

# MATERIAL SAFETY DATA SHEET

## I. COMPANY/PRODUCT IDENTIFICATION

Winfield Solutions, LLC  
P.O. Box 64589  
St. Paul, MN 55164-0589

In Case of Medical Emergency Call:  
(877) 424-7452 [US]  
or Chemical Emergency Call: (800) 424-9300  
[CHEMTREC,24 hours]

**PRODUCT NAME:** ATRAZINE 4L  
**Product Class:** Triazine Herbicide  
**Synonyms:** Atrazine  
**Active Ingredient(s) and/  
or Primary Component(s) :** 2-chloro, 4-ethylamino, 6-isopropylamino -s- triazine

**Chemical Family:** Mixture

**EPA Reg. No. 1381-158**

## 2. COMPOSITION/INFORMATION OF HAZARDOUS INGREDIENTS

CHEMICAL NAME (INGREDIENTS)	CAS NUMBER	HAZARD	% BY WEIGHT
Atrazine	1912-24-9	OSHA	40.8
Related Triazines		OSHA	2.2
Ethylene Glycol	107-21-1	OSHA	>6.0
Formulation Aids*		No	54.0

*\*Trade secret information available as provided in 29 CFR 1910.1200 (i)*

For EXPOSURE GUIDELINES, See page 3, section 8 of this MSDS

## 3. HAZARDS IDENTIFICATION

### EFFECTS OF OVEREXPOSURE

#### ACUTE (SHORT TERM EXPOSURE):

EYE: May cause slight tempory irritation SKIN CONTACT: Prolonged exposure may cause skin irritation and redness. INGESTION: May cause gastric distress, lethargy, muscle weakness. INHALATION: May cause labored breathing.

**CHRONIC (LONG TERM EXPOSURE):**

Not listed as a carcinogen by NRC, IARC or OSHA

**GENERAL PRECAUTIONS:**

Always practice good industrial hygiene; handle with care; avoid personal contact. Do not get into eyes or on skin; do not breathe mist or vapor of product. Do not swallow. Wash hands with soap and water and rinse after handling product. Shower after each shift. Wash all work clothing and completely clean all PPE (personal protective equipment) after each shift.

**MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE:**

Skin contact may aggravate preexisting skin conditions. Inhalation of mists may aggravate preexisting respiratory

**PRIMARY ROUTE OF ENTRY:**       **INHALATION**     **INGESTION**       **ABSORPTION**

**4. FIRST AID MEASURES**

Have the product container or label with you when calling a Poison Control Center or doctor, or going for treatment.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses after the first 5 minutes, then continue rinsing eye. Call a Poison Control Center or doctor for 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 INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance then give artificial respiration, preferably mouth-to-mouth if possible. Call a Poison Control Center or doctor for further treatment advice.

**IF SWALLOWED:** Call a Poison Control Center or doctor immediately 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.

**NOTE TO PHYSICIAN: (ANTIDOTE)** 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. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically.

**5. FIRE FIGHTING MEASURES**

FLASH POINT	FLAMMABLE LIMITS	LOWER EXPLOSIVE LIMIT (LEL)	UPPER EXPLOSIVE LIMIT (UEL)
N/E	N/E	N/E	N/E

**EXTINGUISHING MEDIA:**

FOAM       CO<sub>2</sub>       DRY CHEMICAL       WATER SPRAY       OTHER (SPECIFY):

**SPECIAL FIRE FIGHTING PROCEDURES:**

If water is used, use a soft fog to avoid spreading contamination. Use self-contained breathing apparatus and full protective gear in confined areas of buildings. Contain water to prevent entry into water supplies.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

None known.

**6. ACCIDENTAL RELEASE MEASURES****STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Dike the area using absorbent or materials such as sand or clay. Recover and contain as much product as possible

using absorbent. Clean spill area using a solution of water and detergent. Collect and contain wash water and all contaminated absorbent for disposal. If spilled on the ground, the affected area should be excavated to a depth of 1 - 2 inches. Prevent the spilled product or washings from reaching public sewers or waterways. Wear appropriate protective equipment during the cleanup. Ensure that tools and equipment are adequately decontaminated.

#### REPORTABLE QUANTITY (RQ) UNDER CERCLA:

For Ethylene Glycol – 5000 lbs.

### 7. HANDLING AND STORAGE

#### STORAGE TEMPERATURES:

INDOOR       OUTDOOR       REFRIGERATED

#### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Store in area designated specifically for pesticides. Do not store near any material intended for use or consumption by humans or animals. Store in a cool dry place. Do not store in direct sunlight. Do not contaminate water, food, or feed by storage, disposal, or by cleaning of equipment. Do not reuse empty container. Open dumping is prohibited.

OTHER PRECAUTIONS: N/A

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### CHEMICAL NAME

#### EXPOSURE LIMITS

Atrazine (technical)	- OSHA (TWA) - N/E , ACGIH (TLV) - 5 mg/m <sup>3</sup>
Ethylene Glycol	- OSHA (TWA) - N/E , ACGIH (TLV) – 125 mg/m <sup>3</sup> TWA

*\*Trade secret information available as provided in 29 CFR 1910.1200 (i)*  
VALUES ARE 8-HR. TIME-WEIGHTED-AVERAGES UNLESS OTHERWISE SPECIFIED

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (cont.)

**ENGINEERING CONTROLS:** Local exhaust or general ventilation to maintain exposure below PEL.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**EYE/FACE PROTECTION:** Safety glasses or goggles.

**HAND/SKIN PROTECTION:** Chemical resistant gloves, coveralls, apron and foot coverings.

**RESPIRATORY PROTECTION:** If required, use NIOSH/MSHA approved respirator for organic vapors. Use positive pressure where exposure limits are exceeded.

