

# MATERIAL SAFETY DATA SHEET

# ATRAZINE 4L HERBICIDE

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### FORMULATED FOR:

Loveland Products, Inc.  
P.O. Box 1286 • Greeley, CO 80632-1286

**24-Hour Emergency Phone:** 1-800-424-9300  
**Medical Emergencies:** 1-800-301-7976

**PRODUCT NAME:** ATRAZINE 4L HERBICIDE  
**CHEMICAL NAME:** Atrazine: 2-chloro-4-ethylamino-6-isopropylamino-s-triazine  
**CHEMICAL FAMILY:** Triazine Herbicide  
**EPA REG. NO.:** 34704-69  
**MSDS Number:** 000069-03-LPI **MSDS Revisions:** New

**Date Of Issue:** 10/29/03

**Supersedes:** New

## 2. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Atrazine	42.20	1912-24-9	5 mg/m <sup>3</sup>
Related Compounds	0.80		
Ethylene Glycol	5.00	107-21-1	100 mg/m <sup>3</sup> (C)
Inert Ingredients	52.00		

## 3. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION** – Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Keep away from food and feedstuffs.

This product is off-white to light brown aqueous suspension with virtually no odor.

### Warning Statements:

**NOTE TO PHYSICIAN:** There is no specific antidote for Atrazine. If this product is ingested, induce emesis or lavage stomach. The use of an aqueous slurry of activated charcoal may be considered.

## 4. FIRST AID MEASURES

**If Swallowed:** Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If Inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**If in Eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976.** Have the product label or container with you when calling a poison control center or doctor, or going for treatment.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT (°F/Test Method):** >200°F/>93.4°C (PMCC)

**FLAMMABLE LIMITS (LEL & UEL):** None established

**EXTINGUISHING MEDIA:** Considered non-combustible, use medium appropriate to surrounding fire. Dry chemical, carbon dioxide, foam, water spray or fog.

**HAZARDOUS COMBUSTION PRODUCTS:** Oxides of nitrogen, acetonitrile, chlorine-containing compounds, hydrogen cyanide, and fluorine-containing compounds may form in a fire situation. Incomplete combustion may lead to formation of carbon monoxide and/or other asphyxiants.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus with full protective clothing. Fight fire from upwind and keep all non-essential personnel out of area.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** If water is used to fight fire and cool the containers, contain run-off by diking to prevent contamination of water supplies. Containers in fire may burst or explode from excessive heat.

## 6. ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbent material and place into compatible disposal container. Scrub the spill area with hard water detergent (e.g. commercial products such as Tide®, Joy®, Spic and Span®). Pick up wash liquid with additional absorbent and place into disposal container. Once all material is cleaned up and placed in a disposal container, seal the container(s) and handle in an approved manner. Check local, state and federal regulations for proper disposal.

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**7. HANDLING AND STORAGE**

**HANDLING:** Safety glasses with side shields or goggles and rubber gloves should be worn when handling product. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after using this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**STORAGE:** Do not store below 0°F/-17.8°C. If frozen, warm to 40°F/4.4°C and reconstitute before using by rolling and shaking the container. Store in a safe manner. Store in original container only. Keep container tightly closed when not in use. Do not contaminate water supplies by handling and storage of product.

**EPA HANDLER REQUIREMENTS**

**Worker Protection Standard – 40 CFR 170**

**Personal Protective Equipment: Applicators and other handlers must wear:** long sleeved shirt and long pants, chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, or Viton®, and chemical-resistant footwear plus socks. **Mixers and loaders must wear:** long sleeved shirt and long pants, chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, or Viton®, and chemical-resistant footwear plus socks, and protective eyewear. Follow manufacturer’s instructions for cleaning and maintaining PPE. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**RESPIRATORY PROTECTION:** Not normally required, if vapors or mists exceed acceptable levels, wear a NIOSH approved respirator with an N, P or R 95 class filter and an organic vapor cartridge or air-supplied respirator.

**EYE PROTECTION:** Chemical goggles or shielded safety glasses.

**SKIN PROTECTION:** Wear protective clothing: long-sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-resistant gloves.

