

Printing date 04/27/2017 Version Number 1 Reviewed on 04/27/2017

1 Identification of the substance/mixture and of the company/undertaking

· Product identifier

Trade name: Atrazine NeatPart number: PST-005-10MG

• CAS Number: 1912-24-9
• EC number: 217-617-8
• Index number:

613-068-00-7

· Application of the substance / the mixture Laboratory chemicals

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

ULTRA Scientific, inc. 250 Smith Street North Kingstown, RI 02852 USA

· Information department:

Telephone: (401) 294-9400 Fax: (401) 295-2300

E-mail: regulatory@ultrasci.com • Emergency telephone number:

US: (800) 424-9300

Outside US: (703) 527-3887

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



Skin Sens. 1 H317 May cause an allergic skin reaction.

- · Label elements
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms





GHS07 GHS08

- · Signal word Warning
- Hazard-determining components of labeling: atrazine (ISO)

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· Hazard statements

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves.

Contaminated work clothing must not be allowed out of the workplace.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

IF ON SKIN: Wash with plenty of water.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- NFPA ratings (scale 0 4)



 $\begin{aligned} & \text{Health} = 2 \\ & \text{Fire} = 0 \\ & \text{Reactivity} = 0 \end{aligned}$

· HMIS-ratings (scale 0 - 4)



Health = *2

Fire = 0 Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

1912-24-9 atrazine (ISO)

- · Identification number(s)
- **EC number:** 217-617-8
- · Index number: 613-068-00-7

4 First-aid measures

- · Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.

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- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- \cdot Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- \cdot Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:

Substance is not listed.

· PAC-2:

Substance is not listed.

· PAC-3:

Substance is not listed.

7 Handling and storage

- · Handling:
- · **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

US



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8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

At this time, the other constituents have no known exposure limits.

1912-24-9 atrazine (ISO)				
REL	Long-term value: 5 mg/m³			
TLV	Long-term value: 2* mg/m³ *inhalable fraction			

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles



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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

· pH-value:

Form: Solid

Color: Not determined.

Odor: Characteristic
Odor threshold: Not determined.

· Change in condition

Melting point/Melting range: 176 °C (349 °F) Boiling point/Boiling range: Undetermined.

· **Flash point:** Not applicable.

• Flammability (solid, gaseous): Product is not flammable.

· Ignition temperature:

Decomposition temperature:

· Auto igniting: Not determined.

• **Danger of explosion:** Product does not present an explosion hazard.

Not applicable.

Not determined.

· Explosion limits:

Lower: Not determined. Upper: Not determined.

• **Vapor pressure at 20 °C (68 °F):** 0.0000004 hPa

Density: Not determined.
Relative density Not determined.
Vapor density Not applicable.
Evaporation rate Not applicable.

Solubility in / Miscibility with

Water: Insoluble.

 \cdot Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not applicable. **Kinematic:** Not applicable.

· Solvent content:

 Organic solvents:
 0.0 %

 VOC content:
 g/1 / 0 lb/gl

• Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.

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- **Incompatible materials:** No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:

1912-24-9 atrazine (ISO)

Oral	LD50	672 mg/kg (rat)
Dermal	LD50	7500 mg/kg (rabbit)
Inhalative	LC50/4 h	5200 mg/L (rat)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

3

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 3 (Assessment by list): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

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13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.

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· **DOT, IMDG, IATA** UN3077

· UN proper shipping name

• **DOT** Environmentally hazardous substances, solid, n.o.s. (atrazine

(ISO))

· IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (atrazine (ISO)), MARINE POLLUTANT

· IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (atrazine (ISO))

· Transport hazard class(es)

· DOT, IMDG, IATA



· Class 9 Miscellaneous dangerous substances and articles

9

· Packing group

· Label

· DOT, IMDG, IATA

• Environmental hazards: Product contains environmentally hazardous substances: atrazine

(ISO)

· Marine pollutant: Yes (DOT)

Symbol (fish and tree)

· **Special marking (IATA):** Symbol (fish and tree)

• Special precautions for user Warning: Miscellaneous dangerous substances and articles

Danger code (Kemler):EMS Number:F-A,S-F

· Stowage Category A

• Stowage Code SW23 When transported in BK3 bulk container, see 7.6.2.12 and

7.7.3.9.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· DOT

• Quantity limitations On passenger aircraft/rail: No limit

On cargo aircraft only: No limit

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• **Remarks:** Special marking with the symbol (fish and tree).

· IMDG

Limited quantities (LQ)
 Excepted quantities (EQ)
 S kg
 Code: E1

Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g

· UN "Model Regulation": UN 3077 ENVIRONMENTALLY HAZARDOUS

SUBSTANCES, SOLID, N.O.S. (ATRAZINE (ISO)), 9, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- ·Sara
- · Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

- · Proposition 65
- · Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms





GHS07

GHS08



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· Signal word Warning

· Hazard-determining components of labeling:

atrazine (ISO)

· Hazard statements

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves.

Contaminated work clothing must not be allowed out of the workplace.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

IF ON SKIN: Wash with plenty of water.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Document Control / Regulatory
- · Contact: regulatory@ultrasci.com
- · Date of preparation / last revision 04/27/2017 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Sens. 1: Skin sensitisation – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

* Data compared to the previous version altered.