

ATRAZINE

ATZ

CAUTIONARY RESPONSE INFORMATION

Common Synonyms Aatrex herbicide 2-Chloro-4-ethylamino-6-Isopropylamino-s-triazine		Solid crystals White Sinks in water.
Restrict access. AVOID CONTACT WITH SOLID AND DUST. KEEP PEOPLE AWAY. Wear goggles and self-contained breathing apparatus. Stay upwind. Use water spray to "knock down" dust. Notify local health and pollution control agencies. Protect water intakes.		
Fire	Not flammable. POISONOUS GASES MAY BE PRODUCED WHEN HEATED.	
Exposure	CALL FOR MEDICAL AID. DUST POISONOUS IF INHALED. Irritating to eyes, nose and throat. Move victim to fresh air. If in eyes, hold eyelids open and flush with plenty of water. If breathing is difficult, give oxygen. SOLID POISONOUS IF SWALLOWED. Irritating to skin and eyes. 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	HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.	

1. CORRECTIVE RESPONSE ACTIONS

Stop discharge
 Contain
 Collection Systems: Skim; Dredge

2. CHEMICAL DESIGNATIONS

2.1 **CG Compatibility Group:** Not listed.
 2.2 **Formula:** C₈H₁₄N₆Cl
 2.3 **IMO/UN Designation:** 6.1/1609
 2.4 **DOT ID No.:** Not listed.
 2.5 **CAS Registry No.:** 1912-24-9
 2.6 **NAERG Guide No.:** Not listed
 2.7 **Standard Industrial Trade Classification:** 59110

3. HEALTH HAZARDS

- 3.1 **Personal Protective Equipment:** Dust mask; goggles; rubber gloves.
 3.2 **Symptoms Following Exposure:** Irritates eyes and skin. If ingested, irritates mouth and stomach.
 3.3 **Treatment of Exposure:** EYES: flush with copious amounts of water for 15 min. SKIN: wash with large amounts of water. INGESTION: no specific antidote; induce vomiting and give a saline laxative and supportive therapy.
 3.4 **TLV-TWA:** 5 mg/m³
 3.5 **TLV-STEL:** Not listed.
 3.6 **TLV-Ceiling:** Not listed.
 3.7 **Toxicity by Ingestion:** Grade 2; oral rat LD₅₀ = 3080 mg/kg
 3.8 **Toxicity by Inhalation:** Currently not available.
 3.9 **Chronic Toxicity:** Currently not available
 3.10 **Vapor (Gas) Irritant Characteristics:** Vapors are nonirritating to eyes and throat.
 3.11 **Liquid or Solid Characteristics:** Causes smarting of the skin and first-degree burns on short exposure and may cause second-degree burns on long exposure.
 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

- 4.1 **Flash Point:**
 Not flammable
 4.2 **Flammable Limits in Air:** No reaction
 4.3 **Fire Extinguishing Agents:** Not pertinent
 4.4 **Fire Extinguishing Agents Not to Be Used:** Currently not available
 4.5 **Special Hazards of Combustion Products:** Irritating hydrogen chloride and toxic oxides of nitrogen may be formed.
 4.6 **Behavior in Fire:** Not pertinent
 4.7 **Auto Ignition Temperature:** Not pertinent
 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:** Not pertinent
 4.12 **Flame Temperature:** Currently not available
 4.13 **Combustion Molar Ratio (Reactant to Product):** Not pertinent
 4.14 **Minimum Oxygen Concentration for Combustion (MOCC):** Not listed

5. CHEMICAL REACTIVITY

- 5.1 **Reactivity with Water:** No reaction
 5.2 **Reactivity with Common Materials:** No reaction
 5.3 **Stability During Transport:** Stable
 5.4 **Neutralizing Agents for Acids and Caustics:** Not pertinent
 5.5 **Polymerization:** Not pertinent
 5.6 **Inhibitor of Polymerization:** Not pertinent

6. WATER POLLUTION

- 6.1 **Aquatic Toxicity:**
 12.6 mg/l/48 hr/rainbow trout/TL₅₀/fresh water
 6.2 **Waterfowl Toxicity:** >2000 mg/kg LD₅₀
 6.3 **Biological Oxygen Demand (BOD):**
 Currently not available
 6.4 **Food Chain Concentration Potential:**
 None
 6.5 **GESAMP Hazard Profile:**
 Bioaccumulation: 0
 Damage to living resources: 2
 Human Oral hazard: 1
 Human Contact hazard: II
 Reduction of amenities: XX

7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** Various grades, 70-80%. Mixtures with sodium chlorate and sodium metaborate.
 7.2 **Storage Temperature:** Ambient
 7.3 **Inert Atmosphere:** No requirement
 7.4 **Venting:** Open
 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:** Not listed
 8.2 **49 CFR Class:** Not pertinent
 8.3 **49 CFR Package Group:** Not listed.
 8.4 **Marine Pollutant:** No
 8.5 **NFPA Hazard Classification:**
- | Category | Classification |
|---------------------------|----------------|
| Health Hazard (Blue)..... | 1 |
| Flammability (Red)..... | 1 |
| Instability (Yellow)..... | 0 |
- 8.6 **EPA Reportable Quantity:** Not listed.
 8.7 **EPA Pollution Category:** Not listed.
 8.8 **RCRA Waste Number:** Not listed
 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:** 215.7
 9.3 **Boiling Point at 1 atm:** Decomposes
 9.4 **Freezing Point:** 347°F = 175°C = 348°K
 9.5 **Critical Temperature:** Not pertinent
 9.6 **Critical Pressure:** Not pertinent
 9.7 **Specific Gravity:** (est.) 1.2 at 20°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.) -9,500 Btu/lb = -5,300 cal/g = -220 X 10³ 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

ATRAZINE

ATZ

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
	N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T

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
	I N S O L U B L E		N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T