Punjab Major Accident Hazard Control Rules, 1993

PUNJAB
India

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Punjab Major Accident Hazard Control Rules, 1993Published vide Punjab Government Notification No. GSR. 95/C.A. 63/48/S. 112/93 dated 16.11.1993.

1. Short title and commencement.

- (i) These rules may be called [Punjab Major Accident Hazard Control] [Substituted for 'The Punjab Control of Industrial Major Accident Hazards' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] Rules, 1993.(ii)They shall come into force at once.

2. Definitions.

- In these rules unless the context otherwise requires, -(a)"authority" mens an authority or person appointed and designated by the State Government as the District Emergency Authority;(b)[-] [Omitted vide Punjab Government Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.](c)"hazardous chemical" means -(i)any chemical which satisfies any of the criteria laid down in Part 1 of Schedule 1 and is listed in column 2 of Part II of that Schedule; or(ii)any chemical listed in column 2 of Schedule 2; or(iii)any chemical listed in column 2 of Schedule 3;(d)"Industrial activity" means, -(i)any operation or process carried out in [a factory] [Substituted for 'an industrial installation' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] 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 the operation or process, as the case may be; or(ii)an isolated storage; or(iii)a pipe line;(e)"isolated storage" means a storage where no 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] [Substituted for 'an installation'

vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] specified in Schedule 4 on the same site ;(f)["major accident" means an incident involving loss of life inside or out-side the site or ten or more injuries inside and/or one or more injuries outside or release or toxic chemical or explosion or fire or spillage of hazardous chemical resulting in 'onsite' or 'off-site' emergencies or damage to equipments leadings to stoppage of process or adverse effects to the environment;] [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.](g)"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 an flammable gas as set out in column 2 of Part II of Schedule 3 at a pressure of less than light bars absolute;(h)"Schedule" means Schedule appended to these rules;(i)"Site" means any location where hazardous chemicals are manufactured, processed, stored, handled, used or disposed of and includes the whole of the area under the control of an occupier;(j)Words and expressions not defined in these rules but defined or used in the Factories Act, 1948 and in any other rules made thereunder, have the same meaning, as assigned therein.

3. Collection, development and dissemination of information.[Sections 41-B and 112] [Substituted for 'industrial activity' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

(1)This rule shall apply to an [industrial activity or isolated storage] in which a hazardous chemical is or may be involved.(2)[An occupier of an industrial activity or isolated storage] [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] in terms of sub-rule (1), shall arrange to obtain or develop a [detailed information specified] [Substituted for 'detailed information' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] on hazardous chemicals in the form of a material safety data sheet as indicated in Schedule 5 and the information so obtained shall be accessible to workers upon request for reference purposes.(3)The occupier, while obtaining or developing a [safety data sheet as specified] [Substituted for 'material safety data sheet as indicated' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] in sub-rule (2) shall ensure that the information is recorded accurately and reflects the scientific evidence used in making the hazards determination and in case any significant information regarding hazard of a chemical is available, it shall be added to the material safety data sheet as indicted 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), where it is impracticable to label a chemical in view of the size of the container or the nature of the package, provision shall be made for other effective means like tagging or accompanying documents.

3A. [Duties of Inspector. [Inserted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

- The Inspector shall, -(a)inspect the industrial activity or isolated storage at least once in a calendar year ;(b)send annually a status report on the compliance with the rules by occupiers to the Ministry of Environment and Forests through the Directorate General Factory Advice Service and Labour Institutes and Ministry of Labour, Government of India;(c)enforce direction and procedures in respect of industrial activities or isolated storage covered under the Factories Act, 1948, and in respect of pipelines up to a distance of 500m from the outside of the perimeter of the factory, regarding -(i)Notification of the major accidents as per sub-rules (1) and (2) of rule 5 ;(ii)Notification of sites as per rules 7 and 8;(iii)Safety Reports and Safety Audits as per rules 10 to 12; and(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.]

4. General responsibility of [occupier] [Substituted for 'occupiers' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]. [Sections 7-A and 112]

-(1)This rule shall apply to;(a)an industrial activity, [-] [The words 'other than isolated storage' omitted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] in which a hazardous chemical is or may be involved ; and(b)an isolated storage in which a [threshold quantity] [Substituted for 'quantity' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] of a hazardous chemical listed in column 2, of Schedule 2 which is equal to or more than the quantity specified for that chemical in column 3 of the said Schedule, is involved.(2)[An occupier in terms of sub-rule (1) shall provide information on demand to show that as has -] [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.](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 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] [Substituted for 'safety' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.].

5. Notification of major accidents.[Sections 88, 88-A and 112] [Substituted for 'Chief Inspector a report' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

(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 [Ispector and the Chief Inspector a report] relating to the accident in instalments, if necessary, in the form specified in Schedule 6.(2)[The Inspector and the 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 Forest through the Directorate General Factory Advice Service and Labour Institutes and Ministry of Labour, Government of India. [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.](3)An occupier shall notify to the Inspector. The steps taken to avoid any repetition of such occurrence on a site.(4)The Inspector and the 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 the Chief Inspector shall inform the occupier in writing of any lacunae which in their opinion needs to be rectified to avoid major accident.]

6. [Industrial activities or isolated storage to which rules, 7, 8, 10 to 13 and 15 shall apply.] [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

(1)[(a) The provisions of rules 7, 8, 13 and 15 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;] [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.](b)The provisions of rules 10, 11 and 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 [threshold quantity specified] [Substituted for 'quantity specified' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] for that chemical in column 4 of the said Schedule:(c)The provisions of rules [7 and 8] [Substituted for '7, 8, and 9' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] 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 [threshold quantity specified] [Substituted for 'quantity specified' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] for that chemical in column 3 of the said Schedule; and(d)The provisions of rules 10, 11, 12, [13] [Substituted for '13, 14' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] and 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 [threshodl quantity] [Substituted for 'quantity specified' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] for that chemical in column 4 of the said Schedule.(2)[-] [Omitted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

7. Notification of [site] [Substituted for 'industrial activities' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.].

