

Safety Data Sheet

SIMAZINE 4L



SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Simazine 4L
EPA Registration No. 33270-27
Product Type: Herbicide
Active Ingredient: Simazine: (2-Chloro-4, 6-bis (ethylamino)-s-triazine)
Manufacturer/Registrant: United Suppliers, Inc.
30473 260th St.
Eldora, IA 50627

FOR MEDICAL EMERGENCIES: Contact the National Pesticide Information Center 1-800-858-7378
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:

- Eye Damage/Irritation: Category 2A
- Skin Irritation: Category: 2
- Skin Sensitization: Category 1
- Carcinogenicity: Category 2
- Toxic to Reproduction: Category 2
- Specific Target Organ Toxicity (Repeated Exposure): Category 2
- Aquatic acute and chronic: Category I

Signal Word: WARNING

Pictograms:



Hazard Statements:

- Cause serious eye irritation
- Causes skin irritation
- May cause an allergic skin reaction
- Suspected of causing cancer
- Suspected of damaging fertility or the unborn child
- 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. 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.
- 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 Chemtrec for emergency medical treatment at 1- 800-424-9300.

Physical or Chemical Hazards: This product is incompatible with strong oxidizing agents.

Storage and Disposal: See Section 7 and 13.

Other Hazards: See Section 11 and 12.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Simazine	122-34-9	42.8
Ethylene glycol	107-21-2	< 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 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 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 5 minutes, then continue rinsing eye.
Call a poison control center or doctor for 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)
(800) 858-7378 NPIC (human and animal health)

SECTION 5. FIRE FIGHTING MEASURES

Fire and Explosion:

Flash Point:	>200°F	
Flammable Limits (% in Air):	Lower: % Not available	Upper: % Not available
Autoignition Temperature:	Not available	
Flammability:	Not available	

Extinguishing Media: Alcohol foam, carbon dioxide, dry chemical, water spray, 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, Explosion and Reactivity Hazards: Not considered flammable but may burn at high temperatures. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Hazardous Decomposition Products: Carbon monoxides, carbon dioxide.

Firefighting Instructions: Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Follow exposure controls/personal protection outline in Section 8. Handle in accordance with good industrial hygiene and safety practice.

Methods and Material for Containment and Cleaning Up: Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Sweep up material and place in a compatible disposal container. Scrub 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 compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:

Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities: Storage in dry, cool and well-ventilated place, secure area out of reach of children and domestic animals. Keep container closed when not in use. Store locked up. Do not contaminate water, food, or feed by storage or disposal.

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.

Skin/Hand Protection: Wear long-sleeved shirt, long pants, socks, and shoes. Chemical resistant protective gloves. Protective equipment selection must be based on the user's assessment of the workplace hazards.

Eye/Face Protection: Wear chemical protective eyewear (goggles, face shield or safety glasses). Wear face shield if splashing hazard exists.

Respiratory Requirements: Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified respirator with any N, R, P or HE filter. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may be provide adequate protection.

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: See 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	Other
Ethylene glycol	107-21-1	100 mg/m ³ (ceiling, aerosol)	NE	NE

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance:** White liquid**Odor:** Odorless**Odor Threshold:** Not available**pH:** 8.59**Flash Point:** > 200°F (93.33°C)**Flammability:** Not flammable**Density:** 1.39 (9.35 lbs/gal)**Water Solubility:** 6.2 mg/L@22°C**Viscosity:** Not applicable**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:** 1.5 x 10⁻⁸ mmHg (25°C)**Vapor Density:** Not available**Freezing point:** Not available**Boiling Point:** > 100°C (212°F)**Evaporation Rate:** Not available**Decomposition Temperature:** Not available**SECTION 10. STABILITY AND REACTIVITY****Stability:** Stable under normal use and storage conditions.**Hazardous Polymerization:** Will not occur.**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.**Materials to Avoid:** Strong acids, bases and oxidizing agents.**Hazardous Decomposition Products:** Thermal decomposition includes carbon oxides (CO_x), Chlorine**SECTION 11. TOXICOLOGICAL INFORMATION****Acute Toxicity/Irritation Studies:**

Acute oral toxicity: LD₅₀ (rat) > 2,000 mg/kg
 Acute Dermal toxicity: LD₅₀ (rabbit): > 2,000 mg/kg
 Acute inhalation toxicity: LC₅₀ (rat): > Cannot be aerosolized
 Eye irritation: Cause serious eye irritation (Conjunctival)
 Skin irritation: Cause skin irritating
 Skin Sensitization: May cause an allergic skin reaction

Primary Routes of Exposure: Inhalation and skin contact.

Symptoms of Exposure: Inhalation of vapors may cause respiratory irritation. Redness, pain, swelling, itching, burning, dryness and dermatitis after skin or eye contact. Ingestion may cause nausea, vomiting and diarrhea, irritation of throat, stomach, and intestines. May cause cancer with long-term exposure.

Toxicological Information (Based on Simazine):

Chronic/Subchronic Toxicity: Decreased survival at high doses (rats)

Reproductive/Developmental Effects: None observed.

Mutagenicity: Simazine has shown negative results in a variety of mutagenicity tests on bacterial cultures. Tests on human lung cell cultures have produced both positive and negative results. When injected into adult male fruitflies, simazine increased the frequency of sex-linked lethal mutations, but failed to do so when fed to larvae. Other tests for mutagenicity in fruitflies were negative. It is likely that simazine is either nonmutagenic or weakly mutagenic.

Carcinogenicity: Increased incidence of mammary tumors (female Sprague-Dawley rats) sex and species specific effect.

Carcinogenicity Assessment:

ACGIH: None

NTP : None

IARC : 3 *

OSHA : None

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

Target Organs: Mammary gland

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 result 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

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions: Simazine can travel (seep or leach) through soil and enter ground water which may be used as drinking water. Simazine has been found in ground water as a result of its use as a herbicide. Users are advised not to apply Simazine to sand and loamy soils where the water table (groundwater) is close to the surface and where the soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

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. 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.

Ecological information (Based on Simazine):

Rainbow trout LC₅₀ (static, 96h): >10 mg/L

Fathead minnow LC₅₀ (static, 96-h): 3.5 – 7.15 mg/L

Daphnia magna EC₅₀ (static, 48h): 0.56 – 2.2 mg/L

Mallard Duck (8-day) LD₅₀: > 4,640 mg/kg

Algae (3-d) EC₅₀: 0.9 mg/L

Environmental Fate (Based on Simazine): Low bioaccumulation potential. Not persistent in soil. Stable in water. Moderate mobility in soil. Sinks in water (after 24 h).

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal: Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State

Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

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	Simazine
Description	UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Simazine), 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	Simazine
Description	UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Simazine), 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, inhaled or absorbed through skin. Do not get in eyes or on skin. Do not breathe spray mist.

SARA 311/212 Hazard Categories:

Section 311/312	Acute Health Hazard Chronic Health Hazard
Section 313 Chemical(s)	Simazine (CAS No. 122-34-9); 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.

State Right-To-Know Ingredients:

Simazine (CAS No. 122-34-9): MA, NJ

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

SECTION 16. OTHER INFORMATION

SDS DATE: 9-10-2015. Supersedes version dated 3-13-2015. Revised for OSHA 2012 HCS compliance.

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.