Safety Data Sheet

According to the UN GHS revision 8

Creation Date: June 10, 2026
Revision Date: June 10, 2026

1. IDENTIFICATION

1.1 GHS Product identifier

Product name: Atrazine

Catalog Number: T5626

CAS Number: 1912-24-9

1.2 Other means of identification

Other names: -

1.3 Recommended use of the chemical and restrictions on use

Identified uses: no data available

1.4 Supplier's details

Company: Targetmol Chemicals Inc.

Address: 34 Washington Street, Wellesley Hills, Massachusetts 02481 USA

Tel/Fax: (781) 999-4286

1.5 Emergency phone number

Emergency phone number: 781-999-4286

Service hours: Monday to Friday, 9am-5pm (Standard timezone: UTC/GMT -5 hours).

2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Sensitisation, skin (Category 1, 1A, 1B),H317

2.2 GHS label elements, including precautionary statements

Pictogram(s):

Signal word: Warning

Hazard statement(s): H317 May cause an allergic skin reaction

Precautionary statement(s):

Prevention: P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response: P302+P352 IF ON SKIN: Wash with plenty of soap and water

Storage: no data available

Disposal: P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

2.3 Other hazards which do not result in classification

no data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number
Atrazine	-	1912-24-9	217-617-8

4. FIRST-AID MEASURES

4.1 Description of necessary first-aid measures

General advice

Atrtazine (technical) was seen to be bright white with a 90% reflectance equivalent to a N 9.5/white on the neutral scale of the Munsell Book of Color. the appaerance of the test compound was compared to the Munsell neutral value scale.

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a d°Ctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Rinse and then wash skin with water and soap.

Following eye contact

Rinse with plenty of water (remove contact lenses if easily possible). Refer for medical attention.

Following ingestion

Rinse mouth. Refer for medical attention .

4.2 Most important symptoms/effects, acute and delayed

Skin decontamination. Skin contamination should be treated promptly by washing with soap and water. Contamination of the eyes should be treated immediately by prolonged flushing of the eyes with large amounts of clean water. If dermal or °Cular irritation persists, medical attention should be obtained without delay. Other herbicides

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Irritates eyes and skin. If ingested, irritates mouth and stomach. (USCG, 1999)

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use dry chemical, foam, or CO2 extinguisher media. 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. Prevent use of contaminated buildings, area, and equipment until decontaminated. Atrazine 4L Herbicide

5.2 Specific hazards arising from the chemical

Special Hazards of Combustion Products: Irritating hydrogen chloride and toxic oxides of nitrogen may be formed. (USCG, 1999)

5.3 Special protective actions for fire-fighters

Use water spray, foam, powder, carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to l°Cal regulations.

6.2 Environmental precautions

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to l°Cal regulations.

6.3 Methods and materials for containment and cleaning up

Wear chemical safety glasses or goggles, rubber gloves, waterproof boots, long sleeved shirt, long pants, hat and an NIOSH approved dust or pesticide respirator. For small spills, cover the spill with an absorbent material. Sweep up the material and place in an appropriate chemical waste container. Wash the spill area with water containing a strong detergent, absorb with an absorbent material, sweep up

and place in a chemical waste container. Seal the container and dispose of in an approved manner. Rinse the spill area with water to remove any residue. Do not allow wash or rinse water to contaminate water supplies. Atrazine 4L Herbicide

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

NO open flames. Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2 Conditions for safe storage, including any incompatibilities

Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs. Store in an area without drain or sewer access. Store the material in a well ventilated, secure area out of the reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco usage, adn cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling. Atrazine 4L Herbicide

Powder: -20°C for 3 years | In solvent: -80°C for 1 year

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

TLV: 2 mg/m3, as TWA; A3 (confirmed animal carcinogen with unknown relevance to humans).MAK: 1 mg/m3; peak limitation category: II (2); pregnancy risk group: C

Biological limit values

no data available

8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear safety spectacles.

Skin protection

Protective gloves.

Respiratory protection

Use ventilation (not if powder).

