

PENETONE 8502H

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Date prepared: 12 May 2016
MSDS : PENETONE 8502H SDS GHS

1. IDENTIFICATION

Product Identifier

Product Name PENETONE 8502H
Chemical Name Triazine/aldehyde-type hydrogen sulfide scavenger

Recommended use of the chemical and restrictions on use

Recommended use Aqueous hydrogen sulfide control applications
Restrictions on use For industrial use only

Supplier details

West Penetone Inc.
11411-160 Street
Edmonton, AB,
T5M3T7
Tel: 780-454-3919

Emergency Telephone Number

Canutec (613)-996-6666 or 1-888-226-8832 – FOR 24 HOUR TRANSPORT EMERGENCY WITHIN CANADA
Chemtrec 1-800-424-9300 – FOR 24 HOUR TRANSPORT EMERGENCY WITHIN USA

2. HAZARDS IDENTIFICATION

Classification

Flammable liquids	Category 4
Acute toxicity, oral	Category 3
Acute toxicity, inhalation - mists	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitizer	Category 1B
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1
Specific target organ toxicity – single exposure	Category 1
Specific target organ toxicity – single exposure	Category 3
Hazardous to the aquatic environment, acute hazard	Category 3

Label Elements

DANGER

Hazard Statements

Combustible liquid
Toxic if swallowed or inhaled
Causes skin and serious eye irritation
May cause an allergic skin reaction
Suspected of causing genetic defects
May cause cancer
Causes damage to organs
May cause respiratory irritation
Harmful to aquatic life



Precautionary Statements - Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/other sources of ignition. No smoking.
Avoid breathing dust/fume/mist/vapors/spray.
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
In case of inadequate ventilation, wear respiratory protection.

Precautionary Statements - Response

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.
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.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician.
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.
If exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage

Store locked up. Store in a well ventilated place. Keep container tightly closed. Keep cool.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant according to local, provincial/federal regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
ethylene glycol	107-21-1	10-30
1,3,5-triazine-1,3,5-(2H,4H,6H)-triethanol	4719-04-4	10-30
formaldehyde	50-00-0	7-13

4. FIRST AID MEASURES

Ingestion Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Skin contact Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Inhalation Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician.

Eye contact 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.

Most important symptoms and effects, both acute and delayed

Contact with eyes may cause serious irritation leading to discomfort or pain, excess blinking and tear production with marked excess redness and swelling of the conjunctiva. Contact with skin may cause irritation with local redness. Exposure may aggravate previous medical skin conditions. Exposure may cause an allergic skin reaction with prolonged or repeated contact. Inhalation of mist/vapors/spray may cause destruction of the mucous membranes and upper respiratory tract leading to a burning sensation of the nose and throat, coughing, and difficulty breathing. Serious effects may be delayed following exposure. Ingestion may cause irritation or a burning sensation of the mouth and throat and abdominal pain. Product contains materials that cause damage to the nervous system (CNS), liver, kidneys, gastrointestinal tract, upper respiratory tract, skin, eyes, lens or cornea, testes. See Section 2 for possible delayed effects.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

None.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed including formaldehyde, oxides of carbon and nitrogen, and other irritating gases.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Do not breathe vapor or mist. Wear appropriate respirator when ventilation is inadequate. Put on personal protective equipment. Remove all sources of ignition. Evacuate personnel to safe areas.

Environmental Precautions

Avoid discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Contain and solidify with inert absorbent material. Keep in suitable, closed containers for disposal. Following product recovery, flush the area with water. For large spills, stop flow of material, prevent product from entering drains, and pump off product where this is without risk and possible. Proceed as above.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling

Avoid contact and inhalation of mist/vapors/spray. Avoid contact with skin, eyes and clothing. Ensure thorough ventilation of work areas. Use recommended personal protective equipment. Smoking, eating and drinking should be prohibited in the application area.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed away from direct sunlight in a dry, cool and well-ventilated place, away from incompatible materials.

Incompatible Materials

Acids, strong oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
ethylene glycol 107-21-1	100 mg/m ³ Ceiling	50 ppm/125 mg/m ³ Ceiling	Not listed
formaldehyde 50-00-0	0.3 ppm/0.37mg/m ³ Ceiling	TWA: 0.75 ppm STEL: 2 ppm	Not listed

Appropriate engineering controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas. Eyewash facilities and emergency shower must be made available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face Protection

Safety glasses with side shields or goggles and/or faceshield.

Skin and body protection

Wear protective gloves and protective clothing.

Respiratory Protection

Wear respiratory protection if ventilation is inadequate. Respiratory protection in case of vapor/aerosol release.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE :**

Clear, colorless to dark red liquid

ODOR :

Amine/aldehyde

ODOR THRESHOLD :

Not applicable

pH :

9.0-10.0

MELTING POINT / FREEZING POINT :

≤ -40°C (≤ -40°F)

BOILING POINT/BOILING RANGE :

Not available

FLASH POINT :

>60°C (>140°F)

EVAPORATION RATE, water = 1 :

1

FLAMMABILITY (SOLID, GAS) :

Not applicable

VAPOR PRESSURE, mm Hg AT 20°C (68°F) :

Not available

VAPOR DENSITY (Air = 1) :

Not available

RELATIVE DENSITY AT 20°C (68°F) :

1.080

SOLUBILITY IN WATER :

Complete

PARTITION COEFFICIENT, N-OCTANOL/WATER :

Not available

AUTO-IGNITION TEMPERATURE :

Not available

DECOMPOSITION TEMPERATURE :

Not available

VISCOSITY :

Not available

FLAMMABLE LIMITS :

UPPER : Not available LOWER : Not available

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid

Avoid extreme temperatures. Store away from incompatible materials.

