



ATRAZINE 4L

SAFETY DATA SHEET

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Atrazine 4L
EPA Registration No.: 33270-10
Product Type: Herbicide
Active Ingredient: Atrazine: 2-chloro-4-ethylamino-6-isopropylamino-s-triazine
Chemical Family: Triazine Herbicide
Manufacturer/Registrant: WINFIELD SOLUTIONS, LLC
 P.O. Box 64589
 St. Paul, MN 55164-0589

FOR MEDICAL EMERGENCIES: Medical Emergency: 1-877-424-7452 (24 hrs)

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

THE FOLLOWING HAZARDS ARE IDENTIFIED ACCORDING TO OSHA HCS CLASSIFICATION (29 CFR 1910.1200).

Hazard Classifications:

Acute Oral Toxicity: Category 4
 Acute Inhalation Toxicity: Category 4
 Eye Damage/Irritation: Category 2B
 Skin Irritation: Category 2
 Skin Sensitization: Category 1
 Mutagenicity: Category 1B
 Carcinogenicity: Category 1B
 Specific Target Organ Toxicity (Repeated Exposure): Category 2
 Aquatic acute and chronic: Category I

Signal Word: DANGER

Pictograms:



Hazard Statements:

- Harmful if swallowed or if inhaled
- Cause eye irritation
- Causes skin irritation
- May cause an allergic skin reaction
- May cause cancer
- May cause genetic defects
- May cause damage to organs through prolonged or repeated exposure
- Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

- Wash hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. If swallowed, call a poison center or a doctor if you feel unwell. Rinse mouth.
- Avoid breathing dust, mist, vapor or spray. Use in a well-ventilated area. If inhaled, remove victim to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
- Wash hands and face thoroughly after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/attention.



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- Wash hands and face thoroughly after handling. Wear protective gloves. If on skin: wash with plenty of water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing and wash it before reuse.
- Avoid breathing dust, mist, spray and vapors. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. If on skin, wash with plenty of water. If skin irritation or rash occurs: get medical advice/attention. Wash contaminated clothing before reuse.
- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, clothing and eye and face protection. If exposure or concerned: get medical advice/attention. Store locked up.

Contact 1-877-424-7452 (24 hrs) for emergency medical treatment.

Storage and Disposal: See Section 7 and 13.

Other Hazards: See Section 11 and 12.

SECTION 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>CAS No.</u>	<u>Percentage (%) by Weight:</u>
Atrazine	1912-24-9	42.6
Ethylene glycol	107-21-1	≤ 5
Ethylene oxide	75-21-8	< 5

SECTION 4. FIRST AID MEASURES

- If Swallowed:** Call a poison control center or doctor immediately for treatment advice.
Do not give any liquid to the person.
Do not induce vomiting unless told to do so by the poison control center or doctor.
Do not give anything by mouth to an unconscious person.
- If in Eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes.
Remove contact lenses, if present, after 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.

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment.

Emergency Telephone Number: (800) 424-9300 CHEMTREC (transportation and spills)

In case of medical emergency, call toll-free 1-877-424-7452.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point: >200°F (non-flammable)

Flammable Limits (LFL & UFL): Not established

Extinguishing Media: Alcohol foam, dry chemical, carbon dioxide, water spray or fog. Use extinguishing media appropriate for surrounding fire. Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Unusual Fire and Explosion Hazards: Not considered flammable but may burn at high temperature. Can burn in fire, releasing irritating and toxic gases due to thermal decomposition or combustion.

Special Fire Fighting procedures: Do not enter fire area without proper protective equipment, including respiratory protection. Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Dike and collect water used to fight fire to prevent environmental damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

Fire Fighting Equipment: Self-contained breathing apparatus with full facepiece. Full fire-fighting turn-out gear (Bunker gear).



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SECTION 6. ACCIDENTAL RELEASE MEASURES

Steps to be Taken if Material is Released or Spilled: In case of leak or spill, evacuate unnecessary personnel. Contain material and dispose as waste. Do not contaminate any body of water. Pick up spilled liquid with absorbent material and sweep up for disposal. Place it and damaged unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state and federal regulations for proper disposal. After removal, scrub area with detergent and water, then neutralize with dilute alkaline solutions of soda ash or lime. **NOTE:** Prevent spilled material from flowing onto adjacent land, or into municipal sewers and open bodies of water. Always wear proper protective equipment when working with the product.

