

1. IDENTIFICATION

Product name: Dibromomethane CAS No. : 74-95-3 Brand: Macklin Company: Shanghai Macklin Biochemical Co.,Ltd. Address: Shanghai Pudong Zhangjiang High-tech Park; 1st Building, 68 Huatuo Road; SHANGHAI CHINA Zip code: 201206 Telephone: +86 21-50706066 Fax: +86 21-50706099 E-mail: sales@macklin.cn; tech@macklin.cn Revision date: 2019/12/12

2. HAZARDS IDENTIFICATION

GHS classification

PHYSICAL HAZARDS

Flammable liquids Category 2

HEALTH HAZARDS

Acute toxicity (Oral) Category 5 Serious eye damage/eye irritation Category 2A Reproductive toxicity Category 1B Specific target organ toxicity Visual system, Central nervous system - Single exposure [Category 1] Specific target organ toxicity Respiratory tract irritation, Narcotic effects - Single exposure [Category 3] Specific target organ toxicity Visual system, Central nervous system - Repeated exposure [Category 1]

ENVIRONMENTAL HAZARDS

Not classified

GHS label elements, including precautionary statements

Pictograms or hazard symbols

Signal word

Danger

Hazard statements

Highly flammable liquid and vapour

May be harmful if swallowed

Causes serious eye irritation

May damage fertility or the unborn child

Causes damage to organs : Visual system Central nervous system

Causes damage to organs through prolonged or repeated

exposure : Visual system Central nervous system

May cause respiratory irritation

May cause drowsiness or dizziness

Precautionary statements

Water Analysis]

[Prevention]

Obtain special instructions before use.

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against ignition by the static discharge and the spark.

Do not breathe dust/fume/gas/mist/vapours/spray.

Use only outdoors or in a well-ventilated area.

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

Wash hands thoroughly after handling.

Wear protective gloves/eye protection/face protection.

[Response]

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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/attention.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF exposed or concerned: Get medical advice/attention.

[Storage]

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

[Disposal]

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components:Dibromomethane CAS No.:74-95-3 Chemical Formula:CH₂Br₂

4. FIRST AID MEASURES

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

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

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

Ingestion: Get medical advice/attention.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 in large amounts, carbon dioxide. media:

Specific hazards arising Take care as it may decompose upon combustion or in high temperatures to from the chemical: generate poisonous fume.

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

method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by

spraying with water. Eliminate all ignition sources if safe to do so.

Special protective When extinguishing fire, be sure to wear personal protective equipment. equipment for firefighters:

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, Use extra personal protective equipment (self-contained breathing apparatus). Keep

protective equipment and people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-

emergency procedures: involved personnel should be controlled around the leakage area by roping off, etc.

Environmental precautions: Prevent product from entering drains.

Methods and materials for Absorb spilled material in dry sand or inert absorbent before recovering it into an

containment and cleaning airtight container. In case of large amount of spillage, contain a spill by bunding.

up: Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

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

hazards: 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 heat/sparks/open flame/hot

surfaces. -No smoking. 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 all contact!

Conditions for safe storage, including any

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in an explosion-poof refregerator. Store locked up.

Store away from incompatible materials such as oxidizing agents.

Heat-sensitive

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Install a closed system or local exhaust. Also install safety shower and eye bath.

Exposure limits: (Methanol) ACGIH TLV(TWA):200 ppm (skin) ACGIH TLV(STEL):250 ppm (skin) OSHA PEL(TWA):200 ppm

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 Odour: No data available pH: No data available Melting point/freezing point:No data available (Methanol) -98°C Boiling point/range: No data available (Methanol) 64°C Flash point: No data available (Methanol) 12°C Flammability or explosive limits: Lower: No data available

Upper: No data available Relative density: No data available Solubility(ies): [Water] No data available [Other solvents] No data available Log Pow: (Methanol) -0.82/-0.66

10. STABILITY AND REACTIVITY

Chemical stability: Stable under proper conditions. Possibility of hazardous No special reactivity has been reported. reactions: Conditions to avoid: Spark, Open flame, Static discharge Incompatible materials: Oxidizing agents Hazardous decomposition Carbon monoxide, Carbon dioxide, Hydrogen bromide products:

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: No data available (Methanol) orl-hmn LDLo:143 mg/kg orl-rat LD50:5600 mg/kg ihl-rat LC50:64000 ppm/4H skn-rbt LD50:15800 mg/kg Skin corrosion/irritation: No data available (Methanol) skn-rbt 20 mg/24H MOD Serious eye No data available damage/irritation: (Methanol) eye-rbt 40 mg MOD Germ cell mutagenicity: No data available (Methanol) dni-hmn-lym 300 mmol/L mmo-smc 12 pph (-S9) mmo-mus-lym 7900 mg/L (+S9) cyt-mus-ipr 75 mg/kg Carcinogenicity: IARC = No data available NTP = No data available Reproductive toxicity: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity: Fish: No data available Crustacea: No data available Algae: No data available Persistence / degradability: No data available Bioaccumulative No data available potential(BCF): Mobility in soil Log Pow: No data available Soil adsorption (Koc): No data available Henry's Law No data available constant(PaM3/mol):

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 but exert extra care in igniting as this material is

highly flammable. Observe all federal, state and local regulations when disposing of the substance

14. TRANSPORT INFORMATION

Hazards Class: 6.1: Toxic substance. UN-No: 2664 Packing group: III

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.

This product is included in the list of dangerous chemicals(2015)/Serial No.: 629

16. OTHER INFORMATION

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 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.