[Sections 41-B and 112] - (1) An occupier shall not undertake any [industrial activity or isolated storage] [Substituted for 'industrial activities' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] unless he has submitted a written report to the Chief Inspector containing the particulars specified in Schedule 7 at least [ninety days] [Substituted for 'three months' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] before commencing that activity or before such shorter time, as the Chief Inspector may agree and for the purposes of this rule, an activity in which subsequently there is or is likely to be a [threshold quantity] [Substituted for 'quantity' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] specified in column 3 of Schedules 2 and 3 or more

of an additional hazardous chemical shall be deemed to be a different industrial activity and shall be notified, accordingly.(2)[The Chief Inspector within sixty days from the date of receipt of the report in accordance with sub-rule (1) 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.] [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

8. [Updating of the site notification. [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

- Where an activity has been reported in accordance with sub-rule (1) of rule 7 and the occupier makes a change in it (including an increase or decrease in the maximum quantity of a hazardous chemical to which this rule applies which is or is liable to be at the site or in the pipeline or at the causation of the activity) which effects 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.]

9. Transitional provision. [Sections 41-B and 112]

- [-] [Rule 9, omitted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

10. [Safety Reports and Safety Audit Reports.] [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

(1)Subject to the provisions of sub-rules (2) and (3), an occupier shall not undertake any [industrial activity or isolated storage] [Substituted for 'industrial activity' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] to which this rule applies, unless he has prepared a safety report on that [industrial activity or isolated storage] [Substituted for 'industrial activity' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] containing the information specified in Schedule 8 and has sent a copy of that report to the Chief Inspector at least [ninety days] [Substituted for 'three months' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] 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 :-(a)internally once in a year by a team of suitable plant personnel:(b)externally once in two years by a competent agency accredited in this behalf; and(c)in the year when an external audit is carried out, internal audit need not be carried out.(3)The occupier within thirty days of the completion of the audit, shall send a report to the Chief Inspector with respect to the implementation of the audit recommendations.] [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

11. Updating of [safety reports] [Substituted for 'reports' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] under rule 10. [Sections 41-B and 112] [Substituted for 'industrial activity' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

(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 modification and has sent copy of that report to the [Inspector and the Chief Inspector at least ninety days] [Substituted for 'Chief Inspector at least three months' vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.] before making those modifications.(2)Where an occupier has made a report in accordance with sub-rule (1) of rule 10 and that industrial activity is continuing, the occupier shall within a period of three years from the date of the last such report, make a further report which shall record in particular to new technical knowledge which has affected the particulars in the previous report relating to safety and hazard assessment, and shall within a period of one month or in such longer time, as the Chief Inspector may agree in writing send a copy of the report to the Chief Inspector.

12. [Requirement for further information to be sent to the Inspector and the Chief Inspector [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

. - Where in accordance with rules 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 the Chief Inspector, the Inspector and the 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 the Chief Inspector within ninety days.]

13. [Preparation of on-site emergency plan by the occupiers. [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

(1)The occupier shall prepare, keep up to date and furnish to the Inspector and Chief Inspector, an on-site emergency plan containing details specified in Schedule 8-A 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) 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 provision.(3)The occupier shall prepare the emergency plan required under sub-rule (1) -(a)before

the commencement of industrial activity or isolated storage ; and(b)within ninety days of coming into operation of these rules in case of an existing industrial activity or isolated storage.(4)The occupier shall ensure that mock drill of the on-site emergency is conducted atleast once 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 the Chief Inspector.]

14. Preparation of off-site emergency plants. [Sections 41-B and 112] [Rule 14 omitted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

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15. [Information to be given to persons liable to be affected by major accidents. [Sections 41-B and 112] [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

(1)The occupier shall take appropriate steps to inform persons out-side the site who are likely to be in an area which may be affected by a major accident about, -(a)the nature of the major hazards; and(b)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 steps required under sub-rule (1) to inform persons about an industrial activity or isolated storage before that activity is commenced, except that in respect of an existing industrial activity of isolated storage, the occupier shall comply with the requirements of sub-rule (1) within ninety days of coming into operation of these rules.]

16. [Disclosure of information. [Substituted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

- Where for the purpose of evaluating information notified under rule 5 or rules 7, 8, 10 to 13 and 15, the Inspector or the Chief Inspector discloses that information to some other persons, that others 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, and before disclosing that information the Inspector or the Chief Inspector, as the case may be, shall inform that other person his obligations under this rule.]

17. Improvement notice. [Sections 41-B and 112] [Omitted vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.]

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Schedule 1

[See Rule 2(c)(i)]Indicative Criteria and List of Chemicals

Part 1 – Indicative Criteria

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

Serial No.	Degree of Toxicity	ID 50 absorbed orally in rats mg/kg body weight	ID 50 by cutaneous absorption in rats or rabbits mg/kg/body byweight	IC 50 absorbed by inhalation (4 hours in rats mg/litre
1	Extremely toxic	= 50	=200	0.1-0.5
2	Highly	51-500	201-2000	0.5-2.0

(b)Flammable Chemicals. -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 presure is 20 degree C or below;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;Flammable liquids : Chemicals which have a flashpoint lower than 65 degree C and which remain liquid under pressure where particular processing conditions such as high presure and high temperature may create major accident hazards.(c)Explosives. - Chemicals which may explode under the effect of flame, heat or photo-chemicals condition, or which are more sensitive to shocks or friction than dinitrobenzene.

