

# TCI AMERICA SAFETY DATA SHEET

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

1. IDENTIFICATION

Product name: DTT / TG12 [Dithiothreitol + α-Thioglycerol] (1:2 mixture) [Matrix for FABMS and liquid

Product code: S0437

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

Company: TCI America

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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

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+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 4] Acute Toxicity - Dermal [Category 4] Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A]

Signal word: Warning!

Hazard Statement(s): Harmful if swallowed or in contact with skin

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, protective clothing, eye protection.

[Response]

If swallowed: Call a poison center or doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of soap and water. Call a poison center or doctor if you feel unwell. 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

[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

Mixture Substance/mixture:

Components: DTT / TG12 [Dithiothreitol + α-Thioglycerol] (1:2 mixture) [Matrix for FABMS and liquid SIMS]

Percent: CAS RN: **Chemical Formula:** 

Hazardous ingredient(s): DL-Dithiothreitol (33.3%) 3483-12-3 alpha-Thioglycerol (66.7%) 96-27-5

Synonyms: Dithiothreitol + α-Thioglycerol (1:2 mixture)

## 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. Rinse skin with water/shower. If skin irritation

or rash occurs: Get medical advice/attention.

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

Continue rinsing. If eye irritation persists: Get medical advice/attention.

Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Symptoms/effects:

Ingestion:

Acute: Redness.

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.

None Hazardous combustion products:

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

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

## 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,

**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 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 away from incompatible materials such as oxidizing agents.

Packaging material: Comply with laws.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

system or local exhaust as possible so that workers should not be exposed directly. Also install safety

No data available

No data available.

No data available

No data available

No data available

shower and eye bath.

Personal protective equipment

Respiratory protection: Vapor respirator. Follow local and national regulations.

Hand protection: Protective gloves.

Eye protection: Safety glasses. A face-shield, if the situation requires. Skin and body protection: Protective clothing. Protective boots, if the situation requires.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid

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

No data available Melting point/freezing point: Boiling point/range: No data available No data available **Decomposition temperature:** Relative density: No data available No data available Kinematic viscosity:

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

Acetate=1):

Vapour pressure:

Dynamic Viscosity:

Vapour density:

No data available Autoignition temperature: Flash point: No data available

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

No data available Lower: 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.

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

Incompatible materials: Oxidizing agents

Hazardous decomposition products: Carbon monoxide, carbon dioxide etc

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** 

No data available

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

dnd-omi 1 mmol/L mnt-nml-emb 2 mmol/L mmo-sat 100 ug/plate (+/-S9)

Carcinogenicity: No data available

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

Reproductive toxicity:

scu-ham TDLo: 1925 mg/kg (35D male)

Target organ(s): No data available

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** 

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

Persistence / degradability:

Bioaccumulative potential(BCF):

Mobility in soil

No data available No data available

Log Pow: No data available 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. Disposal of container: Dispose of as unused product. Do not re-use empty containers.

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

14. TRANSPORT INFORMATION

DOT (US) Non-hazardous for transportation.

Non-hazardous for transportation. IATA

<u>IMDG</u> Non-hazardous for transportation.

#### 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:** 

Not Listed **SARA 313:** Not Listed **SARA 302:** 

**State Regulations** State Right-to-Know

Not Listed Massachusetts Not Listed **New Jersey** Pennsylvania Not Listed California Proposition 65: Not Listed

Other Information

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

#### **International Inventories**

#### 16. OTHER INFORMATION

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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.