Thermal hazards

no data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid
Color	White
Odour	Odorless
Melting point/freezing point	177 - 178. Atm. press.:1 atm. Remarks:Mean result to nearest 0.5°C.
Boiling point or initial boiling point and boiling range	313.03 °C. Atm. press.:1 atm.
Flammability	Noncombustible Solid, but may be mixed with flammable liquids.
Lower and upper explosion limit/flammability limit	no data available
Flash point	76°C(lit.)
Auto-ignition temperature	> 450 °C. Remarks:At atm. press. of 1.0 atm.

Decomposition temperature	no data available
pH	6.47. Remarks:Overal mean of 10 accettable results (see the box "remarks on results". The ass°Ciated standard deviation was 0.04 units.
Kinematic viscosity	no data available
Solubility	DMSO: 83.33 mg/mL (386.36 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
N-octanol-water partition coefficient	log Pow = 2.59. Temperature:20 °C.
Vapour pressure	0 Pa. Temperature:25 °C. Remarks:With a calculated error range of 63%.
Density and/or relative density	1.23. Temperature:20 °C.
Relative vapour density	no data available
Particle characteristics	no data avaliable

10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

Stable in neutral, slightly acidic or basic media

10.3 Possibility of hazardous reactions

Nonflammable.ATRAZINE undergoes slow hydrolysis at 158° F under neutral conditions. Hydrolysis is more rapid in acidic or alkaline conditions. Forms salts with acids (NTP, 1992).

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong acids, strong bases.

10.6 Hazardous decomposition products

Hazardous decomposition products may include but are not limited to carbon monoxide, hydrogen cyanide, acetonitrile. Atrazine 4L Herbicide

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral: LD50 - rat (male/female) - 2 220 mg/kg bw. Remarks:24 hours.Inhalation: LC50 Rat inhalation >5800 mg/cu m 4hrDermal: LD50 Rat percutaneous >3100 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

Cancer Classification: Not Likely to be Carcinogenic to Humans

Reproductive toxicity

no data available

STOT-single exposure

The substance is severely irritating to the eyes.

STOT-repeated exposure

The substance may have effects on the liver. This may result in tissue lesions.

Aspiration hazard

A harmful concentration of airborne particles can be reached quickly when dispersed.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish: LC50; Species: Lepomis macr°Chirus (Bluegill) weight 0.6 g; Condtions: freshwater, static, 22 deg C, pH 7.1, hardness 43 mg/L CaCO3; Concentration: 48000 ug/L for 24 hr (95% confidence interval: 42000-55000 ug/L) /43% purityToxicity to daphnia and other aquatic invertebrates: LC50 - Daphnia magna - > 29 mg/L - 24 h.Toxicity to algae: EC50 - Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) - 0.043 mg/L - 72 h.Toxicity to microorganisms: no data available

12.2 Persistence and degradability

AEROBIC: An addition of fly ash up to 0.5% in a sandy clay loam results in increased degradation of atrazine by 13.3% on the average; the same amount of fly ash in clay soil increases atrazine degradation by 9.0%(1). The half-life of atrazine at 25 deg C in wet (and dry) Colorado loam soil, New York sandy loam soil, and Mississippi silt loam was determined to be 30 (90), 28 (55), and 35 (78) days respectively(2). The percent atrazine remaining from rhizosphere and edaphosphere (non-vegetated) soil samples collected at an agr° Chemicals dealership in Iowa was determined to be approximately 55% in the rhizosphere and 75% in the edaphosphere, suggesting that the microbial activity of K°Chia sp in the rhizosphere soil increased atrazine degradation(3). Atrazine was found to exhibit a half-life of about 30 days in soil samples collected from the top surface (10 cm) from the Ebro delta, Tarragona, Spain between 1989 and 1991; deethyl atrazine was the major degradate formed, with deisopropylatrazine detected in one sample(4). Degradation studies of atrazine in subsoils from an Atlantic coastal plain watershed revealed 13.3 to 25.0% carbon dioxide evolution from sandy loam soils, indicating that atrazine was not appreciably mineralized in the soils(5). Atrazine had half-lives in the range of 20-360 days, observed in laboratory studies conducted with loamy soil from a corn field in Bologna, Italy(6). The shortest half-lives were observed for soils in°Culated at temperatures of 35 deg C, while the longest half-lives observed °Ccurred at 5 deg C(6). Experiments with s-triazine-adapted Colorado soil (35.2% sand, 28% silt, 36.8% clay, 19 g C/kg organic matter and pH 7.9) had atrazine degradation half-lives of 2.0 to 28.2 days(7). Experiments with s-triazine-adapted Mississippi soil (15.8% sand, 47.2% silt, 36.7% clay, 13 g C/Kg organic matter and pH 6.67) had atrazine degradation half-lives of 0.8 to 5.6 days(7).

