



# ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 20/08/2020

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Version: 1.0

DLM-1149-E-S

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixtures  
Product name : ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL  
Product code : DLM-1149-E-S

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : For professional use only

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
USA  
USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://www.isotope.com)

### Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)  
International: 1-703-741-5970 (24 hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225  
Skin Irrit. 2 H315  
Eye Irrit. 2 H319  
STOT SE 3 H335

Full text of hazard classes and H-statements : see section 16

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11  
Xi; R36/37/38

Full text of R-phrases: see section 16

#### GHS-US classification

Flam. Liq. 2 H225  
Skin Irrit. 2 H315  
Eye Irrit. 2A H319  
STOT SE 3 H335

Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

Nerves. heart. liver. Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

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### 2.2. Label elements

#### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazardous ingredients :

ETHANOL UNLABELED

Hazard statements (CLP) :

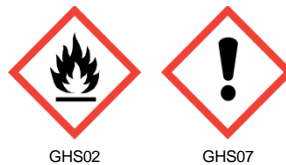
H225 - Highly flammable liquid and vapor  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective clothing, protective gloves.

#### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapor  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation

Precautionary statements (GHS-US) :

P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/Bond container and receiving equipment  
P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective clothing, protective gloves.  
P302+P352 - If on skin: Wash with plenty of water  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P312 - Call a doctor if you feel unwell  
P321 - Specific treatment (see Hazardous component(s) for labeling on this label)  
P332+P313 - If skin irritation occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P362 - Take off contaminated clothing and wash before reuse.  
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry extinguishing powder to extinguish.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

### 2.3. Other hazards

PBT: not yet assessed

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### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
ETHANOL UNLABELED	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5 (REACH-no) 01-2119457610-43	99.937	F; R11 Xi; R36/37/38
ATRAZINE (ETHYLAMINE-D5, 98%)	(CAS-No.) 163165-75-1 (EC-No.) 217-617-8 (Unlabeled) (EC Index-No.) 613-068-00-7 (Unlabeled)	0.063	Xn; R22 N; R51/53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ETHANOL UNLABELED	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5 (REACH-no) 01-2119457610-43	99.937	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
ATRAZINE (ETHYLAMINE-D5, 98%)	(CAS-No.) 163165-75-1 (EC-No.) 217-617-8 (Unlabeled) (EC Index-No.) 613-068-00-7 (Unlabeled)	0.063	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

Name	Product identifier	%	GHS-US classification
ETHANOL UNLABELED	(CAS-No.) 64-17-5	99.937	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
ATRAZINE (ETHYLAMINE-D5, 98%)	(CAS-No.) 163165-75-1	0.063	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of R- and H- phrases: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Gently wash with plenty of soap and water, Get immediate medical advice/attention. Get medical advice/attention. Specific treatment (see Hazard pictograms (CLP) on this label).
First-aid measures after eye contact	: Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
Reactivity	: Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

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### 5.3. Advice for firefighters

- Firefighting instructions : Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment.
- Other information : Use water spray to cool exposed surfaces.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Use personal protective equipment as required. Avoid breathing vapors, mist, gas. Ensure adequate air ventilation. Evacuate unnecessary personnel. No flames, no sparks. Eliminate all sources of ignition. Provide adequate ventilation to minimize dust and/or vapor concentrations. Special attention should be given to low areas/pits where flammable vapors can accumulate.

#### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

- For containment : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Collect spillage. Clean up any spills as soon as possible, using an absorbent material to collect it. Vacuum with an equipment that avoids ignition risk.
- Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.
- Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.
- Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapor and mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid breathing vapors, spray, mist, gas, fume, dust. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands, forearms and face thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Keep container tightly closed in a cool, dry and well-ventilated place. Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof Lighting equipment, ventilating equipment.
- Storage conditions : Store at room temperature away from light and moisture.
- Incompatible materials : Heat sources.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	1000.00000000 ppm
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	1000 ppm
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans.
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm

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ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL		
USA NIOSH	Remark (NIOSH)	Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans.
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
USA OSHA	Remark (OSHA)	Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans. The value in mg/m <sup>3</sup> is approximate.

ETHANOL UNLABELED (64-17-5)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	1000.00000000 ppm
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	1000 ppm
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans.
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA NIOSH	Remark (NIOSH)	Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans.
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
USA OSHA	Remark (OSHA)	Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans. The value in mg/m <sup>3</sup> is approximate.

