

CAS-No.: 111-24-0 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

| 1.1. | Product identifier | |
|--------------------|--------------------------------|--|
| Produc | t form | : Substance |
| | | : |
| CAS-N | 0. | : 111-24-0 |
| Produc | t code | : 03267 |
| Formul | a | : Br(CH2)5B |
| Chemical structure | | = BrCH ₂ (CH ₂) ₃ CH ₂ BR |
| Synony | vms | : Pentamethylene dibromide |
| | | |
| 1.2. | Relevant identified uses of th | e substance or mixture and uses advised against |
| 1.2.1. | Relevant identified uses | |

Industrial/Professional use spec

: Industrial For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

SPAN LAB UNIT NO. 14,SKY INDUSTRIAL ESTATE,WALIV, VASAI (E) 401208 Mumbai - INDIA PH: +91 9820509929 info@spanlab.in www.spanlab.in

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, H315 Category 2 Serious eye damage/eye H319 irritation, Category 2

Full text of H statements : see section 16

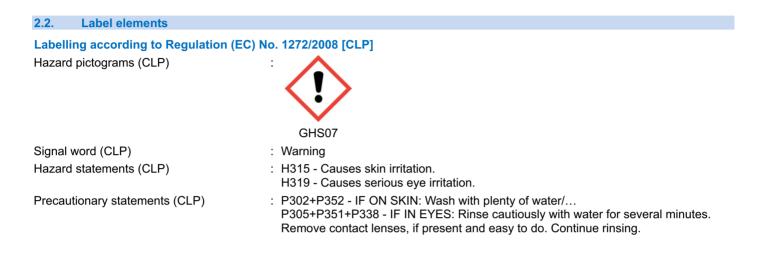
Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Xi; R36/38

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Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available



2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

| Name | Product identifier | % |
|----------------------------------|--------------------|-----|
| 1,5-DIBROMOPENTANE FOR SYNTHESIS | (CAS-No.) 111-24-0 | 100 |

Full text of R- and H-statements: see section 16

3.2. Mixtures

Not applicable

| SECTION 4: First aid measures | |
|---------------------------------------|---|
| 4.1. Description of first aid measu | ires |
| First-aid measures after inhalation | : Assure fresh air breathing. Allow the victim to rest. |
| First-aid measures after skin contact | : Wash with plenty of water/ Get immediate medical advice/attention. |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. |
| First-aid measures after ingestion | : Rinse mouth. Do not induce vomiting. |
| 4.2. Most important symptoms an | d effects, both acute and delayed |
| Symptoms/effects after skin contact | : Causes skin irritation. |
| | |

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| 4.3. | 3. Indication of any immediate medical attention and special treatment needed | | | |
|------------------------|---|--|--|--|
| Treat symptomatically. | | | | |
| SECTIO | SECTION 5: Firefighting measures | | | |
| 5.1. | Extinguishing media | | | |
| | extinguishing media | : Carbon dioxide. Dry powder. Foam. Water spray. | | |
| | ble extinguishing media | : Do not use a heavy water stream. | | |
| Unsultar | | . Do not use a neavy water stream. | | |
| 5.2. | Special hazards arising from the | substance or mixture | | |
| No addit | tional information available | | | |
| 5.3. | Advice for firefighters | | | |
| Protectio | on during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. | | |
| SECTIO | N 6: Accidental release measures | 5 | | |
| 6.1. | Personal precautions protective | e equipment and emergency procedures | | |
| | | complicit and emergency procedures | | |
| 6.1.1. | For non-emergency personnel | | | |
| Emerger | ncy procedures | : Evacuate unnecessary personnel. | | |
| 6.1.2. | For emergency responders | | | |
| Protectiv | /e equipment | : Use personal protective equipment as required. | | |
| Emerger | ncy procedures | : Ventilate area. | | |
| 6.2. | Environmental precautions | | | |
| | lease to the environment. | | | |
| | | | | |
| 6.3. | Methods and material for contain | nment and cleaning up | | |
| Methods | s for cleaning up | : Collect spillage. On land, sweep or shovel into suitable containers. | | |
| 6.4. | Reference to other sections | | | |
| | tional information available | | | |
| SECTIO | N 7: Handling and storage | | | |
| | in rendering and storage | | | |
| 7.1. | Precautions for safe handling | | | |
| Precauti | ons for safe handling | : Avoid contact with skin and eyes. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour. | | |
| Hygiene | measures | : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. | | |
| 7.2. | Conditions for safe storage, incl | | | |
| Storage | conditions | : Store in a well-ventilated place. Keep container tightly closed. | | |
| 7.3. | Specific end use(s) | | | |
| No addit | tional information available | | | |
| SECTIO | N 8: Exposure controls/personal | protection | | |
| 8.1. | Control parameters | | | |
| 0.1. | ound of parameters | | | |

