

SAFETY DATA SHEET

ATRAZINE 90DF



SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: ATRAZINE 90DF
EPA Registration No.: 33270-9
Product Type: Herbicide
Active Ingredient: Atrazine: 2-chloro-4-ethylamino-6-isopropylamino-s-triazine
Chemical Family: Triazine Herbicide
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:

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

Signal Word: WARNING

Pictograms:



Hazard Statements:

- Harmful if swallowed or if inhaled
- Cause eye irritation
- Causes skin irritation
- May cause an allergic skin reaction
- 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.
- 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.

Storage and Disposal: See Section 7 and 13.

Hazards Not Otherwise Classified: Contain combustible dust

SECTION 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>CAS No.</u>	<u>Percentage (%) by Weight:</u>
Atrazine	1912-24-9	87.72
Silica, amorphous	7631-86-9	< 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 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.
- 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)
(800) 858-7378 NPIC (human and animal health)

SECTION 5. FIRE FIGHTING MEASURES

Flash Point: Not available

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: Contain combustible dust. Product is not explosive but if dust is generated, dust clouds suspended in air can be explosive. If burn in fire, irritating and toxic gases due to thermal decomposition or combustion can be released.

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 runoff. 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 firefighting turn-out gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Evacuate unnecessary personnel. Follow exposure controls/personal protection outline in Section 8.

Methods and Material for Containment and Cleaning Up: Avoid dust formation. 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

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 secure, dry, cool and well-ventilated place away from children and pets. Keep container closed when not in use. Store locked up.

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.

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.

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

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 (inhalable fraction, TWA)	NE	5 mg/m ³ (TWA)
Silica, amorphous	7631-86-9	NE	80 mg/m ³ (%SiO ₂)	6 mg/m ³ (TWA)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Grayish-brown granules

Odor: Odorless

Odor Threshold: Not available

pH: 5.5 - 8

Flash Point: 200°C (technical active ingredient) (392°F)

Flammability: Not available

Density: 1.19 @ 25°C (27 – 31 lbs/ft³)

Water Solubility: 33ppm @ 20°C

Viscosity: Not available

Flammability (Solid, Gas): Not available

Upper/Lower Flammability/Explosive Limits: Not available

Auto-ignition Temperature: 480°C (technical active ingredient) (896°F)

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

Melting Point: 175 - 177

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: Strong acids, Strong bases. Strong oxidizers.

Chemical Stability: Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

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: LD₅₀ (rat) 1,075 – 1,886 mg/kg

Acute Dermal toxicity: LD₅₀ (rabbit): > 5,000 mg/kg

Acute inhalation toxicity: LC₅₀ (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).

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

Carcinogenicity Assessment:

Chemical Name	CAS No.	ACGIH	NTP	IARC	OSHA
Atrazine	1912-24-9	NA	NA	Group 3*	NA
Silica, amorphous	7631-86-9	NA	NA	Group 3*	NA

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

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)

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 3077

Proper Shipping Name

Environmentally hazardous substance, solid, n.o.s.

Hazard class

9

Packing Group

III

Marine Pollutant

Atrazine

Description

UN 3077, Environmentally hazardous substance, solid, n.o.s. (Atrazine), 9, PG III, Marine Pollutant

ICAO/IATA

UN/ID no	UN 3077
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s.
Hazard class	9
Packing Group	III
Marine Pollutant	Atrazine
Description	UN 3077, Environmentally hazardous substance, solid, 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)

CERCLA/SARA 302 Reportable Quantity (RQ): Not applicable

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: Not applicable

State Right-To-Know Ingredients:

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

Silica, amorphous (CAS No. 7631-86-9): MA, NJ, PA

SECTION 16. OTHER INFORMATION

SDS DATE: 9-7-2015. 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