416. Trinitrocresol

417. 2.4.6-Trinitrophenetole

418. 2,4,6-Trinitroresorcinol (Styphnic Acid)

419. Trinitrotoltiene

. 2

- 420. Triorthocresyl Phosphate
- 421. Triphenyltin Chloride
- 422. Terpentine
- 423. Uranium & Compounds
- 424. Vanadium & Compounds
- 425. Vinyl Chloride
- 426. Vinyl Fluoride
- 417. Vinyl Toluene
- 428. Warfarin
- 429. Xylene
- 430. Xylidine
- 431. Zinc & Compounds
- 432. Zirconium & Compounds

#### SCHEDULE 2

[See Rule 2 (a) (ii), 4 (1) (b), 4(2) (1) and 6 (1) (c) and (d)]

Isolated storage of Installation other then those covered by schedule 4.

- (a) The quantities set 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 foreseable 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 hazar-dous 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,

but:

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SI, No

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- (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.

SI, No. Chemical or group	oups Quantity (tonnes)		
of chemicals	For application of	For application of	
	Rules 4, 5 and 7 to 9	2.42	
(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	1250	10000	
fertilizers (b)		4 - X	
5. Chlorine	10	25	
6. Flammable gases	as	Table and a	
defined in Schedu			
Pargraph (b) (i)	50	300	
7. Highly flammable as defined in Sch			
paragraph (b) (ii	10000	100000	
8. Liquid oxygen	2(0	2000	
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.

### Footnotes:

( - .)

- (a) This applies to ammonium nitrate and mixtures of ammonium nitrate where the nitrogen content derived from the ammonium nitrate is greater then 28 per cent by weight and to aqueous solutions of ammonium nitrate 928 . where the concentration of ammonium nitrate is greater than 90 per cent by weight.
- 21 100 This applies to straight ammonium nitrate fortiliers 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 7 to 15

- 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 foresceable 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 then 500 metres.
- (b) For the purpose of determining the quantity of a 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;

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(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 ofit;

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

#### Part-I NAMED CHEMICALS

SL. No. Chemical		Quantity	CAS Number
. W.S.	For application	For application	1 ø
\$ .	of Rules 5, 7 to	of Rules	
n / n · n · n · l	9 and 13 to 15	10 to 12	e i spe <sup>5</sup>
(Column 1) (Column	n 2) (Column 3)	(Column 4)	(Column 5)
Group 1-Toxic Che	emicals		3 113 3112 11
1. Aldicarb		100 kg	116-06-3
2. 4-Aminodiphe	nyl	1 kg	92-67-1
3. Amiton		1 kg	78-53-5
4. Anabasine		100 kg	494-52-0
5. Arsenic pento:	xide	500 kg	
Arsenic (v) ac	id <b>&amp;</b>	15 25 H	. 8
salts			
6 Arsenic trioxi		10.0 kg	4
nious (III) ac	id &		· ./ c
salts			and the second
7. Arsine (Arsen		10 kg	7784-42-1
Azinphos-ethyl		100 kg	2642-71-9
7.9 Azinphos-meth	yl :	100 kg	86-50-0
10. Benzidine		1 kg	92-87-5
Benzidine salts		1 kg	

	i. Variation		*		भीगे 4 (।
	31 (32	) राजस्थान राज-पत्र, जून	17, 1993	भाग 4 (ग)	भाग क (
	1	2	. 3	4 5	1.
	#ak 31, 90				34. I
		Beryllium (powders,	10 kg		P
		compounds)	1.1	505-60-2	35. I
		Bis (2-chloroethyl sulphide	1 kg	542-88-1	36. I
	n 1.	Bis (chloromethyl) ether	1 kg	1563-66-2	37. E
		Carbofuran	100 kg	786-19-6	38. E
		Carbophenothion	100 kg	470-90-6	39. I
30		Chlorfenvinphos	100 kg		40. I
	18.	4-(Chloroformyl) morpholine		15159-40-7	41. I
	19.	Chloromethyl methyl ether	1 kg	107-30-2	42. 1
	20.	Cobalt metal, oxides,	1 kg	•	43. ]
	C	carbonates, sulphides, as power		535-89-7	44.
	200 HI 0	Crimidine	100 kg	3734-95-0	45.
	22.	Cyantinoato	100 kg	66-81-9	46.
	23.	Cycloheximide	100 kg	8065-48-3	47.
	24.	Demeton	100 kg	10311-84-9	48.
	25.	Dialifos	100 kg		49.
	26.	00-Diethyl	100 kg	2588-05-8	50.
	x # = =	S-ethylsulphinyl		•	51.
		methyl phosphorothioate		e same was	52.
	27.	00-Diethyl	100 kg	2588-06-9	
	21.	S-ethylsulphonyl	, tell 1	0 WH # 6 P	53.
		methyl			54.
		phosphorthioate	1001	2600-69-3	55.
	28.	00-Diethyl	100 kg	2000403-3	33.
		S-ethylthiomethyl phosphorodithioate			56.
	29.	00-Diethyl			30.
	29.	S-isopropylthiomethyl			57
		phosphorodithioate	100 kg	78-52-4	
	30.	00-Diethyl	100 kg	3309-68-0	58.
		S-propylthiomethyl			
	3 <b>5</b> 0 1176 80	phosphorothioate	25		59,
	31.	Dimefox	100 kg	115-26-4	60.
	32.	Dimethylcarbamoyl	1 kg	79-44-7	61.
		chloride			62.
	33.	Dimethylnitrosamine	1 kg	62-75-9	02.