Part II – List of Hazardous Chemicals

Serial No. & Name of the Chemical

1. Acetone

2. Acetone Cyanohydrine

3. Acetyl Chloride

4. Acetylene (Ethyne)

5. Acrolein (2-Propenal)

6. Acrylonitrile

7. Aldicarb

8. Aldrine

9. Alkyl Phthalate

10. Allyl Alcohol

11. Allylamine

12. Alpha Naphthyl Thiourea (Antu)

13. 4-Aminodiphenyl

14. 2-Aminophenol

15. Amiton

16. Ammonia

17. Ammonium Nitrate

18. Ammonium Nitrate in fertilizers

19. Amnonium Sulfamate

20. Anabasine

21. Aniline

22. P-Anisidine

23. Antimony and Compounds

24. Antimony Hydride (Stibine)

25. Arsenic Hydride (Arsine)

26. Arsenic Pentoxide Arsenic (V) acid and salts

27. Arsenic trioxide, Arsenious (III) acid and 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-Chloreoethyl) Sulphide

45. Bis (Chloromethyl) Ether

46. 2, 2-Bis (tert-Butylperoxy) Butane

47. 1, 1-Bis (tert-Butylperoxy) Cyclohexane

48. Bis-1, 2 (Tribromophenoxy) Ethane

49. Bisphenol

50. Boron and Compounds

51. Bromine

52. Bromine Pentaflouride

53. Bromoform

54. 1, 3-Butadiene

55. Butane

56. N-Butanethiol

57. 2-Butanone

58. Butoxy Ethanol

59. Butyl Glycidal Ether

60. tert-Butyl Peroxyacetate

61. tert-Butyl Peroxyisobutyrate

62. tert-Butyl Peroxyisopropyl Carbonate

63. tert-Butyl Peroxymaleate

64. tert-Butyl Peroxypivalate

65. Butyl Vinyl Ether

66. Butylamine

67. C9-Aromatic Hydrocabon Fraction

68. Cadmium and Compounds

69. Cadmium Oxide (Fumes)

70. Calcium Cyanide

71. Captan

72. Captofol

73. Carbaryl (Sevin)

74. Carbofuran

75. Carbon Disulphide

76. Carbon Monoxide

77. Carbon Tetrachloride

78. Carbophenothion

79. Cellulose Nitrate

80. Chlorates (Used in Explosives)

81. Chlordane

82. Chlorfenvinphos

83. Chlorinated Benezenes

84. Chlorine

85. Chlorine Dioxide

86. Chlorine Oxide

87. Chlorine Triflouride

88. Chlormequate Chloride

89. Chloroacetal Chloride

90. Chloroacetaldehyde

91. 2-Chloroaniline

92. 4-Chloroaniline

93. Chlorobenzene

94. Chlorodiphenyl

95. Chloroepoxypropane

96. Chloroethanol

97. Chloroethyl Chloroformate

98. Chloroflurocarbons

99. Chloroform

100. 4-(Chloroformyl) Morpholine

101. Chloromethane

102. Chloromethyl ether

103. Chloronitrobenzene

104. Chloroprene

105. Chlorosulphonic acid

106. Chlorotrinitrobenzene

107. Chloroxuron

108. Chromium and compounds

109. Cobalt and compounds

110. Copper and compounds

111. Coumafuryl

112. Coumaphos

113. Coumatetralyl

114. Cresols

115. Crimidine

116. Cumene

117. Cyanophos

118. Cyonothoate

119. Cyanuric Flurode

120. Cyclohexane

121. Cyclohexanol

122. Cyclohexanone

123. Cyclohexamide

124. Cyclopentadiene

125. Cyclopentane

126. Cyclotetramethylene Tetrantramine

127. Cyclotrimethyl Trinitramine

128. DDT

129. Decabromodiphenyl Oxide

130. Demeton

131. Di-Isobutyryl Peroxide

132. Di-n-Propyl Peroxydicarbonate

133. Di-sec-Butyl Peroxydicarbonate

134. Dialifos

135. Diazodinitrophenol

136. Diazomethane

137. Dibenzyl Peroxydicarbonate

138. Dichloroacetylene

139. o-Dichlorobenezene

140. p-Dichlorobenzene

141. Dichloroethane

142. Dichloroethyl ether

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)

