



SAFETY DATA SHEET

DREXEL SIMAZAT™ 4L HERBICIDE

Section 1: Material Identification

Product Name: Drexel Simazat 4L Herbicide

EPA Reg No.: 19713-171

CAS NO: Atrazine 1912-24-9
Simazine 122-34-9

Formula: Atrazine $C_8H_{14}ClN_5$
Simazine $C_7H_{12}ClN_5$

Company: Drexel Chemical Company
1700 Channel Avenue
Memphis, TN 38106

Identifiers:

EINECS: Atrazine 217-617-8
Simazine 204-535-2

RTECS: Atrazine XY5600000
Simazine XY5250000

DOT label: See Section 14

Emergency Telephone Number:

CHEMTREC
Tel: 1-800-424-9300

Drexel Chemical Co.
901-774-4370

This product is an EPA FIFRA registered pesticide. Some of the classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Please see **Section 15. REGULATORY INFORMATION** for explanation.

Section 2: Hazard Identification

(As defined by the OSHA Hazard Communication Standard, 29)

GHS Classification

Acute toxicity - inhalation
Eye damage/irritation
Hazardous to the aquatic
environment – acute hazard

Category 4
Category 2B
Category 2

GHS label elements
Signal Word

Warning

**Hazard statements**

Harmful if inhaled.
Causes eye irritation.
Toxic to aquatic life.

Precautionary statements**Prevention**

Avoid breathing mist or vapors.
Use only outdoors or in well-ventilated area.
Wash exposed skin thoroughly after handling.
Avoid release to the environment.

Response

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor if you feel unwell.
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.

Storage

Store in a cool, dry, well ventilated and secure area designated specifically for pesticides and away from heat sources.

Disposal

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities.

Section 3: Composition Information

<u>Components</u>	<u>% By Wt.</u>	<u>OSHA PEL:</u>	<u>ACGIH TLV:</u>
Active Ingredient:			
Atrazine	21.03%	N/Av	5 mg/m ³
Related triazines	0.39%	N/Av	N/Av
Simazine	21.41%	N/Av	N/Av
Inert Ingredients:	57.17%	N/A	N/A

Section 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 Swallowed: Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious or convulsing person.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 25 minutes. Remove contact lenses, if present, after 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 to 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 treatment advice.

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.

Section 5: Fire Fighting Measures

Fire Hazards: Closed containers may rupture if exposed to excess heat or flame due to build-up of internal pressure. Thermal decomposition during a fire can produce fumes and irritating gases.

Flammability classification (OSHA 29 CFR 1910.1200): Non-Combustible.

Flash point: >200°F

Lower flammable limit (% by volume): N/Av

Upper flammable limit (% by volume): N/Av

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Evacuate the area and fight the fire from upwind at a safe distance to avoid hazardous vapors or decomposition products. Dike and collect fire-extinguishing water to prevent environmental damage and excessive waste runoff.

Firefighting media: Use foam, dry chemical, carbon dioxide, or water fog when fighting fires involving this product. Do not use water jet, as this may spread burning material. Minimize the use of water to avoid environmental contamination. Contain all runoff.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Use full face shield and operate in positive pressure mode. Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides, halogenated compounds, irritating fumes and smoke.

(NFPA):	Health:	Flammability:	Reactivity:
	2	1	0

Section 6: Accidental Release Measures

Steps to be taken if Material is Released or Spilled:

- Contain spilled material if possible. Small spills: absorb in earth, sand or absorbent material and sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Drexel Chemical Co. for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

Personal Precautions:

- Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental Precautions:

- Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Section 7: Handling and Storage

KEEP OUT OF REACH OF CHILDREN

- Handling:** **General Handling:** Avoid contact with eyes, skin, and clothing. When using do not eat, drink or smoke. Wash thoroughly after handling. Do not swallow. Avoid breathing vapor. Use with adequate ventilation. Wear long-sleeved shirt, long pants and boots with socks when handling. Keep away from heat, sparks and flame. See Section 8, Exposure Controls and Personal Protection.
- Storage:** Store in a cool, dry, well ventilated and secure area designated specifically for pesticides and away from heat sources. Keep in original containers and keep containers closed when not in use. Do not store in excessive heat. Do not store near children, food, foodstuffs, drugs or potable water supplies.

Section 8: Exposure Controls/ Personal Protection

Exposure Limits: TLV Atrazine: 5mg/m³

Personal Protection:

Eye/Face Protection: Wear safety glasses with side shields or chemical splash goggles to prevent vapors or mists from entering the eyes. If using a full-face shield, always use safety glasses or goggles along with the face shield to ensure adequate protection of the eyes.

Skin Protection: Use long-sleeved shirt, long pants and boots with socks. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene, Nitrile/butadiene rubber ("nitrile" or "NBR") or Polyvinyl chloride ("PVC" or "vinyl").