r 4 (ग)	भीग 4	(ग) राजस्थान राज-प	त्र, जून 17, 19	93	31 (33)
5	1	2	3	4	5
	34.	Dimethyl Phosphoramidocyanidic acid	1 t		63917-41-9
5-60-2	35.	Diphacinone	100 kg		82-66-6
!-88-1	36.	Disulfoton	100 kg		298-04-4
-66-2	-37.	EPN	100 kg		2104-54-5
-19-6	38.	Ethion	100 kg		563-12-2
-90-6	39.	Fensulfothion	100 kg		115-90-2
-40-7	40.	Fluenetil	100 kg	329	4301-50-2
-30-2	41.	Fluoroaceic acid	1 kg		144-49-0
11	42.	Fluoroacetic acid, salts	1 kg		
	43.	Fluoroacetic acid, esters	1 kg	8 N N N N N N N N N N N N N N N N N N N	
·89 <u>-7</u>	44.	Fluoroacetic acid, amides	1 kg		
95-0	45.	4-Fluorobutyric acid	1 kg		462-23-7
81-9	46.	4-Fluorobutyric acid, salts	1 kg		*i
-48-3	47.	4-Fluorobutyric, esters	1 kg		•
84-9	48.	4-Fluorobutyric acid, amide	s 1 kg		
05-8	49.	4-Fluorocronotic acid	1 kg		37759-72-1
	50.	4-Fluorocronotic acid, salts	1 kg		
	51.	4-Fluorocronotic acid, esters	1 kg		
)6-9	52.	Fluorocrotoic acid, amides	1 kg		
70-7	53.	4-Fluoro-2-hy-droxybutyric	acid 1 kg		* # # # # # # # # # # # # # # # # # # #
	54.	4-Fluoro-2-hydroxybutyric a	cid 1 kg	-	*
		salts			
19-3	55.	4-Fluoro-2-hydroxy-butyric	1 kg		
		acid, esters			
	56.	4-Fluoro-2-hydroxy-butyric acid, amides	1 kg		
2-4	<b>57</b> .	Glycolonitrile	100 kg		107-16-4
8-0		(hydroxyacetonitrile)			
	58.	1,2,3 7,8,9-	100 kg		19408-74-3
		Hexachlorodibenzop-dioxin	*		
5-4	59.				68C-31-9
4-7	60.		10 kg		7783-07 <b>-</b> 5
1	61.	Isobenzan	100 kg		297-78-9
5-9	62.	Isodrin	100 kg	J	465-73-6
	-				