149. Dicrotophos

150. Dieldrin

151. Diepoxybutane

152. Diethyl Peroxydicarbonate

153. Diethylene Glycol Dinitrate

154. Diethylene Triamine

155. Diethyleneglycol, Butyl ether/Diethyleneglycol Butyl Acetate

156. Diethylenetriamine (DETA)

157. Diglycidyl Ether

158. 2,2-Dihydroperoxypropane

159. Di-isobutyryl Peroxide

160. Dimefox

161. Dimethoate

162. Dimethyl Phosphoramidocyanidic Acid

163. Dimethyl Phthalate

164. Dimethylcarbomoyl Chloride

165. Dimethylnitroamine

166. Dinitrophenol, Salts

167. Dinitrotoluene

168. Dinitro-o-Cresol

169. Dioxane

170. Dioxathion

171. Dioxolane

172. Diphacinone

173. Diphosphoramide Octamethyl

174. Disorpylene Glycolmethyl ether

175. Disulfoton

176. Endosulfan

177. Endrin

178. Epichlorohydrine

179. EPN

180. 1,2-Epoxypropane

181. Ethion

182. Ethyl Carbamate

183. Ethyl Ether

184. 2-Ethyl Hexanol

185. Ethyl Mercaptan

186. Ethyl Methacrylate

187. Ethyl Nitrate

188. Ethylamine

189. Ethylene

190. Ethylene Chlorohydrine

191. Ethylene Diamine

192. Ethylene Dibromide

193. Ethylene Dichloride

194. Ethylene Glycol Dinitrate

195. Ethylene Oxide

196. Ethylene Imine

197. Ethylthiocyanate

198. Fensuphothion

199. Fluenetil

200. 4-Fluoro, 2-Hydroxybuty Acid and Salts, Esters, Amides

201. Fluoroacetic Acid and Salts, Esters, Amides

202. 4-Fluorobutyric Acid and Salts, Esters, Amides

203. 4-Fluorochrotonic Acid and Salts, Esters, Amides

204. Formaldehyde

205. Glyconitrile (Hydroxyacetonitrile)

206. 1-Guanyl-4-Nitrosaminoguanyl-1-Tetrazene

207. Heptachlor

208. Hexachloro Cyclopenadiene

209. Hexachlorocyclohexane

210. Hexachlorocyclomethane

211. 1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxine

212. Hexafluopropene

213. Hexamethylphosphoramide

214. 3,3,6,6,9,9-Hexamethyl-1,2,4,5-Tetroxacyclononane

215. Hexamethylenediamine

216. Hexane

217. 2.2',4.4',-6.6',Hexanitrostilbene

218. Hexavalent Chromium

219. Hydrazine

220. Hydrizine Nitrate

221. Hydrochloric Acid

222. Hydrogen

223. Hydrogen Bromide (Hydrobromic Acid)

224. Hydrogen Chloride (Liquefied Gas)

225. Hydrogen Cyanide

226. Hydrogen Fluoride

227. Hydrogen Selenide

228. Hydrogen Sulphide

229. Hydroquinone

230. Iodine

231. Isobenzan

232. Isodrin

233. Isophorone Diisocyanate

234. Isopropyl Ether

235. Juglone (5-Hydroxynaphthalene-1,4, Dione)

236. Lead (Inorganic Fumes and Dusts)

237. Lead 2,4,6-Trinitroresorcinoxide (Lead Styphnate)

238. Lead Azide

239. Leptophos

240. Lindane

241. Liquified Petroleum Gas (LPG)

242. Maleic Anhydride

243. Manganese and Compounds

244. Mercapto Benzothiazole

245. Mercury Alkyl

246. Mercury Fulminate

247. Mercury Methyl

248. Methacrylic Anhydride

249. Methacrylonitrile

250. Methacryloyl Chloride

251. Methamidophos

252. Methanesuphonyl Fluoride

253. Methanethiol

254. Methoxy Ethanol (2-Methyl Cellosolve)

255. Methoxyethylmercuric Acetate

256. Methyl Acrylate

257. Methyl Alcohol

258. Methyl Amylketone

259. Methyl Bromide (Bromomethane)

260. Methyl Chloride

261. Methyl Chloroform

262. Methyl Cyclohexene

263. Methyl Ethyl Ketone Peroxide

264. Methyl Hydrazine

265. Methyl Isobutyl Ketone

266. Methyl Isobutyl Ketone Peroxide

267. Methyl Isocyanate

268. Methyl Isothiocyanate

269. Methyl Mercaptan

270. Methyl Methacrylate

271. Methyl Parathion

272. Methyl Phosphonic Dichloride

273. N-Methyl 2,4,6-Tetranitroaniline

274. Methylene Chloride

275. 4,4-Methylenebis (2-Chloroaniline)

276. Methyl Trichlorosilane

277. Mevinphos

278. Molybdenum and Compounds

279. N-Methyl-N, 2,4,6-N-Tetranitroaniline

280. Naphtha (Coal Tar)

281. 2-Naphthylamine

282. Nickel and Compounds

283. Nickel Tetracarbonyl

284. o-Nitroaniline

285. p-Nitroaniline

286. Nitrobenzene

287. p-Nitrochlorobenzene

288. Nitrocyclohexane

289. Nitroethane

290. Nitrogen Dioxide

291. Nitrogen Oxide

292. Nitrogen Trifluouride

293. Nitroglycerine

294. p-Nitrophenol

295. 1-Nitropropane

296. 2-Nitropropane

297. Nitrosodimethylamine

298. Nitrotoluene

299. Octabromophenyl Oxide

300. Oleum

301. Oleylamine

302. OO-Diethyl S-Ethylsulphinylmethyl Phosphorothioate

303. OO-Diethyl S-Ethylsulphonylmethyl Phosphocrotothioate

304. OO-Diethyl S-Ethylthiomethyl Phosphorothioate

305. OO-Diethyl S-Isopropyl Thiomethyl Phosphorodithioate

306. OO-Diethyl S-Propyl Thiomethyl Phosphorodithioate

307. Oxyamyl

308. Oxydisulfoton

309. Oxygen (Liquid)

310. Oxygen Difluoride

311. Ozone

312. Paraoxon (Diethyl 4-Nitrophenyl Phosphate)

313. Paraquat

314. Parathion

315. Parathion Methyl

316. Paris Green (Bis Acto Hexametasrseniotetra Copper)

317. Pentaborane

318. Pentabromodiphenyl Oxide

319. Pentabromophenol

320. Pentachloro Naphthalene

321. Pentachloroethane

322. Pentachlorophenol

323. Pentaerythritol Tetranitrate

324. Pentane

325. Peracetic Acid

326. Perchloromethylene

327. Perchloromethyl Mercaptan

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. Phosfolan

337. Phosgene (Carbonyl Chloride)

338. Phosmet

339. Phosphamidon

340. Phosphine (Hydrogen Phosphide)

341. Phosphoric Acid and Esters

342. Phosphoric Acid, Bromoethyl Bromo (2, 2-Demethylpropyl), Bromoethyl Ester

343. Phosphoric Acid, Bromoethyl Bromo (2, 2-Dimethylpropyl), Chloroethyl Ester

344. Phosphoric Acid, Chloroethyl Bromo , (2, 2-Dimethoxylpropyl) Chloroethyl Ester

345. Phosphorous and Compounds

346. Phostalan

347. Picric Acid (2, 4, 6-Trinitrophenol)

348. Polybrominated Biphenyls

349. Potassium Arsenite

350. Potassium Chlorate

351. Promurit (1-3,4-Dichlorophenyl-3- Trioazenethiocarboxamide))

352. 1, 3-Propanesul tone

353. 1-Propene-2-Chloro-1, 3-Diol-Diacetate

354. Propylene Dichloride

355. Propylene Oxide

356. Propyleneimine

357. Pyrazoxon

358. Selenium Hexafluoride

359. Semicarbazide Hydrochloride

360. Sodium Arsenite

361. Sodium Azide

362. Sodium Chlorate

363. Sodium Cyanide

364. Sodium Picramate

365. Sodium Selenite

366. Styrene, 1.,1,2,.2-Tetrachloroethane

367. Sulfotop

368. Sulphur Dichloride

369. Sulphur Dioxide

370. Sulphur Trioxide

371. Sulphuric Acid

372. Sulphoxide. 3-Chloropropyloctyl

373. Tellurium

374. Tellurium Hexafluoride

375. TEPP

376. Terbufos

377. Alpha-Tetrabromobisphenol

378. 2,2,5,6-Tetrachloro-2, 5-Cyclohexadiene-1, 4-Dione

379. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD)