**WORK PRACTICES:** Minimize exposure. Wear appropriate PPE to prevent the probability of exposure and personal contact. Wash with soap and rinse thoroughly after handling material and before eating, drinking, smoking or using restroom facilities. Shower after each shift. Deluge safety shower and eye wash should be located in work area.

***NOTE TO END-USERS:*** *The employee protection recommendations on this MSDS may differ from those on the product label. For normal use of this product, always refer to the personal protective equipment requirements on the product label.*

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE:</b>	White or near white colored liquid	<b>pH (AS IS):</b>	N/E
<b>BOILING POINT (°F):</b>	~103° C	<b>SOLUBILITY (WATER):</b>	Miscible
<b>BULK DENSITY:</b>	N/A	<b>SPECIFIC GRAVITY:</b>	1.10

<b>COLOR:</b>	White or near white	<b>VAPOR DENSITY (Air = 1):</b>	N/E
<b>EVAP. RATE (BuAc=01):</b>	N/E	<b>VAPOR PRESSURE (mmHg):</b>	$3 \times 10^{-7}$ mmHg @ 68° F
<b>FREEZING POINT (°F):</b>	N/E	<b>VISCOSITY:</b>	N/E
<b>ODOR:</b>	Odorless	<b>% VOLATILE BY VOLUME:</b>	N/E

**10. STABILITY AND REACTIVITY**

<b>CONDITIONS TO AVOID:</b>	Avoid freezing and extreme heat conditions
<b>INCOMPATIBILITY (MATERIALS TO AVOID):</b>	Strong bases and acids
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	Ammonia, hydrogen chloride, ethyl chloride, and carbon monoxide.
<b>STABILITY:</b>	<input checked="" type="checkbox"/> STABLE <input type="checkbox"/> UNSTABLE
<b>HAZARDOUS POLYMERIZATION:</b>	<input type="checkbox"/> WILL OCCUR <input checked="" type="checkbox"/> WILL NOT OCCUR

**11. TOXICOLOGICAL INFORMATION**

<b>ORAL LD<sub>50</sub></b>	<b>DERMAL LD<sub>50</sub></b>	<b>INHALATION LC<sub>50</sub></b>
Rat = 4346 mg/kg (extrapolated from technical)	Rabbit = >3100 mg/kg (extrapolated from technical)	N/E

**EFFECTS TO EYES:** Non irritating.

**EFFECTS TO SKIN:** Slightly irritating.

**11. TOXICOLOGICAL INFORMATION (cont.)****CARCINOGENICITY REFERENCE SOURCES:**

<b><u>I.A.R.C.</u></b>	Yes	<b><u>N.T.P.</u></b>	Yes	<b><u>O.S.H.A.</u></b>	<input type="checkbox"/> Yes
	X No		X No		<input checked="" type="checkbox"/> No

**12. ECOLOGICAL INFORMATION****13. DISPOSAL CONSIDERATIONS**

**RCRA – FEDERAL HAZARDOUS WASTE INFORMATION:** N/A\*

\* See 40 CFR Part 261 and contact your local regulatory agency for additional information and requirements.

**PESTICIDE DISPOSAL:**

Dispose of waste at an approved disposal facility.

**CONTAINER DISPOSAL:**

Completely empty container into application equipment. This dispose of empty container in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**14. TRANSPORT INFORMATION**

<b>REGULATED BY:</b>	<input type="checkbox"/> Domestic Road/Rail (DOT)
	<input type="checkbox"/> Export Water (IMO)
	<input type="checkbox"/> Air (ICAO/IATA)
	<input checked="" type="checkbox"/> Not regulated as a hazardous material by any mode of transportation.

**DOMESTIC ROAD/RAIL (DOT)**

<b>For Package Sizes:</b>	<u>Not regulated.</u> [If shipped non-bulk in US over highway.]
<b>Proper Shipping Name:</b>	N/A (not regulated).
<b>ERG Number:</b>	
<b>Placard (&gt;1001 lbs.):</b>	N/A
<b>Other Information:</b>	N/A

Marine Pollutant?  Yes  No      Chemical (s): NA

**EXPORT WATER (IMO)**

Contact Winfield Solutions, LLC Environmental Health & Safety for additional information.

**AIR (ICAO/IATA)**

Contact Winfield Solutions, LLC Environmental Health & Safety for additional information.

**FREIGHT TARIFF DESCRIPTION**

Rate As: Insecticide/Fungicide, Agriculture, N.O.I., Solid

**15. REGULATORY INFORMATION**

**SARA HAZARD CATEGORY** This product has been reviewed according to the EPA Hazard Categories promulgated under Section 311 and 312 of the Superfund Amendments and Reauthorization Act Of 1986 (Sara Title III) and is considered, under applicable definitions, to meet the following categories:

**CERCLA/SARA:** Immediate (acute), delayed (chronic)

**TPQ:** N/A

**RQ:** N/A

**SARA 313 INFORMATION** This product contains the following substances subject to the reprint requirements of SARA Title III, Section 313 and 40 CFR Part 372:

<u>CHEMICAL NAME</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION</u>
Atrazine	1912-24-9	43%
Ethylene Glycol	107-21-1	>6.0%

**16. OTHER INFORMATION**

<b>HMIS RATINGS</b>		<b>NFPA RATING</b>	
HEALTH	1	HEALTH	2
FLAMMABILITY	0	FLAMMABILITY	0
REACTIVITY	0	REACTIVITY	0
PERSONAL PROTECTION	B	SPECIFIC HAZARD	N/A
<b>ABBREVIATION KEY</b>			
N/A = Not Applicable		C = Ceiling Limit	
STEL = Short Term Exposure Limit		N/D = Not Determined	
rf = Respirable Fraction		SKIN = Skin Notation	
N/E = Not Established		td = Total Dust	