810(34) राजस्थान राजस्थान राजस्थान राजस्थान	
3 4.	5 भाग 4 (ग
63. Juglone (5-Hydroxynaphthalene	
(3-Hydroxynaphtharene 100 kg 481-	39-9 90- 7
64 4.4 -methylenebis	91. 7
(2-chloroaniline) 10 kg	14-4 he
65. Methyl isocyanate 150 kg 150 kg 624-	
66. Mevinphos 100 kg 7786	
67. 2-Naphthylamine 1 kg 91	-59 <b>-</b> 9 d
68. Nickel metal, oxides carbo	93, 1
mates, surprinte, as powers	-39-3 94. 7
69. Nickel tetracai bonyl 10 kg 13463	
70. Oxydisulfoton 100 kg 2497	
71. Oxygen diffuoride	4.1.
72. Paraoxon (diethy 14-nitrop-	-4.5-5 96.
nenyi phosphate	-38-2 r
73. Paratinion	
14. Talatinish mothy	
75. Fentabolane 200	3-02-2 98.
76. Phorate 400 kg 4104	
78. Phosgene (carbonyl chloride) 750: kg 75	
79. Phosphamidon 1 106 kg 13171	-21-6
80. Phosphine (Hydrogen	100
phosphide) 100 kg 7803	3-51-
31. Promurit (1-(3,4-Dichlorop- 100 kg 5836	5-73-7
henyl) 3-triazenethio	100
carboxamide)	
82. 1,3 Propanesultone 1 kg 1120	
83 1-Propen-1-chloro-1, 10 kg 1011	104.
3-diol diacetate	105.
84. Pyrazoxon 100 kg 10	2-3,4-9
85. Sclerium hexafluoride 10 kg 77.8	3-/3-1
86. Sodium selenite . 100 kg . 1010	2-18-8 3-52-3
87. Stibine (Antimony hydride) 100 kg	9-24-5 109.
88. Sulfoto) 100 kg 1368	5-99-0
89. Sulphur dichloride . 1 t 1054	110.

T 4 (4)			
5	भाग 4 (ग) राजस्थान रा	ज-पत्र, जून 17, <del>199</del> 3-	31 (35)
	1 2	3	4 5
1-39-0	90. Tellurium	100 kg	7783-80-4
1 12 .	91. TEPP	100 kg	167-49-3
1-14-4 1-83 <b>-</b> 9	hexafluoride	11 <sup>2</sup> 2 g	
5-34 <b>-7</b>	92. 2,3 7,8.	1 kg	1746-01-6
1-59-9	Tetrachlorodibenzo		
. 14	dioxin (TCDD)  93. Tetramethylenedisul	1 1	00.10.6
illy j	photetramine	1 kg	8C-12-6
1-39-3	94. Thionazin	100 kg	297-97-2
<b>-</b> 9 <b>7-6</b>	95. Tirpate (2.4—dimethy		26419-71-8
-4·1-7	dithiolane-2-carboxalde	hyde	= **
4.5.5	C-methylcarbomoyloxin	ne)	
-4.5 <b>-5</b> -3.8-2	96. Trichloromethane-sulphyl chloride	he- 100 kg	594-42-3
-C.O+O	97. 1-Tri (cyclohexyl) stan	nyl- 100 kg	41083-11-8
·22 <b>-7</b>	1H-1, 2, 4-triazole	, and a 12-8	
0242	98. Triethylenemelamine	10 kg	51-18-3
1 457.	99. Warfarin	100 kg	81-81-2
44-5	Group 2-Toxic chemica	ls d	, T., }
21:6	(Quantity; 1 tonne)	e glian	est on the
51-	100. Acetone cyanohydrin	200 t	75-86-5
13-7	(2-Cyanopropan-2-01)		·
	101. Acrolein (2-Propenal)	20 t	107-02-8
	102. Acrylonitrile	20 t 200	t 107-13-1
'1-4	103. Allyl alcohol	200 t	1 <b>7-</b> 18-6
2-6	(2-Propen-1-01)	600	
	104. Allylamine 105. Ammonia	200 t	
4-9	1(6. Bromine		t 706441-7
9-1	1(7. Carbon disulphide		775-15-0
8-8 2-3	108. Chlerine		
4-5	109. Diphyenl methane	20 t	100
)-0	di-isocyanate (MDI)		
	110. Ethylene dibromide	mits tecom	
	(1, 2-Dibromomethane)		18.4

