



CHEMSYNTH CORPORATION

(Exporter of chemical Raw materials)

B 406 kailas Business park,Veer savarkar marg,Vikhroli powai link raod,

Vikhroli (west) Mumbai 400 079, India. Tele: +91 22 6692 0467 , 6221 5429

Email info@chemsynth.co.in

p-Chloroaniline MSDS

Section 1: Chemical Product and Company Identification Product Name: P-Chloroaniline Catalog Code: 10466 CAS#: 106-47-8 RTECS: CAS# 108-42-9: BX0350000 TSCA: listed on the TSCA inventory Synonym: 3-Chloroaniline Chemical Formula: C₆H₆ClN

Section 2: Composition and Information on Ingredients Composition: Name CAS # % P-Chloroaniline 106-47-8 100 Hazard Symbols: T C N Risk Phrases: 33 34 24/25 50/53

Section 3: Hazards Identification EMERGENCY OVERVIEW Danger of cumulative effects. Causes burns. Toxic in contact with skin and if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Light sensitive. Air sensitive. Corrosive. Potential Health Effects Eye: Causes eye burns. Skin: Causes skin burns. Substance is rapidly absorbed through the skin. If absorbed, may cause symptoms similar to those for ingestion. Ingestion: Harmful if swallowed. May cause irritation of the digestive tract. May cause liver and kidney damage. May cause methemoglobinemia, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), convulsions, and death. Methemoglobinemia is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), rapid heart rate and chocolate-brown colored blood. May cause central nervous system effects. May cause discoloration of the lips, tongue, and mucous membranes. Inhalation: Harmful if inhaled. May cause respiratory tract irritation. May cause effects similar to those described for ingestion. Chronic: May cause cancer according to animal studies. Health 3 Fire 0 Reactivity 2 Personal Protection E 0 3 2

Section 4: First Aid Measures Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Skin: Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician:

Section 5: Fire and Explosion Data General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam. Do NOT use straight streams of water.

Section 6: Accidental Release Measures General Information: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

Section 7: Handling and Storage Handling: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Storage: Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8: Exposure Controls/Personal Protection Engineering Controls: Use adequate ventilation to keep airborne concentrations low. Exposure Limits CAS# 108-42-9: Russia: 0.05 mg/m³ TWA Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate protective gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to prevent skin exposure. Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9: Physical and Chemical Properties Physical State: Liquid Color: clear to light yellow Odor: None reported. pH: Not available. Vapor Pressure: 0.05 mm Hg @20C Viscosity: Not available. Boiling Point: 229.8 deg C Freezing/Melting Point: -10.4 deg C Autoignition Temperature: 500 deg C (932.00 deg F) Flash Point: 190 deg C (374.00 deg F) Explosion Limits, lower: Not available. Explosion Limits, upper: Not available. Decomposition Temperature: 190 deg C Solubility in water: Insoluble. Specific Gravity/Density: 1.2060g/cm³ Molecular Formula: C₆H₆ClN Molecular Weight: 127.57

Section 10: Stability and Reactivity Data Chemical Stability: Stable under normal temperatures and pressures. Substance may undergo color change upon exposure to light and air. Conditions to Avoid: Incompatible materials, strong oxidants. Incompatibilities with Other Materials: Acids, acid chlorides, acid anhydrides, strong oxidizing agents, chloroformates. Hazardous Decomposition Products: Hydrogen chloride, nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen. Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information RTECS#: CAS# 108-42-9: BX0350000 LD50/LC50: CAS# 108-42-9: Dermal, guinea pig: LD50 = 100 mg/kg; Inhalation, mouse: LC50 = 550 mg/m³/4H; Oral, mouse: LD50 = 334 mg/kg; Oral, rat: LD50 = 256 mg/kg; Skin, rat: LD50 = 250 mg/kg. Oral, guinea pig: LD50 = Carcinogenicity: m-Chloroaniline - Not listed by ACGIH, IARC, or NTP. Other: See actual entry in RTECS for complete information.

Section 12: Ecological Information Not available

Section 13: Disposal Considerations Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

Section 14: Transport Information IATA Shipping Name: CHLOROANILINES, LIQUID Hazard Class: 6.1 UN Number: 2019 Packing Group: II IMO Shipping Name: CHLOROANILINES, LIQUID Hazard Class: 6.1 UN Number: 2019 Packing Group: II RID/ADR Shipping Name: CHLOROANILINES, LIQUID Hazard Class: 6.1 UN Number: 2019 Packing group: II

Section 15: Other Regulatory Information European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols: T C N Risk Phrases: R 24/25 Toxic in contact with skin and if swallowed. R 33 Danger of cumulative effects. R 34 Causes burns. R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Safety Phrases: S 28 After contact with skin, wash immediately with... S 28A After contact with skin, wash immediately with plenty of water. S 36/37 Wear suitable protective clothing and gloves. S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S 60 This material and its container must be disposed of as hazardous waste. S 61 Avoid release to the environment. Refer to special instructions/safety data sheets. WGK (Water Danger/Protection) CAS# 108-42-9: 2 Canada CAS# 108-42-9 is listed on Canada's DSL List. CAS# 108-42-9 is listed on Canada's Ingredient Disclosure List. US FEDERAL TSCA CAS# 108-42-9 is listed on the TSCA inventory.

Section 16: Other Information References: Not available. Other Special Considerations: Not available. Created: 10/06/2010 Last Updated: 24/11/2012 The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Finar Limited be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Finar Limited has been advised of the possibility of such damages.