

# SAFETY DATA SHEET

## ETHYLENE GLYCOL

### 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: Ethylene glycol  
Catalog Number: ETH001

### SECTION 2 HAZARDS IDENTIFICATION

**GHS Classification:**  
Acute toxicity, Oral (Category 4)  
Specific target organ toxicity - repeated exposure, Oral (Category 2), Kidney

**Pictogram:**



**Signal word:** WARNING

**Hazard statements:**  
H302 Harmful if swallowed.  
H373 May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

**Precautionary statement:**  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.  
P314 Get medical advice/ attention if you feel unwell.

### Potential Health Effects

**Target Organs:** Kidneys, CNS, eyes, respiratory tract  
**Eyes:** May cause eye irritation.  
**Skin:** May cause skin irritation.  
**Inhalation:** may cause irritation.  
**Ingestion:** May be harmful if swallowed. Ingestion may cause nausea, vomiting and diarrhea. **Lethal dose for humans is 100ml.** May cause CNS disturbances, convulsions, and coma. May cause renal failure.

**CHRONIC HEALTH HAZARDS:** Repeated exposure may cause kidney

damage. Irritation to respiratory tract.

### SECTION 3 COMPOSITION/ INGREDIENTS

	CAS #	%
Ethylene glycol	107-21-1	>95%

**Molecular Formula:** C<sub>2</sub>H<sub>6</sub>O<sub>2</sub>  
**Molecular Weight:** 62.06

### SECTION 4 FIRST AID MEASURES

**Eyes:** Flush eyes with plenty of water for at least 15 minutes.  
**Skin:** Flush area immediately with plenty of soap and water while removing contaminated clothing and shoes.  
**Inhalation:** Remove victim to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen. GET MEDICAL ATTENTION.  
**Ingestion:** Wash mouth with water. GET MEDICAL ATTENTION.

### SECTION 5 FIRE FIGHTING MEASURES

**General Information:** Always wear full protective gear in the event of a fire. Toxic gas and vapors may be generated by decomposition or combustion.  
**Flash Point:** 111C  
**Autoignition Temperature:** 398C  
**Explosion limits:** Lower: 3.20 vol%. Upper: 15.30 vol%.  
**Extinguishing Media:** **Small fires:** Use water spray, foam, dry chemical or carbon dioxide. **Large fires:** water spray. Alcohol resistant foam.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container. In the event of a fire always wear self-contained breathing apparatus, NIOSH/MSHA approved or equivalent.  
**Leak and Spill Procedures:** Ventilate the area. Wear appropriate protective equipment. Absorb with inert material like vermiculite or earth. Sweep into suitable 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. Minimize dust generation.  
**Storage Conditions:** Room temperature.

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:** ACGIH: 100MG/M<sup>3</sup> CEILING  
Wear appropriate protective equipment to prevent eye and skin exposure. Wear appropriate respirator to prevent lung irritation.  
**Personal Protection:** Lab coat, safety goggles, rubber gloves.  
**Ventilation:** Local exhaust systems. Use fume hood

# SAFETY DATA SHEET

## ETHYLENE GLYCOL

**Respiratory protection:** use OSHA/MSHA approved respirator.

**Canada:** not regulated

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid  
**Appearance and Odor:** clear/colorless viscous..  
**Freezing/Melting Point:** N/A  
**Boiling Point:** 197C  
**Specific Gravity:** 1.113 g/ml  
**Vapor Density:** N/A  
**Vapor pressure:** 0.05 mm Hg@ 20C  
**Viscosity:** 21cP  
**Solubility:** soluble in water  
**pH:** N/A

### SECTION 10 STABILITY AND REACTIVITY:

**Stability:** Stable under normal temperatures and pressure. Hygroscopic.  
**Conditions to avoid:** moisture and heat.  
**Incompatibility:** Strong oxidizing agents and reducing agents, caustics.  
**Hazardous Decomposition Products:** carbon monoxide, carbon dioxide,  
**Hazardous Polymerization:** Will not occur

### SECTION 11 TOXICOLOGICAL PROPERTIES

#### Exposure Limits:

LD50 / LC50:  
Oral, mouse: LD50=5500 mg/kg  
Oral, Rat= LD50+4700 mg/kg  
Draize test: rabbit, eye: 500mg/24H r mild.

**Lethal dose for humans: 100ml.**

**Epidemiology:** No data available  
**Teratogenicity:** No data available  
**Reproductive Effects:** No data available  
**Neurotoxicity:** No data available  
**Mutagenicity:** No data available  
**Carcinogenicity:** Not listed by ACGIH, IARC, NTP, or OSHA

### SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: rainbow trout; LC50=4100 mg/L, 96hr  
Goldfish: LC50=27500-41000 mg/L 96hr, unspecified

### SECTION 13 DISPOSAL CONSIDERATION

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

### SECTION 14 TRANSPORT INFORMATION

**US DOT:** not regulated

### SECTION 15 REGULATORY INFORMATION

**US:** TSCA: listed  
**European/International:** Harmful if swallowed  
**Canada:** WHMIS: **D2B**

### SECTION 16 ADDITIONAL INFORMATION

#### Hazard Rating System (estimated)

NFPA	Health	Fire	Reactivity
	2	1	0

Prepared By: M.Kierdelewicz (President)  
Date Prepared: Dec 29/2021  
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.