31	1 (3)	5) राजस्थान राज-पत्र,	जून 17, 19	93	माग 4 (ग)	
	l	2	3	4	5	
1:	11.	Ethyleneimine	50 t		151-56-4	
		Formaldehyde			50-00-0	
4.	12.	(concentration $< = 90\%$ )			* # * * * * * * * * * * * * * * * * * *	
1	13.	Hydrogen chloride	25 t	250 t	7646-01-0	
	10.	(liquefied gas)	5 t			
1	14.	Hydrogen cyaniqe	5 t	20 t	74-90-8	
150	15.	Hydrogen flouride	5 t	50 t	7664-39-3	
	16.	Hydrogen sulphide	5 t	50 t	7783-06-4	11/
	17.	Methyl bromide	20 t		74-83-9	
- 1		(Bromomethane)	SCOTT TO THE SCOTT			
1	18.	Nitrogen oxides	50 t		11104-93-1	
	19.	Propyleneimine	50 t	X	75-55-8	
	20.	Sulphur dioxide	20 t	250 t	7446-09-5	
	21.		15 t	75 t	7446-11-9	
	22.	Tetraethyl lead	5 t		78-00-2	
	23.	Tetramethyl lead	5 t		75-74-1	
	24.	Toluene di-isocyanate (TDI)	10 t		584-84-9	
_	- ,,					
		Group 3-Highly reactive che		1 - 2		
1	25.	Acetylene (ethyne)	5 t	2( 85 = 117 - 156	74-86-2	
1	2 <b>6.</b>	a. Ammonium nitrate (1)	350 t	2500t	6484-52-2	
		b. Ammonium nitrate in	1,250 t		*	
•	0.5	the form of fertiliser (2)	£ 4		2167-23-9	
1	2 <b>7.</b>	2,2-Bis (tert-butylperoxy)	5 t		2107-23-9	
	20	butane (concentration > =	70 / <sub>6</sub> ) 5 t		3006-86-8	
1	28.	1,1-Bis (tert-butylperoxy)	3 t		3000-80-8	
		cyclohexane (concentration				<b>.</b>
1	20	> =:80 %)	5 t		107-71-1	/ 1
1	29.	Tert-Butyl peroxyacetate (concentration > =:70 %)	<i>J</i> (		107711	
1	20	141 (1997)	e 5 t		109-13-7	
ı	30.	Tert-Butyl peroxyisobutyrate (concentration > =80 %)	. J <b>.</b>		107 137	
1	2.1	MI 01 71	5 <b>t</b>		2372-21-6	1
1	31.		<i>J</i> (	s "	2012240	
		carbonate (concentration				
		<b>&gt;</b> =:80 %)	à			

ग 4 (ग)	भाग 4	(ग) राजस्थान राज-पत्र,	जून 17, 19	93	31 (37)
5	- 1	2	3	4	5
51-56-4	132.	Tert-Butylperoxymaleate	5 t		1931-62-0
0-00-0	133,	(concentration > =80 %) Tert-Butyl peroxypivalate	50 t		927-07-1
6-01-0	134.	(concentration > = 77%)  Dibenzyl peroxydicarbonate	5 <b>t</b>		2144-45-8
4-90-8 4-39-3	135.	(concentration > = 190 %)  Di-sec-butyl peroxydicarbons	ate 5 t		19910-65-7
3-06-4 4-83-9	136.	(concentration > =:80 %)  Diethyl peroxydicarbonate (concentration > =30 %)	50 t		14666-78-5
4-93-1	137.	2,2-Dihydroperoxypropane (concentration > =30 %)	5 t		2614-76-8
5-55 <b>-</b> 8 6-09-5	138.	Di-isobutryl peroxide  (concentration > =:50 %)	50 t		343 <b>7</b> -84 <b>-1</b>
5-11-9 3-00-2	139.	Di-n-propyl peroxydicarbon- ate (concentration > =80 %)		¥	16066-38-9
5-74-1	140	Ethylene oxide	5 t	50 t	75-21-8
1-84-9		Ethyl nitrate	50 t	95 355 95	625-58-1
		3, 3, 6, 6, 9, 9, -Hexamethyl-			22397-33-7
-86-2	112.	1, 2, 4, 5,-tetroxacyclonane		*	F 10
-52-2		(concentration > =:75%)		12.	E S
		Hydrogen	2 t	50 t	1333-74-0
		Liquid oxygen	200 t		7782-44-7
-23-9		Methyl ethyl ketone percx-	5 t	197 	1338-23-4
	- A 18 A C	ide (conbentration > =:60%)	5 7 8		
·86-8	146.	Methyl isobutyl ketoneper-	50 t		37206-20-5
77	147.	oxide (concentration > =60%) Peracetic acid	50 t		79-21-0
71-1		(concentration $> =60 \%$ )	70.	ē.	75.56.0
10.5	148.	Propylene oxide	5 t		75-56-9
13-7	149.	Sodium chlorate	25 t		7775-09-9
	garen en	Group 4 Explosive chemica		2) (20)	10010-507
21-6	150.	Barium azide	50 t		18810-58-7
•	151.	Bis (2, 4, 6-trinitophenyl)	50 t	2:	131-73-7
	,	amine			