Incompatible Materials

Acids, strong oxidizing agents.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition can lead to release of irritating gases and vapors such as formaldehyde, oxides of carbon and nitrogen as well as other low molecular weight hydrocarbons.

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

ATE_{mix} – LD50 oral – approx. ≥867 mg/kg (rat), LD50 dermal – approx. >3700 mg/kg (rat), LC50 inhalation-mist – approx. ≥0.708 mg/L – 4 h (rat)

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
ethylene glycol 107-21-1	4000 mg/L (rat)	9530 uL/kg (rabbit)	Not listed
1,3,5-triazine-1,3,5-(2H,4H,6H)-triethanol 4719-04-4	>488-≤584 mg/L (rat)	>2000 mg/kg (rat)	0.371 mg/L (rat) – 4 hr
formaldehyde 50-00-0	500 mg/kg (rat)	Not listed	0.579 ppm (rat) – 4 hr

Information on likely sources of exposure**Ingestion**

May be harmful if swallowed. May cause stomach pains.

Skin corrosion/irritation

Causes skin irritation, redness and possible sensitization.

Inhalation

May cause coughing, respiratory irritation and possible damage.

Serious eye damage/irritation Causes serious eye irritation. May cause pain, watering and redness.

Delayed and immediate effects and also chronic effects from short and long-term exposure

Respiratory or skin sensitization 1,3,5-triazine-1,3,5(2H,4H,6H)-triethanol (CAS 4719-04-4) - 1B May cause an allergic skin reaction
Formaldehyde (CAS 50-00-0) 1 May cause an allergic skin reaction
Germ cell mutagenicity Formaldehyde (CAS 50-00-0) 2 Suspected of causing genetic defects
Carcinogenicity Formaldehyde (CAS 50-00-0) 1 Carcinogenic to humans
Reproductive toxicity No information available
STOT - single exposure 1,3,5-triazine-1,3,5(2H,4H,6H)-triethanol (CAS 4719-04-4) 1 Causes damage to liver, central nervous system
Formaldehyde (CAS 50-00-0) 1 Causes damage to eyes, CNS
STOT - repeated exposure 1,3,5-triazine-1,3,5(2H,4H,6H)-triethanol (CAS 4719-04-4) 1 Causes damage to skin, CNS, kidneys
Aspiration Hazard None.

Symptoms related to the physical, chemical and toxicological characteristics

Skin and eye irritation. Ingestion may cause irritation or burns of mouth, esophagus and stomach, abdominal pain, nausea, vomiting, diarrhea. Inhalation may cause irritation of nose, mouth, and upper respiratory tract, coughing, difficulty breathing, as well as headaches, dizziness, or nausea at high concentrations.

12. ECOLOGICAL INFORMATION

Ecotoxicity

If available, ecotoxicity values of individual components are shown below.

Chemical Name	Fish	Waterflea	Algae
ethylene glycol	≤41000 mg/L: rainbow trout LC50	Not available	1300-6500 mg/L: selenastrum capricornutum EC50
1,3,5-triazine-1,3,5(2H,4H,6H)-triethanol 4719-04-4	119 mg/L: 96 h rainbow trout LC50	26.1 mg/L: 48 h Daphnia magna EC50	Not available
formaldehyde 50-00-0	62-109 mg/L: 96 h rainbow trout LC50	14.7 mg/L: 24 h Daphnia magna EC50	10-100 mg/L: 96 h

Persistence and degradability

Expected to be readily biodegradable.

Bioaccumulative potential

Accumulation in organisms is not to be expected.

Mobility in soil

No information available

Other adverse effects

Do not release untreated into natural waters. No other adverse environmental effects are expected.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

UN Number: 2810
UN Proper Shipping Name: Toxic Liquid, Organic, N.O.S. (1,3,5-triazine-1,3,5(2H,4H,6H)-triethanol solution), Inhalation Hazard
Transport Hazard Class(es):
Class: TDG: 6.1
US DOT: 6.1
IMDG: 6.1
Label(s): 6.1
Packing Group: II
Marine Pollutant: No

Special precautions for user: None established

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not determined

15. REGULATORY INFORMATION

Canada (DSL/NDSL)

All ingredients contained in this product are in compliance with the Canadian Environmental Protection Act and are listed on the DSL or are exempt.

United States (TSCA)

All ingredients contained in this product are listed on the TSCA inventory or are exempt.

HMIS Information:

Health:	2
Flammability:	2
Reactivity:	0

16. OTHER INFORMATIONPreparation Date

12 May, 2016

Revision Date

3 May 2018

Revision Note

Revision 3 - Modifications to Section 1, 2, 4, 7, 11, 14, 15

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS