SIGMA-ALDRICH

Material Safety Data Sheet

Version 3.0 Revision Date 06/16/2009 Print Date 07/15/2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Dibromomethane

Product Number : 66730 Brand : Fluka

Company : Sigma-Aldrich

3050 Spruce Street

SAINT LOUIS MO 63103

USA

Telephone : +18003255832 Fax : +18003255052 Emergency Phone # : (314) 776-6555

2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Methylene bromide

Formula : CH₂Br₂ Molecular Weight : 173.83 g/mol

| CAS-No. | EC-No. | Index-No. | Concentration |
|----------------|-----------|--------------|---------------|
| Dibromomethane | | | |
| 74-95-3 | 200-824-2 | 602-003-00-8 | - |

3. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Toxic by ingestion, Irritant

Target Organs

Liver, Nerves., Blood, Kidney, Heart

HMIS Classification

Health Hazard: 2
Chronic Health Hazard: *
Flammability: 0
Physical hazards: 0

NFPA Rating

Health Hazard: 2 Fire: 0 Reactivity Hazard: 0

Potential Health Effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.Skin May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation. **Ingestion** Toxic if swallowed.

4. 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

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions

Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Avoid inhalation of vapour or mist.

Normal measures for preventive fire protection.

Storage

Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose 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).

Hand protection

Handle with gloves.

Eye protection

Face shield and safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form liquid, clear Colour colourless

Safety data

pH no data available

Melting point -52 °C (-62 °F)

Boiling point 96 - 98 °C (205 - 208 °F)

Flash point no data available Ignition temperature no data available Lower explosion limit no data available Upper explosion limit no data available

Vapour pressure 46.5 hPa (34.9 mmHg) at 20.0 °C (68.0 °F)

Density 2.477 g/mL at 25 °C (77 °F)

Water solubility no data available

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents, Aluminum, Magnesium, Reacts violently with:, Potassium

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen bromide gas

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - rabbit - 1,000 mg/kg

TDLo Oral - rat - 333 mg/kg

Remarks: Blood:Changes in serum composition (e.g., TP, bilirubin, cholesterol). Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels: Dehydrogenases.

TDLo Inhalation - rat - 2 h - 1 mg/l

LD50 Dermal - rabbit - > 4,000 mg/kg

LD50 Subcutaneous - mouse - 3,738 mg/kg

LDLO Rectal - rabbit - 5,000 mg/kg

Remarks: Behavioral:Convulsions or effect on seizure threshold. Lungs, Thorax, or Respiration:Respiratory stimulation. Gastrointestinal:Changes in structure or function of salivary glands.

Irritation and corrosion

Irritating to eyes, respiratory system and skin.

Sensitisation

no data available

Chronic exposure

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as

a carcinogen or potential carcinogen by ACGIH.

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 identified as

a carcinogen or potential carcinogen by OSHA.

Signs and Symptoms of Exposure

Blood disorders, Cardiac irregularities, Acts as a simple asphyxiant by displacing air., Dizziness, Disorientation, Headache, excitement, Central nervous system depression, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

InhalationSkinMay be harmful if inhaled. Causes respiratory tract irritation.May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation. **Ingestion** Toxic if swallowed.

Target Organs Liver, Nerves., Blood, Kidney, Heart,

Additional Information RTECS: PA7350000

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

no data available

Further information on ecology

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN-Number: 2664 Class: 6.1 Packing group: III

Proper shipping name: Dibromomethane

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN-Number: 2664 Class: 6.1 Packing group: III EMS-No: F-A, S-A

Proper shipping name: DIBROMOMETHANE

Marine pollutant: No

IATA

UN-Number: 2664 Class: 6.1 Packing group: III

Proper shipping name: Dibromomethane

15. REGULATORY INFORMATION

OSHA Hazards

Toxic by ingestion, Irritant

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

CAS-No. Revision Date Dibromomethane 74-95-3 2007-07-01

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

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Pennsylvania Right To Know Components

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New Jersey Right To Know Components

Dibromomethane CAS-No. Revision Date 74-95-3 2007-07-01

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Further information

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