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1 2	3	4 5			
NATERI	50 t	28260-61-9			
152. Chlorotrinitrobenzene		9004-70-0			
153. Cellulose nitrate (contain-	50 t	9004•70•0			
ing >=12.6 % nitrogen)	50.	2691-41-0			
154. Cyclotetramethylene	50 t	2091-41-0			
tetranitramine		101 02-4			
155. Cyclotrimethylenetri nitroa-	50 t	121-82-4			
mine	au un 5º	#0.00 01 2			
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			
1,60. I-Guanyl-4-nitrosamineogu-	10 t	109-27-3			
anyl-1-tetrazene	3				
161. 2,2', 4,4', 6,6' Hexa-	50 t	20062-22-0			
nitrostilbene		2 *			
162. Hydrazine nitrate	50 t	13464-97-6			
163. Lead azide	50 t	13424-46-9			
164. Lead styphnate (lead 2, 4, 6	50 t	15245-44-0			
trinitro-resorcinoxide)		Sgr			
165. Mercuryfulminate	10 t	628-86-4			
166. N-Methyl-N, 2, 4, 6-	50 t	479-15-8			
tetranitroaniline					
167. Nitrogylcerine	10 t	10 t 55-63-0			
168. Pentaerythritol tetranitrate	50 t	78-11-5			
169. Pieric acid (2, 4, 6-	50 t	88-89-1			
Trinitrophenol)					
170. Sodium picramate	50 t	831-52-7			
171. Styphnic acid (2, 4, 6-	50 t	82-71-3			
Trinitroresorcinol)		-			
172. 1, 3, 5-Triamino-2, 4, 6-	50 t	3058-38-61			
trinitrobenzene		90			
173. Trinitroaniline	50 t	26952-42-1			
174. 2, 4, 6-Trinitroanisole	50 t	606-35-9			
175. Trinit robenzene	50 t	25377-32-6			
175. Illiteropenzeno					

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	भाग	भाग 4 (ग) राजस्थान राज-पत्र, जून 17, 1993		
(ग)	1	2	3	4 5
5	176	. Trinitrobenzoic acid	50 t	35860-50-5
	177	. Trinitrocresol	50 <b>t</b>	28905-71-7
1-9	178	. 2, 4, 6-Trinitrophene tol		4732-14-3
0-0	179			0 t 118-96-7
1-0	" P	ART-II CLASSES OF CHE	EMICALS NOT SA	PECIFICALLY
		$N_{A}MED$	IN PART-I	
2-4	SI.No	c. Classes of Chemicals	Q	uantity.
1-3			For application	For application
0		a su	of Rules 5, 7 to 9 & 13 to 15	of Rules 10 to
-6	Colu	mn Column	Column	n Column
-3	1	2	3	4
-0 <sub>1</sub> -6 <sub>1</sub> -9, 0; 4 8: 0, 5 1	1. 2.	Group-5 Flammable Chemicals which in gaseous normal pressure and mixed become flammable and the point of which at normal properties and the point of which at lower then 23 degree Composition point of which a pressure is above 20 degree Flammable liquids:  Chemicals which have a flammable liquids:	as state at 15 t d with air he boiling cressure is ash point 1000 t and the at normal se C.	200 t
		lower than 65 degree C a remain liquid under where particular processitions, such as high preschigh temperature, may created accident hazards.	pressure, ng condi- sure and	200 t

### Foot notes:

- (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.
- (7) This applies to straight ammonium fertilisers and to compound fertilisers where the nitrogen content derived from the ammonium nitrate is greater than 28% by weight (a compound fertilizer 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 (b) (1)]

# Industrial Installation Within The Meaning of Rule 2 (b) (i)

- 1. Installations for the 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) Esterfication
  - (g) Halogenation & manufacture of Halogens
  - (h) Hydrogenation
  - (i) Hydrolysis
  - (j) Oxidation

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(k) Polymerization

- (1) Sulphonation
- (m) Desulphurization, manufacture and transformation 6.
  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) Solvation
- (t) mixing
- 2. Installations for distillation, refining or other processing of petroleum or petroleum products.
- 3. Installations for the total or partial 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.
- 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		7 7	Chemical Classification I		
Synonyms			Trade Name	Pyrophy E	
Formula	(		C. A. S. No.	U. N. No.	