No additional information available

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| 8.2. Exposure controls | | | |
|---|---|--|--|
| Hand protection | : Protective gloves | | |
| Eye protection | : Chemical goggles or safety glasses | | |
| Skin and body protection | : Wear suitable protective clothing | | |
| | Respiratory protection : [In case of inadequate ventilation] wear respiratory protection. | | |
| SECTION 9: Physical and chemical prop | | | |
| 9.1. Information on basic physical a Physical state | nd chemical properties : Liquid | | |
| Molecular mass | : 235.9 g/mol | | |
| Colour | : light brown. | | |
| Odour | : No data available | | |
| Odour threshold | : No data available | | |
| рН | : No data available | | |
| Relative evaporation rate (butylacetate=1) | : No data available | | |
| Melting point | : -34 °C | | |
| Freezing point | : No data available | | |
| Boiling point | : 110 °C | | |
| Flash point | : 79 °C | | |
| Auto-ignition temperature | : No data available | | |
| Decomposition temperature | : No data available | | |
| Flammability (solid, gas) | : No data available | | |
| Vapour pressure | : No data available | | |
| Relative vapour density at 20 °C | : No data available | | |
| Relative density | : No data available | | |
| Density Solubility | : 1.688 g/cm³ at 25°C : No data available | | |
| Log Pow | : No data available | | |
| Viscosity, kinematic | : No data available | | |
| Viscosity, dynamic | : No data available | | |
| Explosive properties | : No data available | | |
| Oxidising properties | : No data available | | |
| Explosive limits | : No data available | | |
| 9.2. Other information | | | |

9.2. **Other information**

No additional information available

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| Safety Data Sheet | | |
|---|---|--|
| SECTION 10: Stability and reactivity | | |
| 10.1. Reactivity | | |
| No additional information available | | |
| 10.2. Chemical stability | | |
| Stable under normal conditions. | | |
| | | |
| 10.3. Possibility of hazardous rea | ctions | |
| No additional information available | | |
| 10.4. Conditions to avoid | | |
| Air contact. Direct sunlight. Overheating | g. | |
| 10.5 Incompatible materials | | |
| 10.5.Incompatible materialsOxidizing agent. | | |
| | | |
| 10.6. Hazardous decomposition p | products | |
| No additional information available | | |
| | | |
| SECTION 11: Toxicological informati | ion | |
| 11.1. Information on toxicological effects | | |
| 11.1. Information on toxicological | l effects | |
| Acute toxicity | I effects : Not classified | |
| | | |
| Acute toxicity | : Not classified | |
| Acute toxicity Skin corrosion/irritation | Not classified Causes skin irritation. | |
| Acute toxicity Skin corrosion/irritation Serious eye damage/irritation | Not classified Causes skin irritation. Causes serious eye irritation. | |
| Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation | Not classified Causes skin irritation. Causes serious eye irritation. Not classified | |
| Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity | Not classified Causes skin irritation. Causes serious eye irritation. | |
| Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation | Not classified Causes skin irritation. Causes serious eye irritation. Not classified Not classified | |
| Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity | Not classified Causes skin irritation. Causes serious eye irritation. Not classified Not classified Not classified Not classified | |
| Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity | Not classified Causes skin irritation. Causes serious eye irritation. Not classified Not classified Not classified Not classified | |
| Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity | Not classified Causes skin irritation. Causes serious eye irritation. Not classified Not classified Not classified Not classified | |
| Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure | Not classified Causes skin irritation. Causes serious eye irritation. Not classified Not classified Not classified Not classified Not classified Not classified | |
| Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity | Not classified Causes skin irritation. Causes serious eye irritation. Not classified Not classified Not classified Not classified | |
| Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure STOT-repeated exposure | Not classified Causes skin irritation. Causes serious eye irritation. Not classified | |
| Acute toxicity Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity STOT-single exposure | Not classified Causes skin irritation. Causes serious eye irritation. Not classified Not classified Not classified Not classified Not classified Not classified | |