SECTION 7. HANDLING AND STORAGE

HANDLING: Do not contaminate water, food or feed by storage or disposal. Wash hands after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container with lid tightly closed, away from children and animals. Keep away from water, foodstuffs, feed or seed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Respiratory Protection: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit.

Eye Protection: Wear chemical goggles or shielded safety glasses when handling and mixing product.

Skin Protection: Wear protective clothing: long-sleeved shirts and pants, shoes plus socks and chemical-resistant gloves. Always refer to the label of the pesticide(s) in the tank mix and follow the most restrictive requirements.

Personal Protective Equipment (PPE): Follow manufacturer's instructions for cleaning/maintaining PPE. If not such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations:

Users should:

- Wash hands thoroughly after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Engineering Controls: Refer to product label. Provide general and/or local exhaust ventilation to control airborne levels below the exposure guideline. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Exposure Limits:

Chemical Name	CAS NO.	ACGIH/TLV	OSHA/PEL	NIOSH REL
Atrazine	1912-24-9	2 mg/m ³ (TWA)	NE	5 mg/m ³ (TWA)
Ethylene glycol	107-21-1	100 mg/m ³ (ceiling, aerosol)	NE	NE
Ethylene oxide	75-21-8	1 ppm (TWA)	1 ppm (TWA) 5 ppm (STEL)	0.18 mg/m ³ (TWA) 0.1 ppm (TWA) 9 mg/m ³ (ceiling) 5 ppm (TWA)



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White liquid

Odor: Odorless

Odor Threshold: Not available

pH: 5.03@25°C

Flash Point: > 200°F (non-flammable)

Flammability: Not flammable

Density: 1.12 @ 20°C

Water Solubility: 33ppm @ 20°C

Viscosity: Not available

Flammability (Solid, Gas): Not available

Upper/Lower Flammability/Explosive Limits: Not available

Auto-ignition Temperature: Not available

Explosibility: Not available

Solubility: Not available

Partition Coefficient (n-Octanol/Water): Not available

Vapor Pressure: 6.6×10^{-7} mmHg (25°C)

Vapor Density: Not available

Freezing point: Not available

Boiling Point: Not available

Evaporation Rate: Not available

Decomposition Temperature: Not available

SECTION 10. STABILITY AND REACTIVITY STABILITY:

Stability: Stable under normal use and storage conditions.

Conditions and Materials to Avoid: None known.

Incompatibility: None known.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Oxides of carbon, nitrogen and/or phosphorous.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (End-Use Product)

Acute oral toxicity:	LD ₅₀ (rat)	1,075 – 1,886 mg/kg
Acute Dermal toxicity:	LD ₅₀ (rabbit):	> 5,000 mg/kg
Acute inhalation toxicity:	LC ₅₀ (rat):	2.38 mg/L (4-hr)
Eye irritation:	Cause eye irritation	
Skin irritation:	Cause skin irritating	
Skin Sensitization:	May cause an allergic skin reaction	

Primary Routes of Exposure: Inhalation and skin contact.

Symptoms of Exposure: If inhaled, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. If on the skin, redness, pain, swelling, itching, burning, dryness, and dermatitis. If get in eyes, redness, pain, swelling, itching, burning, tearing and blurred vision may occur. Irritation of throat, stomach, and intestines may occur if swallowed.

Toxicological Information (Based on Atrazine):

Chronic/Subchronic Toxicity: Cardiotoxicity in long term study with high doses (dogs).



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Reproductive/Developmental Effects: None observed.

Mutagenicity: Atrazine showed mutagenic effects in laboratory experiments.

Carcinogenicity: Atrazine did not cause tumors in a mice study were given oral doses of 21.5 mg/kg/day from age 1 to 4 weeks followed by dietary doses of 82 mg/kg for an additional 17 months. Mammary tumors were observed in rats after lifetime administration of atrazine. EPA has classified atrazine as a possible human carcinogen because it has caused cancer in rats receiving high doses over the course of their lifetimes.

