Glory Global
CO.,LTD

Material Safety Data Sheet

Product name	Dibromomethane

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product name	Dibromomethane
1.2. CAS-No.	74-95-3
1.3. Relevant identified uses of the substance or mixture and uses advised against	
Identified uses	Laboratory chemicals, Synthesis of substances
1.4. Details of the supplier of the safety data sheet	
Company	Glory Global CO.,LTD
Address	C-208, 10, Nowon-ro 15-gil, Nowon-gu, Seoul, Korea
Emergency Phone	+82 2 6223 0862

2. Hazards identification

2.1. Classification of the substance or mixture	Acute toxicity, Inhalation (Category 4), H332 Short-term (acute) aquatic hazard (Category 3), H402 Long-term (chronic) aquatic hazard (Category 3), H412 For the full text of the H-Statements mentioned in this Section, see Section 16.
2.2. GHS Label elements, including precautionary statements	
Pictogram	
Signal word	Warning
H332	Harmful if inhaled.
H412	Harmful to aquatic life with long lasting effects.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. - Call a POISON CENTER/doctor if you feel unwell.
P501	Dispose of contents/ container to an approved waste disposal plant.
2.3. Hazards not otherwise classified (HNOC) or not covered by GHS	None

3. Composition/information on ingredients

3.1. Substances	
Synonyms	Methylene bromide
Formula	CH2Br2
Molecular weight	173.83 g/mol
CAS No	74-95-3
EC-No.	200-824-2

Component	Classification	Concentration
Dibromomethane		
	Acute Tox. 4; Aquatic Acute 3; Aquatic Chronic3; H332, H402, H412	≤100 %

4. First aid measures

4.1. Description of first aid measures

General advice	- Consult a physician. Show this safety data sheet to the doctor in attendance. - Move out of dangerous area.
If inhaled	- If breathed in, move person into fresh air. If not breathing, give artificial respiration. - Consult a physician
In case of skin contact	- Wash off with soap and plenty of water. Consult a physician.
In case of eye contact	- Flush eyes with water as a precaution.
If swallowed	- Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2. Most important symptoms and effects, both acute and delayed	- The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
4.3. Indication of any immediate medical attention and special treatment needed	- No data available

5. Firefighting measures

5.1. Extinguishing media	
Suitable extinguishing media	- Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2. Special hazards arising from the substance or mixture	- Carbon oxides
5.3. Special protective equipment and percautions for fire fighters	- Wear self-contained breathing apparatus for firefighting if necessary.
5.4. Further information	- No data available

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures	- Use personal protective equipment. - Avoid breathing vapours, mist or gas. Ensure adequate ventilation. - For personal protection see section 8.
6.2. Environmental precautions	- Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
6.3. Methods and materials for containment and cleaning up	- Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
6.4. Reference to other sections	- For disposal see section 13.

7. Handling and storage

7.1. Precautions for safe handling	- Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. - For precautions see section 2.2.
7.2. Conditions for safe storage, including any incompatibilities	- Keep container tightly closed in a dry and well-ventilated place. - Storage class (TRGS 510): 6. - 1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects
7.3. Specific end use(s)	- Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls/personal protection

8.1. Control parameters	
Components with workplace control parameters	Contains no substances with occupational exposure limit values.
8.2. Exposure controls	
Appropriate engineering controls	- Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment	
a) Eye/face protection	- Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
b) Skin protection	- Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
c) Body Protection	- Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
d) Respiratory protection	- Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
e) Control of environmental exposure	- Prevent further leakage or spillage if safe to do so. Do not let product enter drains. - Discharge into the environment must be avoided.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Form: liquid, clear Colour: colourless
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting / freezing point	Melting point/range: -52 °C (-62 °F) - lit.
Initial Boiling Point and Boiling Range	96 - 98 °C 205 - 208 °F - lit.
Flash point	No data available

Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	46.5 hPa at 20.0 °C (68.0 °F)
Vapour density	No data available
Relative Density	2.477 g/cm3 at 25 °C (77 °F)
Water solubility	8.6 g/l at 20 °C (68 °F)
Partition coefficient n-octanol/water	log Pow: 1.68 at 22.5 °C (72.5 °F)
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
9.2. Other safety information	No data available

10. Stability and reactivity

10.1. Reactivity	- No data available
10.2. Chemical stability	- Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	- No data available
10.4. Conditions to avoid	- No data available
10.5. Incompatible materials	- Strong oxidizing agents
10.6. Hazardous decomposition products	- Hazardous decomposition products formed under fire conditions.: Carbon oxides - Other decomposition products: No data available - In the event of fire: see section 5

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity	No data available Inhalation: No data available LD50 Dermal - Rabbit - > 4,000 mg/kg No data available
Skin corrosion/irritation	Irritating to eyes, respiratory system and skin.
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available

11.2. Carcinogenicity

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

11.3. Reproductive toxicity	No data available
11.4. Specific target organ toxicity - single exposure	No data available
11.5. Specific target organ toxicity - repeated exposure	No data available
11.6. Aspiration hazard	No data available
11.7. Additional Information	RTECS: PA7350000

12. Ecological information

12.1. Toxicity

Fish	- LC50 - Oncorhynchus mykiss (rainbow trout) - 45 mg/l - 96 h (OECD Test Guideline 203)
Daphnia and other aquatic invertebrates	- EC50 - Daphnia magna (Water flea) - 66 mg/l - 48 h

12.2. Persistence and degradability

Biodegradability	- Biodegradability Result: - Not readily biodegradable.
12.3. Bioaccumulative potential	- No data available
12.4. Mobility in soil	- No data available
12.5. Results of PBT and vPvB assessment	- PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
12.6 Other adverse effects	- An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. - Harmful to aquatic life with long lasting effects.

13. Disposal considerations

13.1 Waste treatment methods

Product	- Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	- Dispose of as unused product.

14. Transport information

14.1. DOT (US)	- UN number: 2664 - Class: 6.1 - Packing group: III - Proper shipping name: Dibromomethane - Reportable Quantity (RQ): 1000 lbs - Poison Inhalation Hazard: No
14.2. IMDG	- UN number: 2664 - Class: 6.1 - Packing group: III - EMS-No: F-A, S-A - Proper shipping name: DIBROMOMETHANE
14.3. IATA (Country variations may apply)	- UN number: 2664 - Class: 6.1 - Packing group: III - Proper shipping name: Dibromomethane
14.4. Further information	

15. Regulatory information

15.1. SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
15.2. SARA 313 Components	The following components are subject to reporting levels established by SARA Title III, Section 313: - Dibromomethane - CAS-No.: 74-95-3 - Revision Date: 2007-07-01
15.3. SARA 311/312 Hazards	Acute Health Hazard
15.4. Massachusetts Right To Know Components	- Dibromomethane - CAS-No.: 74-95-3 - Revision Date: 2007-07-01 No components are subject to the Massachusetts Right to Know Act.
15.5. Pennsylvania Right To Know Components	- Dibromomethane - CAS-No.: 74-95-3 - Revision Date: 2007-07-01
15.6. New Jersey Right To Know Components	- Dibromomethane - CAS-No.: 74-95-3 - Revision Date: 2007-07-01

16. Other information

16.1. Further information	- Always work safely around open hatches on bulk tanks. The low density makes flotation difficult for immersed person