

P-CHLOROANILINE

CAP

CAUTIONARY RESPONSE INFORMATION			
Common Synonyms 1-Amino-4-chlorobenzene 4-Chloroaniline 4-Chlorophenylamine	Solid Sinks and mixes slowly with water.	Yellowish white	Mild sweet odor
KEEP PEOPLE AWAY. AVOID CONTACT WITH SOLID AND DUST. Wear rubber overclothing (including gloves) and dust respirator. Call fire department. Stay upwind. Use water spray to "knock down" dust. Notify local health and pollution control agencies. Protect water intakes.			
Fire	Combustible. POISONOUS GASES ARE PRODUCED IN FIRE. Wear goggles and self-contained breathing apparatus. Extinguish with water, dry chemicals, foam, or carbon dioxide. Cool exposed containers with water.		
Exposure SOLID AND DUST POISONOUS IF SWALLOWED OR IF SKIN IS EXPOSED. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk and have victim induce vomiting. IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.			
Water Pollution	Effect of low concentrations on aquatic life is unknown. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.		

1. CORRECTIVE RESPONSE ACTIONS	2. CHEMICAL DESIGNATIONS	3. HEALTH HAZARDS
Stop discharge Contain Collection Systems: Skim; Dredge	2.1 CG Compatibility Group: Not listed. 2.2 Formula: 4-ClC ₆ H ₄ NH ₂ 2.3 IMO/UN Designation: 6.1/2018 2.4 DOT ID No.: 2018 2.5 CAS Registry No.: 106-47-8 2.6 NAERG Guide No.: 152 2.7 Standard Industrial Trade Classification: 51453	3.1 Personal Protective Equipment: Rubber gloves; chemical goggles; protective clothing; dust respirator. 3.2 Symptoms Following Exposure: Inhalation or ingestion causes bluish tint to fingernails, lips, and ears indicative of cyanosis; headache, drowsiness, and nausea, followed by unconsciousness. Liquid can be absorbed through skin and cause similar symptoms. Contact with eyes causes irritation. 3.3 Treatment of Exposure: INHALATION: remove victim from exposure immediately; if needed, administer oxygen; refer to physician. EYES: flush with water for at least 15 min. SKIN: remove victim from exposure immediately; remove contaminated clothing; wash contacted area with copious amounts of water and soap; if needed, administer oxygen; refer to physician. INGESTION: induce vomiting; get medical attention. 3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Grade 3; oral LD ₅₀ = 300 mg/kg (rat) 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Currently not available 3.10 Vapor (Gas) Irritancy Characteristics: Currently not available 3.11 Liquid or Solid Characteristics: Currently not available 3.12 Odor Threshold: Currently not available 3.13 IDLH Value: Not listed. 3.14 OSHA PEL-TWA: Not listed. 3.15 OSHA PEL-STEL: Not listed. 3.16 OSHA PEL-Ceiling: Not listed. 3.17 EPA AEGL: Not listed

4. FIRE HAZARDS	7. SHIPPING INFORMATION
4.1 Flash Point: (Combustible solid) > 220°F O.C. 4.2 Flammable Limits in Air: Not pertinent 4.3 Fire Extinguishing Agents: Water, dry chemical, foam or carbon dioxide 4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent 4.5 Special Hazards of Combustion Products: Irritating and toxic hydrogen chloride and oxides of nitrogen may form in fires. 4.6 Behavior in Fire: Currently not available 4.7 Auto Ignition Temperature: Currently not available 4.8 Electrical Hazards: Not pertinent 4.9 Burning Rate: Not pertinent 4.10 Adiabatic Flame Temperature: Currently not available 4.11 Stoichiometric Air to Fuel Ratio: 39.3 (calc.) 4.12 Flame Temperature: Currently not available 4.13 Combustion Molar Ratio (Reactant to Product): 10.5 (calc.) 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	7.1 Grades of Purity: 99.0%, Technical 7.2 Storage Temperature: Ambient 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open (flame arrester). Store containers in a well-ventilated area. 7.5 IMO Pollution Category: Currently not available 7.6 Ship Type: Currently not available 7.7 Barge Hull Type: Currently not available
	8. HAZARD CLASSIFICATIONS
	8.1 49 CFR Category: Poison 8.2 49 CFR Class: 6.1 8.3 49 CFR Package Group: II 8.4 Marine Pollutant: No 8.5 NFPA Hazard Classification: Not listed 8.6 EPA Reportable Quantity: 1000 pounds 8.7 EPA Pollution Category: C 8.8 RCRA Waste Number: P024 8.9 EPA FWPCA List: Not listed
	9. PHYSICAL & CHEMICAL PROPERTIES
	9.1 Physical State at 15°C and 1 atm: Solid 9.2 Molecular Weight: 127.6 9.3 Boiling Point at 1 atm: 446°F = 230°C = 503°K 9.4 Freezing Point: 158°F = 70°C = 343°K 9.5 Critical Temperature: Not pertinent 9.6 Critical Pressure: Not pertinent 9.7 Specific Gravity: 1.43 at 19°C (solid) 9.8 Liquid Surface Tension: Not pertinent 9.9 Liquid Water Interfacial Tension: Not pertinent 9.10 Vapor (Gas) Specific Gravity: Not pertinent 9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent 9.12 Latent Heat of Vaporization: Not pertinent 9.13 Heat of Combustion: (est.) -11,000 Btu/lb = -6,000 cal/g = -250 X 10 ³ J/kg 9.14 Heat of Decomposition: Not pertinent 9.15 Heat of Solution: Not pertinent 9.16 Heat of Polymerization: Not pertinent 9.17 Heat of Fusion: Currently not available 9.18 Limiting Value: Currently not available 9.19 Reid Vapor Pressure: Currently not available

NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
	NOT PERTINENT		NOT PERTINENT		NOT PERTINENT		NOT PERTINENT

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
86	0.400	150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400	0.028 0.038 0.052 0.069 0.092 0.120 0.157 0.202 0.260 0.331 0.418 0.526 0.657 0.815 1.006 1.235 1.508 1.831 2.213 2.662 3.188 3.800 4.512 5.334 6.282 7.370	150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400	0.00055 0.00074 0.00098 0.00129 0.00168 0.00217 0.00278 0.00354 0.00448 0.00562 0.00701 0.00869 0.01070 0.01310 0.01595 0.01932 0.02328 0.02792 0.03331 0.03957 0.04680 0.05511 0.06464 0.07551 0.08788 0.10190		NOT PERTINENT