380. Tetraethyl Lead

381. Tetrafluoroethane

382. Tetramethylenedisulphotetramine

383. Tetramethyl Lead

384. Tetranitromethane

385. Thallium and Compounds

386. Thionazin

387. Thionyl Chloride

388. Tirpate

389. Toluene

390. Toluene-2-4-Diisocyanate

391. o-Toluidine

392. Toluene 2,6-Diisocyanate

393. Trans-1,4-Chlorobutene

394. 1-Tri. (Cyelohexyl) Stannyl-1H-1,2,4-Triazole

395. 1,3, 5-Triamino-2, 4, 6-Trinitrobenzene

396. 2,4, 6-Tribromophenol

397. Trichloro dichloride

398. Trichloro Ethane

399. Trichloro Naphthalene

400. Trichlorochloromethylsilane

401. Trichlorodichlorophenylsilane

402. I, I, I-Trichloroethane

403. Trichloroethylsilane

404. Trichloroethyliene

405. Trichloromethanesulphenyl Chloride

406. 2, 2, 6-Trichlorophenol

407. 2, 4, 5-Trichlorophenol

408. Triethylamine

409. Triethylenemelamine

410. Trimethyl, Chlorosilane,

411. Trimethylopropane Phosphite

412. Trinitroaniline,

413. 2, 4, 6-Trinitroanisoc

414. Trinitrobenzene

415. Trinitrobenzoic Acid

416. Trinitrocresol

417. 2, 4, 6-Trinitrophenetole

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

419. Trinitrotoluene

420. Triorthocresyl Phosphate

421. Triphenylitin

422. Terpentine

423. Uranium and Compounds

424. Vanadium and Compounds

425. Vinyl Chloride

426. Vinyl Fluoride

427. Vinyl Toluene

428. Warfarin

429. Kylene

430. Kylidine

431. Zinc and Compounds

432. Zirconium and Compounds

Schedule 2

[See Rules 2(c)(ii), 4(1)(b), and 6(1)(c) and (d)]Isolated storage of installations other than 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 foreseeable circumstances, any aggravation of major accident hazards. These quantities apply in any case to each of the installations belonging to the same occupier where the distance between the installations is less than 500 metres.(b)For the purpose of determining the quantity of a hazardous chemical at an isolated storage, account shall also be taken of any hazardous chemical which is,-(i)in that part of a pipeline under the control of the occupier having control of the site, which is within 500 metres of that site and connected to it;(ii)at any other site under the control of the occupier, any part of the boundary of which is 500 metres of the said site; and(iii)in any vehicle, vessel, aircraft or hovercraft under the control of the same occupier which is used for storage purpose either at the site or within 500 metres of it,

		Quantity (in tonnes)	
Serial No.	Chemical or group of chemicals	..For application of rules 4, 5, 7, 8 and 9	For application of rules 10 and

			15
1	2	3	4
1	Acrylonitrile	350	5000
2	Ammonia	60	600
3	Ammonium Nitrate (A)	350*	2500*
4	Ammonium Nitrate fertilizers (B)	1250	10000
5	Chlorine	10	25
6	Flammable Gases as defined in schedule 1, paragraph (B) (I)	50	300
7	Highly Flammable Liquids as defined in schedule 1, paragraph(b) (II)		10000
8	Liquids	200	2000
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	50
16	Carbon Disulphide	5	50
17	Uromine	50	500
18	Ethylene Oxide	5	501
19	Propylene Oxide	5	50
20	Z-Propenel (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 Dibromothane (Ethylene dibromide)	5	50
25	Hydrogen Chloride	25	250
26	Diphenyl Methane di-iscoyanate (MDI)	20	200
27	Toluene di-isonyanate (TDI)	10	100]

*Added vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.Where this chemical is in a state which gives it properties capable of creating a major accident hazard.Explanation. - (a) This applies to ammonium nitrite and mixtures of ammounium nitrate where the nitrogen content derived from the ammonium nitrate is greater than 28 per cent by weight and to aqueous solutions of ammonium nitrate where the concentration of ammonium nitrate is greater than 90 per cent by weight.(b)This applies to straight ammonium nitrate fertilizers and to compound fertilizers where the nitrogen content derived from the ammonium nitrate is greater than 28 per cent by weight (a compound fertilizer contains ammonium nitrate together with

phosphate or potash or both.)

Schedule 3

[See Rules 2(c) (iii) and 6(1) (a) and (b)]List of Hazardous Chemicals for application of rules 5 and 7 to 15.(a)The quantities set out below relate to each installation or group of installations belonging to the same occupier where the distance between the installations is not sufficient to avoid unforeseeable circumstances and any aggravation of major accident hazard. These quantities apply in any case to each group of installations belonging to the same occupier where the distance between the installations is less than 500 metres.(b)For the purpose of determining the quantity of 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; and which is within 500 metres of that site and connected to it;(ii)at any other site under the control of the same occupier any part of the boundary of which, is within 500 metres of the said site; and(iii)in any vehicle, vessel, aircraft or hovercraft under the control of the same occupier, which is used for storage purpose either at the site or within 500 metres of it,but no account shall be taken of any hazardous chemical which is in a vehicle, vessel, aircraft of hovercraft used for transporting it.Listed Chemicals Part-I

Serial No.	Chemical	Quantity	Chemical	
	For application of rules 5,7, 8 and 9 and 13, 14 and 15	For application of rules of 10, 11 and 12	Abstracts Service Number	
1	2	3	4	5
	Group 1 Toxic Chemicals			
1	Aldicarb	100 Kg		06/03/26
2	4-Aminodiphenyl	1Kg		92-67-1
3	Amiton	1 Kg		78-53-5
4	Anabasine	100 Kg		494-52-0
5	Arsenic pentoxidearsenic (v) acid and salt	500 Kg		
6	Arsenic trioxide arsenious (III) acid and salt	100 Kg		
7	Arsine (Arsenic hydride)	10 Kg		7784-42-1
8	Azinphosethyl	100 Kg		2642-71-9
9	Azinphos methyl	100 Kg		86-50-0
10	Benzidine	1 Kg		92-87-5
11	Benzidine salts	1 Kg		
12	Beryllium (powders and compounds)	10 Kg		
13	Bis (2-chloromethyl) Sulphide	1 Kg		505-60-2