Target Organs: Heart

Aspiratory Hazard: Not classified

Toxicological Information of Other Ingredient: Ethylene glycol

Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice. Exposure to high concentrations of mists or aerosols may results in effects on the hematopoietic system and central nervous system with headache, dizziness and drowsiness. Severe kidney damage results from swallowing large amounts of ethylene glycol.

Target Organs: Blood, kidney, CNS

Specific Target Organ Toxicity (Repeated Exposure): Oral – Ethylene glycol may cause damage to organs through prolonged or repeated exposure – Kidney.

Carcinogenicity Assessment:

Chemical Name	CAS No.	ACGIH	NTP	IARC	OSHA
Atrazine	1912-24-9	NA	NA	Group 3*	NA
Ethylene Oxide	75-21-8	NA	NA	Group 1**	X

*IARC Group 3: Not classifiable as to its carcinogenicity to humans

** IARC Group 1: Known human carcinogens.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Hazards: This pesticide is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable.

Fish Toxicity: (Atrazine)

Rainbow Trout LC50 – 9.9 mg/L

Bluegill Sunfish LC50 – 54.5 mg/L

Algae ErC50: 0.147 mg/L

Avian Toxicity: (Atrazine)

Bobwhite quail Oral LD50: >5,000 mg/kg

Mallard duck: > 5,000 mg/Kg

Bee Toxicity: Practically non-toxic

Environmental Fate: Atrazine is moderately to highly mobile in soils. It does not absorb strongly to soil particles and has a lengthy soil half-life, it is expected to have a high potential for groundwater contamination, even though it is only moderately soluble in water.

Bioaccumulative Potential: Atrazine BCF (fish): 7.7 – 15 (Log Pow 2.59 @ 20°C)



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SECTION 13. DISPOSAL CONSIDERATIONS

Pesticide Disposal: Open dumping is prohibited. Wastes resulting from this product are acutely toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures. Contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for proper disposal guidance.

Container Disposal: Refer to product label for container disposal. Dispose of product containers, waste containers, and residues according to local, state and federal health and environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT: (ground)	Not regulated
IMDG/IMO	
UN/ID no	UN 3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
Hazard class	9
Packing Group	III
Marine Pollutant	Atrazine
Description	UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Atrazine), 9, PG III, Marine Pollutant
ICAO/IATA	
UN/ID no	UN 3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
Hazard class	9
Packing Group	III
Marine Pollutant	Atrazine
Description	UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Atrazine), 9, PG III

SECTION 15. REGULATORY INFORMATION

FIFRA INFORMATION:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION Harmful if swallowed. Harmful if absorbed through skin. Caused moderate eye irritation. Avoid contact with eyes, skin, and clothing.

SARA 311/212 Hazard Categories:

Section 311/312	Acute Health Hazard
	Chronic Health Hazard
Section 313 Chemical(s)	Atrazine (CAS No. 1912-24-9); Ethylene Glycol (CAS No. 107-21-1)

CERCLA/SARA 302 Reportable Quantity (RQ): Ethylene Glycol RQ = 5,000 lbs.

RCRA Hazardous Waste Classification (40 CFR 261): Not applicable

TSCA List: The ingredients of this product are listed on the TSCA inventory or are exempt.

CA Proposition 65:

This product contains a chemical (Ethylene glycol CAS No. 107-21-1) known to the state of California to cause reproductive (developmental) harm.

This product contains a chemical (Ethylene oxide CAS No. 75-21-8) known to the state of California to cause cancer, development, and reproductive (male and female) harm.



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State Right-To-Know Ingredients:

Atrazine (CAS No. 1912-24-9): MA, NJ, PA

Ethylene glycol (CAS No. 107-21-1): MA, NJ, PA

Ethylene oxide (CAS No. 75-21-8): MA, NJ, PA

SECTION 16. OTHER INFORMATION

SDS DATE: July 12, 2017

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions

