

SAFETY DATA SHEET

2-MERCAPTOETHANOL

SECTION 1: CHEMICAL AND COMPANY IDENTIFICATION

BioShop Canada Inc.
5480 Mainway
Burlington, Ontario L7L 6A4
1-800-234-1179
Emergency Telephone No.: 1-905-466-3832
Chemical Name: 2-Mercaptoethanol
Catalog Number: MER002

SECTION 2 HAZARDS IDENTIFICATION

GHS Classification:

Flammable liquids (Category 4)
Acute toxicity, Oral (Category 3)
Acute toxicity, Inhalation (Category 3)
Acute toxicity, Dermal (Category 2)
Skin irritation (Category 2)
Serious eye damage (Category 1)
Skin sensitisation (Category 1)
Specific target organ toxicity - repeated exposure, Oral (Category 2), Liver, Heart
Acute aquatic toxicity (Category 1)

Pictogram:



Signal word: DANGER

Hazard Statements:

H227 Combustible liquid.
H301 + H331 Toxic if swallowed or if inhaled.
H310 Fatal in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H373 May cause damage to organs (Liver, Heart) through prolonged or repeated exposure if swallowed.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P262 Do not get in eyes, on skin, or on clothing.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the work-place.

P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
P302 + P352 + P310 IF ON SKIN: Wash with plenty of water. Immediately call a POISON CENTER/doctor.
P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 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/doctor.
P314 Get medical advice/ attention if you feel unwell.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P361 + P364 Take off immediately all contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391 Collect spillage.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Potential Health Effects

Eyes: May cause severe eye irritation

Skin: May be fatal if absorbed through the skin. Causes irritation with burning pain, itching and redness.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause dyspnea (difficulty breathing from shortness of breath). Exposure to high concentrations of mercaptans can produce unconsciousness with cyanosis, cold extremities and rapid pulse.

Ingestion: Harmful if ingested. May cause gastrointestinal irritation with nausea, vomiting, and diarrhea. May cause muscle paralysis, respiratory failure and possible death.

Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis. Repeated or prolonged exposure may cause CNS stimulation.

SECTION 3 COMPOSITION/ INGREDIENTS

	CAS #	%
2-Mercaptoethanol	60-24-2	>98

Molecular Formula: C₂H₆OS

Molecular Weight: 78.1014

SECTION 4 FIRST AID MEASURES

Eyes: Flush eyes with water.

Skin: In case of contact, flush area immediately with water.

Inhalation: Remove victim to fresh air.

Ingestion: Wash mouth with water.

SECTION 5 FIRE FIGHTING MEASURES

Flammable: Combustible

Flash Point: N/A

Autoignition Temperature: N/A

Extinguishing Media: Use water spray, foam, dry chemical or carbon

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dioxide.

Explosion Data: Not available

SECTION 6 ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container.

SECTION 7 HANDLING AND STORAGE

Handling: Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Avoid dust generation.

Storage Conditions: Room temperature.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: none listed

Use adequate ventilation. AVOID DUST GENERATION.

Wear appropriate protective equipment to prevent eye and skin exposure.

Wear appropriate respirator to prevent lung irritation.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance and Odour: Clear, colorless, rotten egg-like odor

Freezing/Melting Point: -148° F

Specific Gravity/Density: 1.14 (water=1)

Vapour Density: 2.69 (air = 1)

Solubility: Soluble in water

pH: 5.2 (0.1M sol)

SECTION 10 STABILITY AND REACTIVITY:

Stability: Stable at normal room temperature and pressure

Conditions to avoid: dust generation

Incompatibility strong oxidizing agents.

Hazardous Decomposition Products: carbon dioxide, carbon monoxide and sulfur oxides.

Hazardous Polymerization: Has not been reported

SECTION 11 TOXICOLOGICAL PROPERTIES

Exposure Limits:

Dermal, guinea pig: LD50= 300uL/kg

Draize test, rabbit, eye: 2 mg/Severe

Inhalation, mouse: LC50=13200 mg/m³

Oral, mouse: LD50=190 mg/kg

Oral, rat: LD50 = 244 mg/kg

Skin, rabbit: LD50=150uL/kg

Epidemiology: No data available

Teratogenicity: No data available

Reproductive Effects: No data available

Neurotoxicity: No data available

Mutagenicity: No data available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity to fish, bacteria and algae

Not very biodegradeable

SECTION 13 DISPOSAL CONSIDERATION

Waste Disposal: Burn in chemical incinerator. Observe all Federal, provincial and local regulations.

SECTION 14 TRANSPORT INFORMATION

Shipping Information:

TDG (Canada)

UN number: 2966 Class: 6.1 Packing group: II

Proper shipping name: THIOGLYCOL

IMDG

UN number: 2966 Class: 6.1 Packing group: II EMS-No: F-A, S-A

Proper shipping name: THIOGLYCOL

Marine pollutant: yes

IATA

UN number: 2966 Class: 6.1 Packing group: II

Proper shipping name: Thioglycol

SECTION 15 REGULATORY INFORMATION

US : TSCA: not listed

European/International: N/A

Canada: WHMIS: as above

SECTION 16 ADDITIONAL INFORMATION

Prepared By: M.Kierdelewicz (President)

Date Prepared: Jan 1/2025

Phone: (800) 234-1179

The information provided on this Material Safety Data Sheet is furnished in good faith and without warranty of any kind. The above information is believed to be correct and should be used only as a guide. BioShop Canada Inc. shall not be held liable for any damage resulting from the handling or from the contact with the above product. Observe all federal, provincial and state laws concerning health, safety and pollution.