



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: 2,3-Dibromo-1-propanol
Product code: D0204
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@tcishanghai.com.cn
Revision number: 1

2. HAZARDS IDENTIFICATION

Classification of the GHS

PHYSICAL HAZARDS

Not classified

HEALTH HAZARDS

Acute toxicity (Oral)

Category 4

Acute toxicity (Dermal)

Category 3

Acute toxicity (Inhalation)

Category 4

Serious eye damage/eye irritation

Category 1

Carcinogenicity

Category 2

Reproductive toxicity

Category 2

ENVIRONMENTAL HAZARDS

Acute aquatic toxicity

Category 3

Chronic aquatic toxicity

Category 3

GHS label elements

Pictograms or hazard symbols



Signal word

Danger

Hazard statement

Harmful by inhalation and if swallowed

Toxic in contact with skin

Causes serious eye damage

Suspected of causing cancer

Suspected of damaging fertility or the unborn child

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

Precautionary statements

[Prevention]

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid breathing.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

Wear protective gloves and eye/face protection.

2. HAZARDS IDENTIFICATION

[Response]

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN: Gently wash with plenty of soap and water.

Remove/Take off immediately all contaminated clothing.

Wash contaminated clothing before reuse.

Immediately call a POISON CENTER or doctor/physician.

[Storage]

Store locked up.

[Disposal]

Dispose of contents/container through a waste management company authorized by the local government

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:	Substance
Component(s):	2,3-Dibromo-1-propanol
Percent:	>95.0%(GC)
CAS Number:	96-13-9
Synonyms:	α,β -Dibromohydrin , Glycerol α,β -Dibromohydrin
Chemical Formula:	$C_3H_6Br_2O$

4. FIRST AID MEASURES

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
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 media:	Dry chemical, foam, water spray, carbon dioxide.
Specific hazards:	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
Specific methods:	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 for firefighters:	When extinguishing fire, be sure to wear personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Use extra personal protective equipment (self-contained breathing apparatus). 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

Handling

Technical measures: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapor or mist. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapor or aerosol will be generated.

Advice on safe handling: Avoid all contact!

Storage

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

Store away from incompatible materials such as oxidizing agents.

Packaging material: Law is followed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: 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

Color: Colorless - Slightly pale yellow

Odor: No data available

pH: No data available

Melting point/freezing point: 9 °C

Boiling Point/Range: 99 °C/1.3kPa

Flash Point: No data available

Explosive limits

Lower: No data available

Upper: No data available

Vapor Pressure: 12Pa/25°C

Density: 2.14

Solubility: Soluble in : Water (52g/L 25°C) Alcohol Ether Benzene Acetone

log Pow = 0.96

10. STABILITY AND REACTIVITY

Stability: Stable under proper conditions.

Reactivity: No special reactivity has been reported.

Conditions to avoid: Light-sensitive

Incompatible materials: oxidizing agents

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Hydrogen bromide

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: orl-rat LD50:681 mg/kg
skn-rbt LD50:316 mg/kg
ihl-rat LC50:9920 mg/m³/4H

Skin corrosion/irritation: No data available

Serious eye damage/irritation: eye-rbt 100 uL/24H SEV

Germ cell mutagenicity: mmo-sat 3300 ng/plate (-S9)
mmo-sat 203 ug/plate (+S9)

11. TOXICOLOGICAL INFORMATION

Carcinogenicity: skn-rat TDLo:45120 mg/kg/48W-I
IARC = Group 2B (Possibly carcinogenic to humans) .
NTP = No data available
Reproductive toxicity: No data available
RTECS Number: UB0175000

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Fish: No data available
Crustacea: No data available
Algae: No data available
Persistence / degradability: No data available
Bioaccumulative potential(BCF): 3
Mobility in soil
log Pow: 0.96
Soil adsorption (Koc): 4
Henry's Law constant(PaM³/mol): 6.4 x 10⁻³

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

Hazards Class: 6.1: Toxic substance.
UN-No: 2810
Proper shipping name: Toxic liquid, organic, n.o.s.
Packing group: III

15. REGULATORY INFORMATION

Safe management ordinance of dangerous chemical product (State Council announces on January 26, 2002): 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: R&D (Information Management) Department
Telephone: +86-(0)21-67121388*461
Fax: +86-(0)21-67121385

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