14	Bis (Chloroformyl) morpholine	1 Kg	542-88-1
15	Carbofuran	100 Kg	1563-66-2
16	Carbophenothion	100 Kg	786-19-6
17	Chlorfenviphos	100 Kg	470-90-6
18	4-(Chloroformyl) morpholine	1 Kg	15159-40-7
19	Chloromethyl ether	1 Kg	107-30-2
20	Cobalt metal, oxides, carbonates, sulphides as powders	1t	
21	Crimidine	100 Kg	535-89-7
22	Cyanothoate	100 Kg	3734-95-0
23	Cycloheximide	100 Kg	66-81-9
24	Demeton	100 Kg	8065-48-3
25	Kialifos	100 Kg	10311-84-9
26	oo-Diethyl S-ethylsulphinyl methyl phosphorothioate	100 Kg	05/08/88
27	oo-Diethroyl S-ethylsulphonyl methyl phosphorthioate	100 Kg	06/09/88
28	oo-Diethyl S-ethylthiomethyl phosphorodithioate	100 Kg	
29	oo-Diethyl S-isopropylthio-methyl phosphorodithioate	100 Kg	78-52-4
30	oo-Diethyl S-propylthiomethyl phosphorothiotate	100 Kg	3309-68-0
31	Dimefox	100 Kg	115-26-4
32	Dimethylcarbomoyl chloride	1 Kg	79-44-7
33	Dimethylnitorosamine	1 Kg	62-75-9
34	Dimethyl phosphoramidocyanidic actd	1 t	63917-41-9
35	Diphacinone	100 Kg	82-66-6
36	Disulfoton	100 Kg	04/04/98
37	EPN	100 Kg	2104-64-5
38	Ethion	100 Kg	12/02/63
39	Fensulfothion	100 Kg	115-90-2
40	Fluenetil	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-Fluorocrontonic acid	1 Kg	
50	4-Flurorocrontonic acid, salts	1 Kg	37759-72-1

51	4-Fluorocorotonic acid, esters	1 Kg	
52	4-Fluorocorotonic acid, amides	1 Kg	
53	4-Fluoro-2-hydroxy butyric acid	1 Kg	
54	4-Fluoro-2-hydroxy butyric acid, salts	1 Kg	
55	4-Fluoro-2-hydroxy butyric acid, esters	1 Kg	
56	4-Fluoro-2-hydroxy butyric acid, amides	1 Kg	
57	Glycolonitrile (hydroxyacetonitrile)	100 Kg	107-16-4
58	1, 2, 3, 7, 8, 9 - Hexachlorodibenzene-p-dioxin	100 Kg	19408-74-3
59	Hexamethylphosphoramide	1 Kg	680-31-9
60	Hydrogen selenide	10 Kg	07/05/83
61	Isobenzan	100 Kg	297-78-9
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	
65	Methylisocyanate	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	11	
69	Nickel tetracarbonyl	10 Kg	13463-39-3
70	Oxydisulfoton	100 Kg	07/06/97
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	02/02/98
77	Phosacetim	100 Kg	01/07/04
78	Phosgene (Carbonyl chloride)	750 Kg	75-44-5
79	Phosphamidon	100 Kg	71-21-6
80	Phosphine (Hydrogen phosphide)	100 Kg	7803-51-2
81	Promurit (1-3, 4-Dichlorophenyl-3-triazenethio-carboxamide)	100 Kg	5836-73-7
82	1, 3- Propanesultone	1 Kg	1120-71-4
83	1-Propene-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		3669-24-5
89	Sulphur dichloride	11		10545-99-0
90	Tellurium hexafluride	100 Kg		7783-80-4
91	TEPP	100 Kg		107-49-3
92	2, 3, 7, 8-Terachlorodibenzo-p-dioxin (TCDD)	1 Kg		01/06/46
93	Tetramethylenediulphotetramine	1 Kg		12/06/80
94	Thionazin	100 Kg		297-97-2
95	Tripate (2, 4-Dimethyl-1, 3-diithiolane-2-carboxaldehydeO-methylcarbomoyloxime)	100 Kg		2641-73-8
96	Trichloromethane-sulphenyl chloride	100 Kg		594-42-3
97	1-Tri (cyclohexyl) stannyl-IH-1, 2, 4 -triazole	100 Kg		41083-11-8
98	Triethylenemelamine	10 Kg		51-18-3
99..	Warfarin Group2-Toxic Chemicals (Quantity : 1 tonne)	100 Kg		81-81-2
100	Acetone cyanohydrine (2-Cyanopropan-2-01)	200 t		75-86-5
101	Acrolein (2-propenal)	20 t		02/08/07
102	Acrylonitrile	20 t	200 t	107-13-1
103	Allyalcohol (2-Propen-1-01)	200 t		107-18-6
104	Allylamine	200 t		11/09/07
105	Ammonia	50 t	500 t	7664-41-7
106	Bromine	40t		7726-95-6
107	Carbon disulphide	20t	200t	75-15-0
108	Chlorine	10t	25t	7782-50-5
109	Diphyenal methanedi-isocyanate (MDI)	20t		101-68-8
110	Ethylene dibromide(1, 2-Dibromomethane)	5t		106-93-4
111	Ethyleneimine	50t		151-56-4
112	Formaldehyde (concentration=90%)	5t		50-00-0
113	Hydrogen chloride (liquefied gas)	25t	250t	7647-01-0
114	Hydrogen cyanide	5t	20t	74-90-8
115	Hydrogen fluoride	5t	50t	7664-89-3
116	Hydrogen sulphide	5t	50t	06/04/83
117	Methyl bromide (Bromomethane)	20t		74-83-9
118	Nitrogen oxides	50t		11104-93-1
119	Propyleneimine	50t		75-55-8
120	Sulphur dioxide	20t	250t	09/05/46
121	Sulphur trioxide	15t	75t	11/09/46
122	Tetraethyl lead	5t		78-00-2