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

The K°C of atrazine in loamy soil, calcareous clay, and high clay was determined to be 109.9, 80.0, and 88.9, respectively(1). The K°C values for atrazine in four Hawaii soils ranged from 54 to 150 mL/g(2). The K°C for a Zimmerman fine sand, a Verndale sandy loam, and a Waukegan silt loam, each with 9.6% water content, was determined to be 1164, 775, and 936, respectively(3). The K°C range for atrazine in salt marsh sediment was 64 to 546, indicating that atrazine undergoes negligible adsorption onto suspended sediments(4). The K°C of atrazine in Norfolk soil, Rion soil, Cape Fear soil, and Webster soil was determined to be 150-200, 84, 202, and 166, respectively(5). Atrazine had a reported mean K°C of 126.9 (range of 26 to 821) in 101 allophanic and non-allophanic surface soil samples collected throughout New Zealand(6). K°C values for three regions of Argentina were reported as 77 to 161(7). K°C values of two soils from Reunion Island, France were reported as 97 and 117(8). Atrazine had measured K°C values of 88 in vegetated filter strip soil (37.9% sand, 31.9% silt, 30.2% clay, 4.2% organic carbon, pH 7.6) and 92 in cultivated soil (36.8% sand, 29.5% silt, 33.7% clay, 2.5% organic carbon, pH 7.6)(9). According to a classification scheme(10), these K°C values suggest that atrazine is expected to have very high to slight mobility in soil, depending upon soil type(SRC). The rate constant for sorption and desorption of atrazine by organic soil at 25 deg C was determined to be 5.02X10-2/day (half-life = 13.8 days) for sorption and 0.1507/day (half-life = 4.6 days) for desorption(11). Atrazine sorption half-life ranged from 3.6 to 735 days and desorption half-life ranged from 1 to 11 days in slurries of a mineralized soil(12).

12.5 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. TRANSPORT INFORMATION

14.1 UN Number

no data available

14.2 UN Proper Shipping Name

no data available

14.3 Transport hazard class(es)

no data available

14.4 Packing group, if applicable

no data available

14.5 Environmental hazards

no data available

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to IMO instruments

no data available

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed.
EC Inventory	Listed.
United States Toxic Substances Control Act (TSCA) Inventory	Listed.
China Catalog of Hazardous chemicals 2015	Not Listed.
New Zealand Inventory of Chemicals (NZIºC)	Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Listed.
Vietnam National Chemical Inventory	Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)	Listed.
Korea Existing Chemicals List (KECL)	Listed.

16. OTHER INFORMATION

Information on revision

Creation Date June 10, 2026

Revision Date June 10, 2026

Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.homeHSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htmIARC - International Agency for Research on Cancer, website: http://www.iarc.fr/eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_l°Cale=enCAMEO Chemicals, website: http://came°Chemicals.noaa.gov/search/simpleChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jspERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/ergGermany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jspECHA - European Chemicals Agency, website: https://echa.europa.eu/

Other Information

Temperature of decomposition is unknown in the literature.Carrier solvents used in commercial formulations may change physical and toxicological properties.If the substance is formulated with solvents also consult the ICSCs of these materials.