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Shinnin	g Name		
Codes/		Hazeh	em No.:
Regulated Identification	a 10s		mar k
	ous waste		
I. D. N	Vo.:	£	<b>3</b>
and the grade of the contract			
Hazardous Ingredients C.	A. S. No. Hazard	ous Ingredients	C.A.S. No
1.	3.		
2.	4.	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
2. PHYSICAL AND C	HEMICAL DATA		i i
Boiling Range/Point	°C physica	al State A	pearance
Melting/Free zing Point	C Vapour	Pressure	Odour
Widing 1 100 ming 2 mins	@ 35		Hg
•		2000	0.1
Vapour Density	Solubility	n water 30°C	Others
(Air'='1)			
Specific Gravity	рH		
Water = 1			
3. FIRE AND EXPLO	SION HAZARD	DATA	) <u>*</u>
Flammability Yes/No	LEL %Flash I	Point °C Autoig	nition °C
J			mperature
TDG Flammability	UEL %Fla	ish Point °C 1	Hazardous
Explosion Sensitivity to	impact Explosion	Sensitivity C	ombustion
Explosion Sensitivity to			ombustion roducts
Explosion Sensitivity to  Hazardous Polymerisati	to Static		
Hazardous Polymerisati	to Static	Electricity P	
	to Static	Electricity F	
Hazardous Polymerisati Combustible Liquid	to Static on Explosive material	Corrosive Material	
Hazardous Polymerisati	to Static	Electricity F	
Hazardous Polymerisati Combustible Liquid	to Static on Explosive material Oxidiser	Corrosive Material	

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FIRE	FIRE EXTINGU Media	ISHING	
FIRE	Special procedures	2 1 2 2 5 2 4 5	
	Unusual Hazards		
EXPOSURE	First Aid Measures	1 Y 8 8 4 2 1	
	Antidotes Dosages	. ಪ್ರಾ <sup>*</sup>	1 4 %
SPILLS	Steps to be taken		
	Waste Disposal Method		
keri .		. 1 -5	ffi i
		4	1124
			. 139 <b>1</b> :
	ACTURER/SUPPLIERS DATA		1 1 2 1
9. MANUFA	ACTURER/SUPPLIERS DATA		

(Mention	industrial activity what is actually ed, stored etc.)
\ /	ndustrial Classifica- at the four digit level.
2. Type of major accided Explosion Explosion Indicate State of the major accided accided to the major accided to t	Fire   Emession of hazardous chemical
,	hour of the accident  ction and exact place  dent took place.
in the Depar	tment/Section where took place, (Attach a necessary).
X /	chemical involved.
1916 - L. 180	es taken and measures envisaged to be nort-term effects of the accident.
5. Causes of the major	accident
Known (to be specified)	
Not known	
Information will be as soon as possible	1

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4 (11)	6. Nature and extent of damage	1. 40 4
	(a) Within the establishment	
	—casualties	Killed
	9)·	Injured
		Poisoned
dot ()	-persons exposed to the	
Leiz	major accident	
em oft	-material damage	
ing the same	-damage is still present	
<b>,</b>	—danger no longer exists	
Val.	2	
	(b) Outside the establishment	Villad
v 1	—casualties	Killed
o <b>,be</b>	Roisivitas in the contraction	InjuredPoisoned
	—persons exposed to the	
-1 /	major accident	
=	material damage	2. Company
	AND TO BEILD PERFORMANCE AND A TOTAL	<u></u>
•	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 medrum or long term effects of the accident
    - (b) to prevent recurrence of similar major accident
    - (c) Any other relevant information

Signature.....

Name and Designation of
Authorised Signatory Occupier
or Manager

## SCHEDULE 7

[See Rule 7 (1)]

Information to be furnished for the Notification of Activities . sites.

Particulars 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).

a.

5.

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- 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 realating 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 chemicals;
  - (c) a description of the processes or storages involving the hazardous chemicals, the maximum amount of such a hazardous chemicals 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.

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### 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 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
    - (d) process description,
    - (e) safety-related types of utilities.
    - 4. Description of the hazardous chemicals, namely:
    - (a) chemical (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.

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- 5. Information on the Preliminary Hazard Analysis, namely:—
  - (a) type of accident,
  - (b) system elements or forseen 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) sefety seytems,
  - (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 fot plant safety,
  - (d) implementation of safety procedures.

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- 9. Information on of 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 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.

[ (No. F. 4 (1) shram/91)]

By Order of the Governor, ग्रार. पी. तिवाड़ी,

Special Secretary to the Government,

हार्। नह

के :

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