	<b>OSHA PEL 8 hr TWA</b>	<b>ACGIH TLV-TWA</b>
Atrazine	not established	5 mg/m <sup>3</sup>
Ethylene Glycol	not established	100 mg/m <sup>3</sup> (Ceiling – Aerosol)

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Off-white to light brown aqueous suspension with virtually no odor

**SPECIFIC GRAVITY (Water= 1):** 1.106 g/ml

**VAPOR PRESSURE:** Not established

**PERCENT VOLATILE (by volume):** Not established

**Note:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

**BULK DENSITY:** 9.23 lbs/gal.

**BOILING POINT:** Not established

**EVAPORATION RATE:** Not established

**SOLUBILITY:** Disperses

**pH:** 4.54 (5% solution)

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable

**INCOMPATIBILITY:** Strong bases and oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of nitrogen, acetonitrile, chlorine-containing compounds, hydrogen cyanide, and fluorine-containing compounds may form in a fire situation. Incomplete combustion may lead to formation of carbon monoxide and/or other asphyxiants.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Excessive heat and extreme cold.

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral LD<sub>50</sub> (rat):** 1,780 mg/kg

**Eye Irritation (rabbit):** Slight irritant

**Inhalation LC<sub>50</sub> (rat):** >0.52 mg/L (4 hr).

**Carcinogenic Potential:** None listed in OSHA, NTP or ACGIH; IARC Group 3

**Target Organs:** Atrazine: Heart; Ethylene Glycol: Blood, kidney, CNS

**Acute Dermal LD<sub>50</sub> (rabbit):** >7,500 mg/kg

**Skin Irritation (rabbit):** Slight irritant

**Skin Sensitization:** Not established.

**12. ECOLOGICAL INFORMATION**

Summary of Effects

Atrazine is slightly toxic to fish and invertebrates. Practically non-toxic to birds and bees.

**Eco-Acute Toxicity**

	<u>LC<sub>50</sub>/EC<sub>50</sub></u>		<u>LC<sub>50</sub>/EC<sub>50</sub></u>
Rainbow Trout	9.9 ppm	Invertebrates (Water Flea)	> 31 ppm
Bluegill Sunfish	54.5 ppm		

**Bobwhite Oral LD<sub>50</sub>:** no data available

**Mallard Oral LD<sub>50</sub>:** no data available

**Bobwhite 8-day Dietary LC<sub>50</sub>:** >5000 ppm

**Mallard 8-day Dietary LC<sub>50</sub>:** >5000 ppm

**Eco-Chronic Toxicity**

**Atrazine:** Fish (Fathead minnow) Early Life Stage MATC >0.25 and <0.46 mg/L

Invertebrate (Ceriodaphnia dubia) Life Cycle NOEL 2.5 ppm

Mallard Reproduction NOEC 225 ppm a.i.

Bobwhite Reproduction NOEC 225 ppm a.i.

**13. DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local, state and federal regulations. Do not reuse product containers  
 Plastic Jugs: Triple rinse (or equivalent), then offer for recycling at an ACRC site or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state and federal regulations.

**14. TRANSPORT INFORMATION**

**DOT Shipping Description:** NOT REGULATED BY USDOT  
**U.S. Surface Freight Classification:** COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2:CLASS: 60)  
**Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.**

**15. REGULATORY INFORMATION**

<b>NFPA &amp; HMIS Hazard Ratings:</b>	NFPA		HMIS
	1 Health	0 Least	1 Health
	1 Flammability	1 Slight	1 Flammability
	0 Instability	2 Moderate	0 Reactivity
		3 High	H PPE
		4 Severe	

**SARA Hazard Notification/Reporting**  
**SARA Title III Hazard Category:** Immediate Y Fire N Sudden Release of Pressure N  
 Delayed Y Reactive N

**Reportable Quantity (RQ) under U.S. CERCLA:** Ethylene Glycol (CAS: 107-21-1) 5000 pounds.  
**SARA, Title III, Section 313:** Atrazine (CAS: 1912-24-9) 42.2%; Ethylene Glycol (CAS: 107-21-1) 5.0%  
**RCRA Waste Code:** Not listed  
**CA Proposition 65:** Not listed.

**16. OTHER**

**MSDS STATUS:** New  
**PREPARED BY:** Registrations and Regulatory Affairs **REVIEWED BY:** Environmental/ Regulatory Services  
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 This product is a Restricted Use Pesticide (Ground and Surface Water Concerns)

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