ATRAZINE (ETHYLAMINE-D5, 98%) (163165-75-1)		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> Central Nervous System convulsion. Not classifiable as a human carcinogen

ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	1900 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	343 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	950 mg/m <sup>3</sup>
DNEL/DMEL (additional information)	
Additional information	DNEL - Workers - Ingestion - Long-term systemic effects - 343 mg/kg BW/d
PNEC (Water)	
PNEC aqua (freshwater)	0.96 mg/l
PNEC aqua (marine water)	0.79 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.6 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.63 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	580 mg/l

### 8.2. Exposure controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Materials for protective clothing : Wear suitable protective clothing and gloves.

Hand protection : Wear suitable protective clothing and gloves.

Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses.

Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

Environmental exposure controls : Avoid release to the environment.

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

*The properties listed below are for the solvent, the main component of this mixture.*

Physical state	: Liquid
Appearance	: Liquid, clear
Molecular mass	: 46.07 g/mol
Color	: Colorless
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: -114 °C (-173 °F)
Freezing point	: No data available
Boiling point	: 78 °C (172 °F)
Flash point	: 14 °C (57.2 °F) - closed cup
Auto-ignition temperature	: 363 °C (685.4 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Highly flammable liquid and vapor
Vapor pressure	: 59.5 hPa (44.6 mmHg) at 20 °C (68 °F)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 0.789 g/ml at 25 °C (77 °F)
Solubility	: Water: completely soluble
Log Pow	: -0.349 at 24 °C (75 °F)
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: 3.3 - 19 %

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

#### 10.2. Chemical stability

See storage and expiration date on CoA.

#### 10.3. Possibility of hazardous reactions

Hygroscopic.

#### 10.4. Conditions to avoid

Heat. Open flame. Direct sunlight. Sparks.

#### 10.5. Incompatible materials

Alkali metals. ammonia. Oxidizing agent. Peroxides.

#### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>).

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL	
LD50 oral rat	10470 mg/kg
LD50 dermal rat	15800 mg/kg
LC50 inhalation rat (mg/l)	30000 mg/l
ATE CLP (oral)	10470.000 mg/kg body weight
ATE CLP (dermal)	15800.000 mg/kg body weight

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ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL	
ATE CLP (vapors)	30000.000 mg/l/4h
ATE CLP (dust, mist)	30000.000 mg/l/4h

ETHANOL UNLABELED (64-17-5)	
LD50 oral rat	10470 mg/kg
LD50 dermal rat	15800 mg/kg
LC50 inhalation rat (mg/l)	30000 mg/l
ATE CLP (oral)	10470.000 mg/kg body weight
ATE CLP (dermal)	15800.000 mg/kg body weight
ATE CLP (vapors)	30000.000 mg/l/4h
ATE CLP (dust, mist)	30000.000 mg/l/4h

ATRAZINE (ETHYLAMINE-D5, 98%) (163165-75-1)	
LD50 oral rat	672 mg/kg
LD50 dermal rabbit	7500 mg/kg
LC50 inhalation rat (mg/l)	5200 mg/m <sup>3</sup> 4 h
ATE CLP (oral)	672.000 mg/kg body weight
ATE CLP (dermal)	7500.000 mg/kg body weight
ATE CLP (vapors)	5.200 mg/l/4h
ATE CLP (dust, mist)	5.200 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation. Skin - Rabbit - No skin irritation(OECD 404 method)
Serious eye damage/irritation	: Causes serious eye irritation. Eyes - Rabbit - Moderate eye irritation(OECD 404 method)
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Carcinogenicity - Mouse - Oral Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors. Blood: Lymphomas including Hodgkin's disease.
Reproductive toxicity	: Reproductive toxicity. oral. human. female. Effects on Newborn: Other neonatal measures or effects. Reproductive toxicity Oral - human - female - Effects on Newborn: Apgar score (human only). Effects on Newborn: Drug dependence.
Specific target organ toxicity – single exposure	: May cause respiratory irritation.
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: CNS depression. Narcosis. Risk of serious damage. to. heart. This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Stomach - Irregularities - Based on Human Evidence.
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL	
LC50 fish 1	14200 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	5012 mg/l Ceriodaphnia dubia (Water flea) - 48 h
EC50 other aquatic organisms 1	275 mg/l Chlorella vulgaris (Fresh water algae) - 72 h (OECD method 201)
NOEC (acute)	9.6 mg/l Daphnia magna (Water flea) - 9 d

ETHANOL UNLABELED (64-17-5)	
LC50 fish 1	14200 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	5012 mg/l Ceriodaphnia dubia (Water flea) - 48 h