123	Tetramethyl lead	5t		75-74-1
124	Toluene di-isocyanate (TDI)Group-3 - Highly reactive chemicals	10t		584-84-9
125	Acctylene (ethyne)	5t		74-86-2
126	a. Ammonimum nitrate (1)b. Ammonimum nitrate in the form offetilizer (2)	350t1250t	2500t	6484-52-2
127	2,2-Bis (tert-butylperoxy) butane(concentration>=70%)	5t		2167-23-9
128	1, 1-Bis (Tert-butylperoxy) cyclohexane(concentration>=80%)	5t		3006-86-8
129	Tert-Butyl peroxacetate(concentration>=70%)	5t		107-71-1
130	Tert-Butyl peroxyisobutyrate(concentration>=80%)	5t		109-13-7
131	Tert-Butyl peroxyisopropyl carbonate(concentration>=80%)	5t		2372-21-6
132	Tert-Butyl peroxymaleate(concentration>=80%)	5t		1931-62-0
133	Tert-Butyl peroxypivatate(concentration>=77%)	50t		06/30/27
134	Dibenzyl peroxydicarbonate(concentration>=90%)	5 t		2144-45-8
135	Di-sec-butyl peroxydicarbonate(concentration>=90%)	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-isobutyl peroxide (concentration>=50%)	50 t		3437-84-1
139	Di--propyl peroxydicarbonate(concentration>=80%)	5 t		16-66-38-9
140	Ethuylene oxide	5 t	50 t	75-21-8
141	Ethyl nitrate	50 t		625-51-1
142	3.3, 6.6, 9.9, Hexamethyl 1, 2, 4.5-tetraxacyclonane(concentration>=75%)	50 t		22397-33-7
143	Hydrgoen	2 t	50 t	1333-74-0
144	Liquid oxygen	200 t		7782-44-7
145	Methyl ethyl ketone peroxide(concentration>=60%)	5 t		1338-23-4
146	Methyl isolbutyl ketone peroxide(concentration>=60%)	50 t		37206-20-5
147	Paracetic acid (concentration>=60%)	5 t		79-21-0
148	Propylene oxide	5 t		75-56-9
149	Sodium Chlorate Goup 4 - Explosive Chemicals	25 t		09/09/75
150	Barium azide	50 t		18810-58-7
151	Bis (2, 4, 6-trinitropehnyl) amine	50 t		131-73-7
152	Chlorotrinitrobenzene	50 t		28260-61-9
153	Cellulose nitrate (containing>=12.6% nitrogen)	50 t		9004-70-0
154	Cyclotrimethylene tetranitramine	50 t		2691-41-0
155	Cyclotrimethylenetri nitromine	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 nitrate	10 t	628-96-9
160	1-Guanyl-4-nitrosamineogumanyl-1-tetrazene	10 t	109-27-3
161	2.2'., 4.4', 6.6.'Hexanitrostibene	50 t	20062-22-0
162	Hydrazine nitrate	50 t	13464-97-6
163	Lead azide	50 t	13424-46-9
164	Leadstyphate (lead 2, 4, 6-trinitro-resorcinoxide)	50 t	15245-44-0
165	Mercury fulminate	10 t	628-86-4
166	N-Methyl-N, 2, 4, 6-tetranitroaniline	50 t	479-45-8
167	Nitrogylcernin	10 t	55-63-0
168	Pentaerythirtol tetranitrate	50 t	11/05/78
169	Picric acid (2, 4, 6-Trinitrophenol)	50 t	88-89-1
170	Sodium Picramate	50 t	831-52-7
171	Styphic 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-Trinitroanisol	50 t	606-35-9
175	Trinitrobenzene	50 t	25377-32-6
176	Trinitrobenzonic acid	50 t	35860-50-5
177	Trinitrocresol	50 t	28905-71-7
178	2, 4, 6-Trinitrophenetole	50 t	4732-14-3
179	2, 4, 6-Trinitrotoluene	50 t	118-96-7

Part-II Classes of Chemical not specifically named in Part-I

Serial No.	Classes of checmicals	Quantity (in tonnes)	
		For application of rules 5, 7, 8 and 9 and 13, 14 and 15	For application of rules 10, 11 and 12
1	2	3	4
Group-5 Flammable Chemicals			
1	Flammables gases :Chemicals which in gaseous state at normalpressure and mixed with air become flammable and the boilingpoint of which at normal pressure is 20 degree C or below	15 t	200 t

2	Highly flammable liquids :Chemicals which have a flash pointlower than 23 degree C and the boiling point of which at normalpressure is above 20 degree C;	10,000 t	50,000 t
3	Flammable liquids :Chemicals which have a flash point lowerthan 65 degree C and which remain liquid under pressure, whereparticular processing conditions, such as high pressure and hightemperature, may create major accident hazards	25 t	200 t

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

Schedule 4

[See Rule 2(d)(i)]Industrial installation within the meaning of rule 2(d)(i)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)esterification(g)halogenation and manufacture of halogens(h)hydrogenation(i)hydrolysis(j)oxidation(k)polymerization(l)sulphonation(m)desulpherization, manufacture and transformation of sulpher containing compounds.(n)nitration and manufacure of nitrogen-containing compounds(o)manufacture of phosphorous-containing compounds(p)formulation of pesticides and of pharmaceutical products(q)distillation(r)exaction(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, Liquified Petroleum Gas, Liquified Natural Gas, Synthetic Natural Gas.

