

**Last Revision Date: 12/08/2011**

**SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION**

Catalog Number: NG-15321  
Description: 1-4-Butanedithiol  
Other Names: Not Available

Supplied by CHEM SERVICE, Inc. PO BOX 599, WEST CHESTER, PA 19381 (610)-692-3026  
EMERGENCY PHONE: 1-610-692-3026

**SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

CAS: 1191-08-8  
Description: 1-4-Butanedithiol  
EINECS No: 214-728-3  
Hazard Symbols: N/A  
Molecular Weight: 122.24  
Molecular Formula: C4H10S2

**SECTION 3 - HAZARDS IDENTIFICATION**

Contact lenses should not be worn in the laboratory  
Can cause eye irritation.  
Can cause skin irritation.  
May be harmful if absorbed through the skin.  
May be fatal if absorbed through the skin!  
May be harmful if inhaled.  
May be fatal if inhaled!  
May be harmful if swallowed.  
May be fatal if swallowed!  
Can be irritating to mucous membranes.  
Possible cholinesterase inhibitor-May cause seizures, nausea, vomiting, airway obstruction and/or increased mucous secretions in the lungs.  
Prolonged exposure may cause nausea/headache/dizziness and/or eye damage.

**SECTION 4 - FIRST AID MEASURES**

An antidote is a substance intended to counteract the effect of a poison. It should be administered only by a physician or trained emergency personnel. Medical advice can be obtained from a POISON CONTROL CENTER.

In case of contact: Flush eyes continuously with water for 15-20 minutes. Flush skin with water for 15-20 minutes.

If no burns have occurred-use soap and water to cleanse skin.

If inhaled remove patient to fresh air. Administer oxygen if patient is having difficulty breathing.

If patient has stopped breathing administer artificial respirations.

If patient is in cardiac arrest administer CPR.

Continue life supporting measures until medical assistance has arrived.

**SECTION 5 - FIRE AND EXPLOSION DATA**

Flash Point:  
70 C

Extinguishing Media:  
Carbon dioxide, dry chemical powder or spray.

Upper Explosion Limit:  
N/A

Lower Explosion Limit:  
N/A

Auto Ignition:  
N/A

NFPA Hazard Rating:  
Health

Flammability

Reactivity

Special

0 - Least, 1 - Slight, 2 - Moderate, 3 - High, 4 - Severe

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Spills or leaks: Evacuate area. Wear appropriate OSHA regulated equipment. Ventilate area. Absorb on vermiculite or similar material. Sweep up and place in an appropriate container. Hold for disposal. Wash contaminated surfaces to remove any residues. Remove contaminated clothing and wash before reuse.

**SECTION 7 - HANDLING AND STORAGE****Handling:**

This chemical should be handled only in a hood. Eye shields should be worn. Use appropriate OSHA/MSHA approved safety equipment. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling.

**Storage:**

Store in a cool dry place. Store only with compatible chemicals. Keep tightly closed.

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

OSHA PEL (TWA):  
N/A

ACGIH TLV (TWA):  
N/A

ACGIH TLV (STEL):  
N/A

Personal Protective Equipment

Eyes: Wear Safety Glasses.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 requirements must be followed whenever workplace conditions warrant a respirator's use.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Color: **R**

Phase: **Liquid**

Melting Point: **N/A C**

Boiling Point: **205 C**

Specific Gravity: **1.042**

Vapor Density: **N/A**  
Vapor Pressure: **N/A**  
Solubility in water: **N/A**  
Odor: **STENCH!**  
Evaporation Rate: **N/A**  
Molecular Weight: **122.24**  
Molecular Formula: **C4H10S2**

**SECTION 10 - STABILITY AND REACTIVITY**

Combustible.  
Incompatible with strong bases.  
Incompatible with strong oxidizing agents.  
Incompatible with strong reducing agents.  
Incompatible with Iron and Zinc and other light metals.

**SECTION 11 - TOXICOLOGY INFORMATION**

RTECS: Not Available

<u>Oral Rat or Mouse LD50:</u>	<u>Dermal Rat or Mouse LD50:</u>	<u>Rat or Mouse LC50:</u>
Not Available	> N/A	N/A

Carcinogenicity					
<u>OSHA:</u>	<u>NTP:</u>	<u>IARC:</u>	<u>CARC:</u>	<u>NIOSH:</u>	<u>ACGIH:</u>
No	No	No	No	No	No

California Proposition 65 info: Not Listed

**SECTION 12 - ECOLOGICAL INFORMATION**

Ecotoxicity: Not Available  
Environmental Fate: Not Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Dispose in accordance with Federal, State and Local regulations.

**SECTION 14 - TRANSPORTATION INFORMATION**

Not a regulated chemical

**SECTION 15 - REGULATORY INFORMATION**

European Labeling in Accordance with EC Directives  
Hazard Symbols: N/A

Risk Phrases:

Safety Phrases:

-S24/25: Avoid contact with skin and eyes.

**SECTION 16 - OTHER INFORMATION**

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded MSDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

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