

1. IDENTIFICATION

Product Identifier

Product Name SCAVEX
Chemical Name Triazine-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 4
Acute toxicity, dermal	Category 4
Acute toxicity, inhalation - mist	Category 3
Skin corrosion/irritation	Category 1C
Serious eye damage/eye irritation	Category 1
Skin sensitizer	Category 1B
Specific target organ toxicity – single exposure	Category 1
Specific target organ toxicity – repeated exposure	Category 1
Hazardous to the aquatic environment, acute hazard	Category 3

Label Elements

DANGER

Hazard Statements

Combustible liquid
Harmful if swallowed
Harmful in contact with skin
Toxic if inhaled
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Causes damage to organs [liver, nervous system]
May cause damage to organs through prolonged or repeated exposure [central nervous system (CNS), kidneys, skin]
Harmful to aquatic life



Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not breathe dust/fume/gas/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.

Precautionary Statements - Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately 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.
Immediately call a POISON CENTER or doctor/physician.
If exposed or concerned: call a POISON CENTER or doctor/physician.
Get medical advice/attention if you feel unwell.

Precautionary Statements - Storage

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

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 %
1,3,5-triazine-1,3,5-(2H,4H,6H)-triethanol	4719-04-4	30-60
2-dimethylaminoethanol	108-01-0	7-13
ethylene glycol	107-21-1	7-13
morpholine	110-91-8	3-7
2-aminoethanol	141-43-5	1-5

4. FIRST AID MEASURES

Ingestion Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

Skin contact Wash with plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation or rash occurs, get medical advice/attention. Take off immediately all contaminated clothing and wash it before re-use.

Inhalation If difficulties occur after mist/vapors/spray has been inhaled, remove person to fresh air and keep comfortable for breathing. Immediately 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. Immediately call a POISON CENTER or doctor/physician

Most important symptoms and effects, both acute and delayed

Product is corrosive to eyes and skin and may cause burns. Product may be harmful in contact with skin and cause sensitization with prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. Product is toxic by inhalation and may irritate respiratory system. Serious effects may be delayed following exposure. Harmful if swallowed. May cause burns to mouth, throat and stomach. Product contains materials which cause damage to the nervous system (CNS), liver, kidneys, gastrointestinal tract, upper respiratory tract, skin, eyes, lens or cornea, testes.

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 oxides of carbon and nitrogen.

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. Avoid contact with skin, eyes and clothing. Do not breathe vapor or mist. Use personal protective equipment.

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 area with water. For large spills, stop flow of material, dike, 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. Smoking, eating and drinking should be prohibited in the application area. Use recommended personal protective equipment.

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, 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
morpholine 110-91-8	TWA: 20 ppm	20 ppm/70 mg/m ³	Not listed
2-aminoethanol 141-43-5	TWA : 3 ppm/7.5 mg/m ³ STEL : 6 ppm/15 mg/m ³	3 ppm/6 mg/m ³	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 or face shield with high risk of splashing.

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 light amber liquid

ODOR :

Amine

ODOR THRESHOLD :

Not applicable

pH :

10.2-11.2

MELTING POINT / FREEZING POINT :

≤ -40°C (≤ -40°F)

BOILING POINT/BOILING RANGE :

Not available

FLASH POINT :

63.5°C / 146°F (TCC), 113°C / 235°F (COC)

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) :

1.030-1.040

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

Strong oxidizing materials, acids.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decompositions 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. ≥945 mg/kg (rat), LD50 dermal – approx. ≥1837 mg/kg (rat), LC50 inhalation-mist – approx. >0.50 mg/L – 4 h (rat)

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
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
2-dimethylaminoethanol 108-01-0	1183 mg/L (rat)	1219 mg/kg (rabbit)	6.1 mg/L (rat) – 4 hr
ethylene glycol 107-21-1	4000 mg/L (rat)	9530 uL/kg (rabbit)	Not listed
morpholine 110-91-8	1910 mg/kg (rat)	500 mg/kg (rabbit)	Not listed
2-aminoethanol 141-43-5	1720 mg/kg (rat)	1000 mg/kg (rabbit)	Not listed

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 blistering or sensitization.

Inhalation

May cause coughing, respiratory irritation and possible damage.

Serious eye damage/irritation

Causes serious eye damage. 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
Germ cell mutagenicity	No information available.
Carcinogenicity	Morpholine (CAS 110-91-8) - under certain conditions, forms nitrosamines, an animal study carcinogen
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
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 irritation. Eye damage. Ingestion may cause irritation or burns of mouth, esophagus and stomach, abdominal pain, nausea, vomiting, diarrhea and affect the liver, kidneys, and central nervous system. Inhalation may cause irritation of nose, mouth, and upper respiratory tract, coughing, difficulty breathing.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

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

Chemical Name	Fish	Waterflea	Algae
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
2-dimethylaminoethanol 108-01-0	146.6 mg/L: 96 h Leuciscus idus LC50	98.4 mg/L: 48 h Daphnia magna EC50	66.1 mg/L: 72 h scenedesmus subspicatus EC50
ethylene glycol 107-21-1	≤41000 mg/L: rainbow trout LC50	Not available	1300-6500 mg/L: selenastrum capricornutum EC50
morpholine 110-91-8	180 mg/L: 96 h salmo gairdneri, syn. O. mykiss LC50	45 mg/L: 48 h Daphnia magna EC50	28 mg/L: 96 h EC50
2-aminoethanol 141-43-5	150 mg/L: 96 h rainbow trout LC50	Not available	Not available

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:	2927
UN Proper Shipping Name:	Toxic Liquid, Corrosive, Organic, N.O.S. (1,3,5-triazine-1,3,5(2H,4H,6H)-triethanol, morpholine, 2-dimethylaminoethanol solution)
Transport Hazard Class(es) Class:	TDG: 6.1 (8) US DOT: 6.1 (8) IMDG: 6.1 (8)
Label(s):	6.1 (8)
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:	1
Flammability:	1
Reactivity:	0

16. OTHER INFORMATION

<u>Preparation Date</u>	24 March 2016
<u>Revision Date</u>	21 January 2020
<u>Revision Note</u>	Revision 3 - Modifications to Section 14

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