SECTION 12: Ecological information

12.1.ToxicityNo additional information available

12.2. Persistence and degradability

No additional information available

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| Salety Data Sheet | | |
|---|------------------|--|
| | | |
| 12.3. Bioaccumulative potential | | |
| No additional information available | | |
| 12.4. Mobility in soil | | |
| No additional information available | | |
| | | |
| 12.5. Results of PBT and vPvB ass | essment | |
| No additional information available | | |
| | | |
| | | |
| 12.6.Other adverse effectsNo additional information available | | |
| SECTION 13: Disposal considerations | | |
| | | |
| 13.1. Waste treatment methods | | |
| No additional information available | | |
| SECTION 14: Transport information | | |
| In accordance with ADR / RID / IMDG / I | ATA / ADN | |
| | | |
| 14.1. UN number | | |
| UN-No. (ADR) | : Not applicable | |
| UN-No. (IMDG) | : Not applicable | |
| UN-No. (IATA) | : Not applicable | |
| UN-No. (ADN) | : Not applicable | |
| UN-No. (RID) | : Not applicable | |
| 14.2. UN proper shipping name | | |
| Proper Shipping Name (ADR) | : Not applicable | |
| Proper Shipping Name (IMDG) | : Not applicable | |
| Proper Shipping Name (IATA) | : Not applicable | |
| Proper Shipping Name (ADN) | : Not applicable | |
| Proper Shipping Name (RID) | : Not applicable | |
| 14.3. Transport hazard class(es) | | |
| ADR | | |
| Transport hazard class(es) (ADR) | : Not applicable | |
| MDC | | |
| IMDG Transport hazard class(es) (IMDG) | : Not applicable | |
| | | |
| ΙΑΤΑ | | |
| Transport hazard class(es) (IATA) | : Not applicable | |
| | | |
| | | |
| Transport hazard class(es) (ADN) | : Not applicable | |
| RID | | |
| עוא Transport hazard class(es) (RID) | : Not applicable | |
| | | |

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| 14.4. Packing group | |
|-------------------------------|--|
| Packing group (ADR) | : Not applicable |
| Packing group (IMDG) | : Not applicable |
| Packing group (IATA) | : Not applicable |
| Packing group (ADN) | : Not applicable |
| Packing group (RID) | : Not applicable |
| 14.5. Environmental hazards | |
| Dangerous for the environment | : No |
| Marine pollutant | : No |
| Other information | : No supplementary information available |
| | |

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

1,5-DIBROMOPENTANE FOR SYNTHESIS is not on the REACH Candidate List

1,5-DIBROMOPENTANE FOR SYNTHESIS is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance) Immission Control Act - 12.BlmSchV

Netherlands

| SZW-lijst van kankerverwekkende stoffen | : The substance is not listed |
|---|-------------------------------|
| SZW-lijst van mutagene stoffen | : The substance is not listed |

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| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding | : The substance is not listed |
|---|--|
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid | : The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling | : The substance is not listed |
| Denmark | |
| Class for fire hazard | : Class III-1 |
| Store unit | : 50 liter |
| Classification remarks | : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed |

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-statements:

| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
|---------------|---|
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| R36/38 | Irritating to eyes and skin |
| Xi | Irritant |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product