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ETHANOL UNLABELED (64-17-5)	
EC50 other aquatic organisms 1	275 mg/l Chlorella vulgaris (Fresh water algae) - 72 h (OECD method 201)
NOEC (acute)	9.6 mg/l Daphnia magna (Water flea) - 9 d
ATRAZINE (ETHYLAMINE-D5, 98%) (163165-75-1)	
EC50 other aquatic organisms 1	0.043 mg/l Desmodesmus subspicatus (green algae) - 72 h
ErC50 (algae)	0.043 mg/l - 72 h, Desmodesmus subspicatus (green algae) -
LOEC (acute)	1.15 mg/l Pseudokirchneriella subcapitata - 60 h
NOEC chronic fish	2 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h

### 12.2. Persistence and degradability

ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL	
Persistence and degradability	Readily biodegradable.
BOD (% of ThOD)	95 % ThOD

ETHANOL UNLABELED (64-17-5)	
Persistence and degradability	Readily biodegradable.
BOD (% of ThOD)	95 % ThOD

### 12.3. Bioaccumulative potential

ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL	
Log Pow	-0.349 at 24 °C (75 °F)
Bioaccumulative potential	Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

ETHANOL UNLABELED (64-17-5)	
Log Pow	-0.349 at 24 °C (75 °F)
Bioaccumulative potential	Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

ATRAZINE (ETHYLAMINE-D5, 98%) (163165-75-1)	
Log Pow	2.61 5
Bioaccumulative potential	Tilapia sparrmanii- 4 weeks Bioconcentration factor (BCF): 6.1.

### 12.4. Mobility in soil

### 12.5. Results of PBT and vPvB assessment

ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL	
PBT: not yet assessed	

ETHANOL UNLABELED (64-17-5)	
PBT: not yet assessed	

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.
Product/Packaging disposal recommendations	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Ecology - waste materials	: Dispose of as unused product.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No.(DOT)	: 1170
DOT NA no.	UN1170

### 14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Ethanol
Class (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT)	: 3 - Flammable liquid





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Packing group (DOT)	: II - Medium Danger
DOT Special Provisions (49 CFR 172.102)	: 24 - Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 4b;150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242

### 14.3. Additional information

Emergency Response Guide (ERG) Number	: 127
Other information	: No supplementary information available.

### Overland transport

Packing group (ADR)	: II
Class (ADR)	: 3 - Flammable liquid
Hazard identification number (Kemler No.)	: 33
Classification code (ADR)	: F1
Hazard labels (ADR)	: 3 - Flammable liquids



Orange plates	:
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Tunnel restriction code (ADR)	: D/E
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E2

### Transport by sea

DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
MFAG-No	: 127

### Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
Civil Aeronautics Law	: Flammable liquids

### 14.4. Environmental hazards

Other information	: No supplementary information available.
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### 14.5. Special precautions for user

### 14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

# ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL

DLM-1149-E-S

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

##### ETHANOL UNLABELED (64-17-5)

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

##### ATRAZINE (ETHYLAMINE-D5, 98%) (163165-75-1)

SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

#### 15.2. International regulations

##### CANADA

##### ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL

Listed on the Canadian DSL (Domestic Substances List)

##### 15.2.1. National regulations

No additional information available

#### 15.3. US State regulations

##### ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL()

U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

##### ETHANOL UNLABELED (64-17-5)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	

##### ATRAZINE (ETHYLAMINE-D5, 98%) (163165-75-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	

##### ETHANOL UNLABELED (64-17-5)

##### State or local regulations

U.S. - Massachusetts - Right To Know List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - New Jersey - Right to Know Hazardous Substance List

# ATRAZINE (ETHYLAMINE-D5, 98%) 500 UG/ML IN ETHANOL

DLM-1149-E-S

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### ATRAZINE (ETHYLAMINE-D5, 98%) (163165-75-1)

#### State or local regulations

U.S. - Massachusetts - Right To Know List  
U.S. - Pennsylvania - RTK (Right to Know) List  
U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

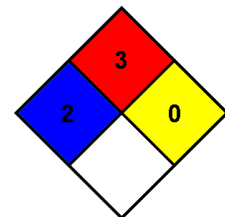
Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R11	Highly flammable
R22	Harmful if swallowed
R36/37/38	Irritating to eyes, respiratory system and skin
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
F	Highly flammable
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



### Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur  
Flammability : 3 Serious Hazard  
Physical : 0 Minimal Hazard

CIL Mixture SDS

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*