

TCI (Shanghai) DEVELOPMENT CO., LTD.

Revision number: 1 Revision date: 09/05/2019 Page 1 of 4

**Revision date:** 09/05/2019

# SAFETY DATA SHEET

1. IDENTIFICATION

**Product name:** 1,3-Propanedithiol

Product code: P0763

Company: TCI (Shanghai) DEVELOPMENT CO., LTD.

Address: No.96 Pu Gong Road, Shanghai Chemical Industry Park, Shanghai 201507 China

 Responsible Department:
 Sales Department

 Telephone:
 +86-(0)21-67121386

 Fax:
 +86-(0)21-67121385

e-mail: Sales-CN@TCIchemicals.com

**Emergency telephone:** 0532-83889090

Revision number: 1

# 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

PHYSICAL HAZARDS Flammable liquids

Flammable liquids Category 4

**HEALTH HAZARDS** 

Acute toxicity (Oral)
Skin corrosion/irritation
Serious eye damage/eye irritation
ENVIRONMENTAL HAZARDS
Category 2
Category 2A
Not classified

Label elements

Pictograms or hazard symbols



Signal word Warning

Hazard statements

Combustible liquid
Harmful if swallowed
Causes skin irritation

Causes serious eye irritation

**Precautionary statements** 

[Prevention] Keep away from flames and hot surfaces. – No smoking.

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: Call a POISON CENTER or doctor if you feel unwell. Rinse

mouth.

IF ON SKIN: Wash with plenty of 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.

In case of fire: Use dry chemical, dry sand or foam to extinguish.

[Storage] Store in a well-ventilated place. Keep cool.

[Disposal] Dispose of contents and container in accordance with local, regional, national

regulations.

TCI (Shanghai) DEVELOPMENT CO., LTD. Revision number: 1 Revision date: 09/05/2019 Page 2 of 4

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components:1,3-PropanedithiolPercent:>97.0%(GC)(T)CAS RN:109-80-8

**Synonyms:** 1,3-Dimercaptopropane, Trimethylene Dithiol

Chemical Formula: C<sub>3</sub>H<sub>8</sub>S<sub>2</sub>

# 4. 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.

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

**Protection of first-aiders:** A rescuer should wear personal protective equipment, such as rubber gloves and

air-tight goggles.

# 5. FIRE-FIGHTING MEASURES

Suitable extinguishing

Dry chemical, foam, water spray, carbon dioxide.

media:

Unsuitable extinguishing

media:

Solid streams of water

Specific hazards arising from Take care as it may decompose upon combustion or in high temperatures to

**the chemical:** generate poisonous fume.

Precautions for firefighters: Fire-extinguishing work is done from the windward and the suitable

fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the

surroundings: Remove movable containers if safe to do so.

**Special protective equipment** When extinguishing fire, be sure to wear personal protective equipment

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, etc.

Environmental precautions: Prevent pro

cautions: Prevent product from entering drains.

Methods and materials for containment and cleaning

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.

Prevention of secondary

hazards:

up:

Remove all sources of ignition. Fire-extinguishing devices should be prepared in

case of a fire. Use spark-proof tools and explosion-proof equipment.

# 7. HANDLING AND STORAGE

# Precautions for safe handling

**Technical measures:** Handling is performed in a well ventilated place. Wear suitable protective

equipment. Prevent generation of vapour or mist. Keep away from flames and hot surfaces. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. 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.

Advice on safe handling: Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any

incompatibilities

**Storage conditions:** Keep container tightly closed. Store in a cool, dark and well-ventilated place.

Store away from incompatible materials such as oxidizing agents.

Packaging material: Comply with laws.

#### Revision date: 09/05/2019 Page 3 of 4

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** Install a closed system or local exhaust as possible so that workers should not be

exposed directly. Also install safety 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 Clear

Colorless - Pale yellow

Odour: Strong Stench
pH: No data available

Melting point/freezing point: -79°C
Boiling point/range: 170°C
Flash point: 61°C

Flammability or explosive

limits:

Lower: No data available Upper: No data available

Relative density: 1.08

Solubility(ies):

[Water] Slightly soluble

[Other solvents]

Miscible: Ether, Alcohols, Benzene, Chloroform

# 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable under proper conditions.

**Possibility of hazardous** No special reactivity has been reported.

reactions:

Conditions to avoid: Open flame

**Incompatible materials:** Oxidizing agents, Strong bases

**Hazardous decomposition** Carbon dioxide, Carbon monoxide, Sulfur oxides

products:

# 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** orl-mus LDLo:1070 mg/kg

ivn-cat LD50:28 mg/kg

Skin corrosion/irritation:
Serious eye
No data available
No data available

damage/irritation:

Germ cell mutagenicity: No data available

Carcinogenicity:

IARC = No data available
NTP = No data available
Reproductive toxicity: No data available
RTECS Number: TZ2585500

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** 

Fish:
Crustacea:
Algae:
Persistence / degradability:
Bioaccumulative
No data available
No data available
No data available
No data available

potential(BCF): Mobility in soil

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

# 13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

# 14. TRANSPORT INFORMATION

Hazards Class: Does not correspond to the classification standard of the United Nations

UN-No: Not listed

# 15. REGULATORY INFORMATION

Regulations on the Control over Safety of Dangerous Chemicals (State Council announces on January 26, 2002 and revised on February 16,2011): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

# 16. OTHER INFORMATION

The reference company name of written contents

Company: TCI (Shanghai) DEVELOPMENT CO., LTD.

Address: No.96 Pu Gong Road, Shanghai Chemical Industry Park, Shanghai 201507 China

**Department:** Technical Information Department

**Emergency telephone:** 0532-83889090 **Fax:** +86-(0)21-67121385

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.