

TCI AMERICA SAFETY DATA SHEET

Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

Product name: Bis(2-hydroxyethyl) Disulfide

Product code: B4263

Product use:For laboratory research purposes.Restrictions on use:Not for drug or household use.

Company: TCI America 9211 N. Harborgate S

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Emergency telephone number:

Chemical Emergencies:

TCI America (8:00am - 5:00pm) PST

+1-503-286-7624

Transportation Emergencies: Chemtrec 24-Hour

+1-800-424-9300 (U.S.A.) +1-703-527-3887 (International)

Responsible department:

TCI America

Environmental Health Safety and Security

+1-503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

WHMIS 2015:

Acute Toxicity - Oral [Category 3] Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A]

Signal word: Danger!

Hazard Statement(s):

Toxic if swallowed Causes skin irritation Causes serious eye irritation

Pictogram(s) or Symbol(s):



Precautionary Statement(s):

[Prevention]

Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves, eye protection.

[Response]

If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

[Storage] Store locked up.

[Disposal] Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40

CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified:

[HNOC]

None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: Bis(2-hydroxyethyl) Disulfide

 Percent:
 >98.0%(GC)

 CAS RN:
 1892-29-1

 Molecular Weight:
 154.24

 Chemical Formula:
 C4H10O2S2

Synonyms: 2,2'-Dithiodiethanol, 2-Hydroxyethyl Disulfide

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

advice/attention if you feel unwell.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If

skin irritation or rash occurs: Get medical advice/attention.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists: Get medical advice/attention. Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Ingestion: Immediately call a POISON CENTER or do

Symptoms/effects:

Acute: No data available

Delayed: No data available

Indication of any immediate medical attention:

Not available.

Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, water spray, carbon dioxide.

Unsuitable extinguishing media: Solid streams of water

Specific hazards arising from the

chemical:

 $\label{thm:care} \textbf{Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.}$

Hazardous combustion products: None

Other specific hazards: Closed containers may explode from heat of a fire.

Advice for firefighters: Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Environmental precautions:

Prevent product from entering drains.

Methods and materials for containment

and cleaning up:

Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly

disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent

generation of vapour or mist. Wash hands and face thoroughly after handling.

Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated.

Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool and dark place.

Store under inert gas. Store locked up.

Store away from incompatible materials such as oxidizing agents.

Air-sensitive

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls: Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc.

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid Form: Clear

Colorless - Slightly pale yellow

Odour: No data available
Odor threshold: No data available
Odour threshold: No data available
No data available

Melting point/freezing point: рН: No data available No data available Boiling point/range: 163°C /0.47kPa (325°F) Vapour pressure: No data available. No data available Vapour density: Decomposition temperature: No data available Relative density: 1.28 **Dynamic Viscosity:** No data available

Kinematic viscosity: 1.28

No data available

Log Pow: No data available Evaporation rate(Butyl No data available

Acetate=1):

Flash point: 112°C (234°F) Autoignition temperature: No data available

Flammability(solid, gas): No data available Flammability or explosive limits:

Lower: No data available

Upper: No data available

Solubility(ies):

[Water] No data available [Other solvents] No data available

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under proper conditions.

Possibility of hazardous reactions: No special reactivity has been reported.

Incompatible materials: Oxidizing agents

Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Sulfur oxides

11. TOXICOLOGICAL INFORMATION

RTECS Number: KK7525000

Acute Toxicity:

ipr-mus LD50:100 mg/kg orl-rat LD50:173 mg/kg

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity:

No data available

IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity:

No data available

Target organ(s): No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: No data available Crustacea: No data available Algae: No data available

Persistence / degradability: Bioaccumulative potential(BCF):

Mobility in soil

No data available No data available

Log Pow:

Soil adsorption (Koc): No data available No data available Henry's Law (PaM 3/mol):

13. DISPOSAL CONSIDERATIONS

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and

Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not

be allowed to enter the environment, drains, water ways, or the soil.

Dispose of as unused product. Do not re-use empty containers. Disposal of container:

Other considerations: Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

DOT (US)

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN2810 Toxic, liquids, organic, n.o.s 6.1 Toxic material.

<u>IATA</u>

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN2810 Toxic liquid, organic, n.o.s 6.1 Toxic material. II

IMDG

er:

UN UN2810 Proper Shipping Name: Class or Division: Packing Group:

numb Toxic liquid, organic, n.o.s 6.1 Toxic material. III

EmS number: F-A, S-A

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313: Not Listed SARA 302: Not Listed

State Regulations
State Right-to-Know

MassachusettsNot ListedNew JerseyNot ListedPennsylvaniaNot ListedCalifornia Proposition 65:Not Listed

Other Information

NFPA Rating:HMIS Classification:Health:0Health:0Flammability:0Flammability:0Instability:0Physical:0

International Inventories

 Canada: NDSL
 On NDSL

 EC-No:
 217-576-6

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.