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

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

Schedule 5

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

1. Chemical Identity :

Chemical Name	Chemical Classification		
Synonyms	Trade name		
Formula	Chemical Abstract Service	United Nations No. :	
			Shipping Name Codes/Label
RegulatedIdentification----------			
			Hazardous Waste Identifed Disposal No. :

Hazardous Ingredients	Chemical Abstrates Service No. :	HazardousIngredients	Chemical Abstract Service No.
1		3	
2		4	

2. PHYSICAL AND CHEMICAL DATA :. -

Boiling Range/Point	C	Physical State	Appearance
Melting/freezing Point	C	Vapour Pressure at 35	Odour mm Hg
Vapour Density(Air-1)	Solubility in water30C		Others
Specific Gravity			
Water-1	H		
	P		

3. FIRE AND EXPLOSION HAZARDS DATA :. -

Flammability	Yes/No	Lower Explosive Limit	Per cent Flash Point Co	Autoilgnition Co Temperature

Transport of Dangerous Good Flammability	Upper Explosive Limit	Per cent Flash Point Co
Explosion Sensitivity to Impact Explosion Sensitivity	Hazardous Combustion Products	
Hazardous Polymerisation		
Combustible Liquid	Explosive Material	Corrosive Material
Flammable Material	Oxidiser	Others
Pyrophoric Material	Organic	Peroxide

4. REACTIVITY DATA :. -

Chemical Stability

Incompatibility with other Material

Reactivity

Hazardous Reaction Products

5. HEALTH HAZARD DATA :. -

Routes of Entry

Effects of Exposure/Symptoms

Emergency Treatment

TLV (ACGIH)	ppra	mg/m3	STEL	ppm	mg/m3
Permissible Exposure Limit	ppm	mg/m3	Odour	Threshold	ppm mg/m3
LD 50			LD 50		
NFPA	Hazard Signals	Health	Flammability	Stability	Special

6. PREVENTIVE MEASURES

Personnel

Protective

Equipment

Handling and

Storage

Precautions

7. EMERGENCY AND FIRST-AID MEASURES :. -

FIRE	FIRE EXTINGUISHING Media
FIRE	Special Procedures Unusual Hazards
EXPOSURE	First-Aid Measure Antidotes/Dosages

SPILLS Steps to be taken Waste Disposal Method

8. ADDITIONAL INFORMATION/REFERENCES :. -

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9. MANUFACTURER/SUPPLIERS DATA :-

Name of Firm	Contact Person
	in Emergency
Mailing Address	Local Bodies
Telephone/Telex Nos.	Involved
Telegraphic Address	Standard
	Packing
	Termcard
	Details/Reference
	Other

10. DISCLAIMER

Information contained in this material data sheet is believed to be reliable but no representation, guarantee or warranties of any kind is made as to its accuracy, suitability for a particular application or results to be obtained from it. It is upto the manufacturer or seller to ensure that the information contained in the material safety data sheet is relevant to the product manufactured or handled or sold by him, as the case may be. The government makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

Schedule 6

[See Rule 5(1)]Information to be furnished regarding notification of a major accident.Report number.....of a particular accident

1. General data -

(a)Name of the site(b)Name and address of the occupier(also state the telephone and telex number, if any)(c)(i)Registration number(ii)Licence number(As may have been allotted under any statute applicable to the site, e.g. the Factories Act, 1948.)(d)(i)Nature of Industrial activity(Mention what is actually manufactured, stored etc.)(ii)National Industrial Classification, 1987 at the four digit level.

2. Type of major accident -

2. Type of major accident

Fire

Emission of hazardous Chemical

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 undertaken in the Department/Section where the accident took place (Attach a flow chart, if necessary).(d)The circumstances of the accident and the hazardous chemical involved.

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

5. Causes of the major accident -

Known (to be specified

Not known

Information will be supplied as soon as possible

6. Nature and extent of damage :-

(a)within the stablishment :

-casualties	..... Killed
	.....Injured
	.....Poisoned
person exposed to the	.....
major accident	
material damage	
-damage is still present	
danger no longer exists	

(b)Outside the establishment : ..... Killed

-casualties .....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; and(c)any other relevant information.

Schedule 7

[See Rules 7, 9, 10 (3)]Information to be furnished for the notification of activities or 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).

4. The date on which it is anticipated that the notifiable industrial activity will commence or 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 about the major accident; and(c)a brief description of the measures taken.

8. Information relating to the site, namely :-

(a)a map of the site and its surroudnding area to a scale large enough to show any features that may be significant the site -the site:-(i)area likely to be affected by the major accident; and(ii)population distribution in the vicinity.(b)a scale plan of the site showing the location and quantity or all significant inventories of the hazardous chemical;(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 indication of the conditions under which it is normally held; and(d)the maximum number of persons likely to be present on the site.

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

Schedule 8

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

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

2. Description of the industrial activity, namely :-

(a)Site;(b)construction design;(c)protection zones (explosion protection, separation distances);(d)accessibility of plant; and(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 state;(d)process description; and(e)safety-related types of utilities.

4. Description of the hazardous chemicals, namely :-

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

chemical.

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

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

6. Description of sfety-relevent units, among others :-

(a)special design criteria;(b)controls and alarms;(c)pressure relief systems;(d)quick-acting valves;(e)collecting tanks or dump tanks;(f)sprinkler systems; and(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; and(f)known accident history.

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

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

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

(a)assessment of the possible release of hazardous chemicals or of energy;(b)possible dispersion of released chemicals; and(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 orgaisation used to fight the emergency, the alarm and communication routes, guidelines for fighting the emergency, examples of possible accident sequences;(d)coordination with Collector or the Authority and its off-site emergency plan;(e)notification of the nature and scope of the hazard in the event of an accident; and(f)antidotes in the event of a release of a hazardous chemical.[Schedule 8-A] [Added vide Punjab Notification No. G.S.R.45/C.A. 63/48/S. 112/Amd. (I)/2002, dated 27.11.2002.][See rule 13(I)]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 responsibility assigned to them in case of an emergency.

3. Outside organisations, if involved in assisting during on-site emergency :

(a)Type of accidents(b)Responsibility assigned

4. Details of liaison arrangement between the organisation.

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 relevant 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 and safety and security systems;(ii)alarm and hazard control plan in line with disaster control and hazard control planning, ensuring the necessary technical and organisational precautions;(iii)reliable measuring instuments, control units and servicing of such equipments;(iv)precautions in designing of the foundation and load bearing parts of building;(v)continuous surveillance 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.