

# SAFETY DATA SHEET

## DL-DITHIOTHREITOL

### SECTION 1: CHEMICAL AND COMPANY IDENTIFICATION

**BioShop Canada Inc.**  
5480 Mainway  
Burlington, Ontario L7L 6A4  
1-800-234-1179  
Emergency Telephone No.: 905-466-3832  
Chemical Name: DL-Dithiothreitol  
Synonym: DTT  
Catalog Number: DTT001/DTT002

	<b>CAS #</b>	<b>EC-No.</b>	<b>%</b>
DL-Dithiothreitol	3483-12-3	222-468-7	100

### SECTION 2 HAZARDS IDENTIFICATION

**WHMIS:**  
D2B toxic material causing other toxic effects Moderate Eye irritant

#### GHS Classification

**CLASSIFICATION:**  
Skin irritant: Category 2  
Eye irritant, Category 2  
Acute toxicity: Category 4  
Specific target organ toxicity-single exposure- Category 3

#### PICTOGRAM:



**SIGNAL WORD:** WARNING

**HAZARD STATEMENTS:**  
H302- Harmful if swallowed  
H315- Causes skin irritation  
H319- Causes serious eye irritation

#### PRECAUTIONARY STATEMENTS:

P261-Avoid breathing dust/fume/gas/mist/vapours/spray.  
P305+P351+P338- if in eyes: rinse cautiously with water for several minutes.  
remove contact lenses if present and easy to do. Continue rinsing.

#### Potential Health Effects:

Inhalation: may be harmful if inhaled.  
Skin: may be harmful if absorbed through skin  
Eyes: Causes eye irritation  
Ingestion: harmful if swallowed

### SECTION 3 COMPOSITION/ INGREDIENTS

**Molecular formula:** C<sub>4</sub>H<sub>10</sub>O<sub>2</sub>S<sub>2</sub>  
**Molecular weight:** 154.25 g/mol

### SECTION 4 FIRST AID MEASURES

**Eyes:** Flush eyes with plenty of water . Consult a physician.  
**Skin:** In case of contact, flush area immediately with water. Get medical aid if irritation persists.  
**Inhalation:** Remove victim to fresh air. If breathing becomes difficult, give oxygen. Consult a physician..  
**Ingestion:** Wash mouth with water. Do NOT induce vomiting. Consult a physician if you feel unwell.

### SECTION 5 FIRE FIGHTING MEASURES

**Flammability:** not flammable  
**Flash Point:** 113C-closed cup  
**Autoignition Temperature:** not determined  
**Extinguishing Media:** Use water spray, foam, dry chemical or carbon dioxide.  
**Explosion Data:** Not available

### SECTION 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions:**  
Ventilate the area. Wear appropriate protective equipment. Avoid contact with skin, eyes and clothing.  
**Methods for containment and clean up:**  
If safe to do so, contain further leakage. Sweep and place in a closed container. Dispose according to local regulations.

### SECTION 7 HANDLING AND STORAGE

**Handling:** Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.  
**Storage Conditions:** Room temperature. Keep cool and dry.

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:**  
ACGIH, NIOSH, OSHA, none listed  
Use adequate ventilation. Avoid dust generation..  
**Personal protective Equipment:** Wear appropriate safety glasses and protective gloves/clothing. Use approved NIOSH respirator.  
**Engineering Measures:** eye wash stations, ventilation systems, showers  
**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice. wash hands before and after handling product.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** White powder  
**Odor:** unpleasant  
**Odor Threshold:** : no information found  
**Melting Point:** 42+/- 2C

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**Boiling Point:** no information found  
**Specific Gravity:** no information found  
**Vapor Density:** no information found  
**Vapor pressure:** no information found  
**Water Solubility:** soluble in water (10-50g/100ml)  
**pH:** 4-6 at 15.4 g/L  
**Flammability:** No  
**Flash point:** 113C-closed cup  
**Ignition temperature:** no information found  
**Autoignition temperature:** no information found  
**Lower explosion limit:** no information found  
**Upper explosion limit:** no information found

### SECTION 10 STABILITY AND REACTIVITY:

**Stability:** Stable at normal room temperature and pressure  
**Conditions to avoid:** dust generation  
**Incompatibility** strong oxidizing agents, reducing agents.  
**Hazardous Decomposition Products:** fumes of carbon monoxide, carbon dioxide and oxides of sulfur.  
**Hazardous Polymerization:** Has not been reported

### SECTION 11 TOXICOLOGICAL PROPERTIES

#### Exposure Limits:

LD50/LC50:  
Oral LD50-rat-400mg/kg

**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 CA

### SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity:**  
No information found

### SECTION 13 DISPOSAL CONSIDERATION

**Waste Disposal:** Care should be exercised when burning in chemical incinerator.. Observe all Federal, provincial and local regulations.

### SECTION 14 TRANSPORT INFORMATION

#### Shipping Information:

**DOT (US):**  
Not regulated  
**IMDG**  
Not regulated  
**IATA:**  
Not regulated

### SECTION 15 REGULATORY INFORMATION

**Canada:**  
WHMIS:  
D2B, Toxic material Causing Other Toxic Effects  
Moderate eye irritant

### SECTION 16 ADDITIONAL INFORMATION

Prepared By: M.Kierdelewicz  
Date Prepared: Oct 6/2022  
Phone: (800) 234-1179

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