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. When handling in enclosed areas, when large quantities of mists are generated or prolonged exposure is possible in excess of the TLV, use a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

Ingestion: Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face before smoking or eating.

Engineering Controls:

Ventilation: When handling this product proper ventilation is required to maintain exposure below the TLV. Ventilate all transport vehicles prior to unloading. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Section 9: Physical and Chemical Properties

- Physical State:** Liquid
- Color:** White to beige
- Odor:** Mild

Flash Point:	N/Av
Vapor Pressure (mmHg):	N/Av
Boiling Point:	N/Av
Vapor Density (air = 1):	N/Av
Bulk Density (H₂O = 1):	9.33 lbs. /gal.
Freezing Point:	N/Av
Solubility in water (wt. %) weight):	Miscible
pH	5-7.5
Viscosity:	N/Av

Section 10: Stability and Reactivity

Stability/Instability:	Stable at typical use temperatures and in closed containers.
Conditions to Avoid:	Avoid heat of open flame. Avoid high temperatures above 130°F (54.4°C).
Incompatible Materials:	Avoid contact with: Strong acids. Strong bases. Strong oxidizers.
Hazardous Polymerization:	Will not occur
Thermal Decomposition:	Decomposition products can include and are not limited to: Carbon oxides, nitrogen oxides, ammonia and halogenated compounds.

Section 11: Toxicological Information

Acute Toxicity

Ingestion:

- Oral LD50, (rat): >3600 mg/kg.

Dermal:

- Dermal LD50, (rabbit) : >2,000 mg/kg.

Inhalation:

- Inhalation LC50, Aerosol, (rat) : >3.55 mg/l.

Eye Irritation (rabbit):

- Mildly irritating.

Skin Irritation (rabbit):

- Non-irritating.

Sensitization Skin:

- Non-sensitizer (guinea pigs).

Chronic Toxicity:

Atrazine: Cardiotoxicity in long term study with high doses (dogs).
 Simazine: Decreased survival at high doses (rats).

Carcinogenicity:

Not likely to be carcinogenic in humans.

Teratogenicity, mutagenicity, and other reproductive effects: None known.

Section 12: Ecological Information

Atrazine: Slightly toxic to birds, aquatic invertebrates and toxic to some aquatic plants.

Simazine: Slightly toxic to birds, aquatic invertebrates and bees.

Persistence and Degradability:

- Atrazine: Low bioaccumulation potential. Not persistent in soils. Stable in water. Highly mobile in soil. Will leach. Sinks in water (after 24 hr.).
- Simazine: Low bioaccumulation potential. Not persistent in soil. Stable in water. Highly mobile in soil. Will leach. Sinks in water (after 24 hr.).

Atrazine:

- Rainbow Trout 96 hour LC50: (4.5 ppm).
- Bluegill 96 hour LC50: (16 ppm).
- Daphnia Magna 48 hour EC50: (6.9ppm).
- Bees acute LD50: >25 µg/bee.
- Bobwhite Quail 12-day LD50: 940 mg/kg.

Simazine:

- Rainbow Trout 96 hour LC50: (> 10 ppm).
- Bluegill 96 hour LC50: (54.5 ppm).
- Daphnia Magna Life Cycle MATC: (0.07 mg/L).
- Bees acute LD50: >99 µg/bee.
- Bobwhite Quail 8-day LD50: >10,000 ppm.

Section 13: Disposal Considerations

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

Section 14: Transport Information

DOT Classification: Not regulated

IMDG: UN 3082 Environmentally hazardous substance (Simazine/Atrazine), 9, PG- III, Marine pollutant.

IATA: UN 3082 Environmentally hazardous substance (Simazine/Atrazine), 9, PG- III

Freight Description: Agriculture Herbicide, liquid, n.o.s.

ERG Guide No: 171

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material

Section 15: Regulatory Information

OSHA Hazard Communication Standard:

- This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
- **EPA FIFRA INFORMATION**
This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemical. The hazard information required on the pesticide label is listed out below. The pesticide label also includes other important information, including directions for use.
- **EPA Label Human Hazard Statements:** CAUTION: Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist.
- **EPA/CERCLA Reportable Quantity:** None Known

SARA/TITLE III:

- **Sec 302: Extremely Hazardous Substance Notification:** Not applicable.
- **Sec. 311/312. Hazard Categories:** Acute health hazard, chronic health hazard (atrazine).
- **Section 313 Toxic Chemical(s):** Atrazine (21.03%) (CAS No. 1912-24-9); Simazine (21.41%) (CAS No. 122-34-9)
- **RCRA Waste Code:** Not applicable

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

- This product is not listed.

Toxic Substances Control Act (TSCA):

- All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

Section 16: Other Information

Drexel Chemical Company recommends that each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown below. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.

Date Issued: September 14, 2017

Supersedes: August 5, 2016