

CAS No: 3184-13-2 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

| SECTION 1: Identification of the substan | ce/mixture and of the company/undertaking | |
|--|--|--|
| 1.1. Product identifier | | |
| Product form | : Substance | |
| | : | |
| CAS No | : 3184-13-2 | |
| Product code | : 05060 | |
| Chemical structure | | |
| Synonyms | NH ₂ : (S)-2,5-Diaminopentanoic acid monohydrochloride | |
| 1.2. Relevant identified uses of the s | ubstance or mixture and uses advised against | |
| 1.2.1. Relevant identified uses | | |
| Use of the substance/mixture | : Laboratory chemicals, Manufacture of substances | |
| 1.2.2. Uses advised against No additional information available | | |
| 1.3. Details of the supplier of the saf | ety data sheet | |
| Labogens Fine Chem Industries 1st Floor , Above Bank of India, Guru Vihar , Rahon Road, Ludhiana Pb. (141007) +91 9316777775, +91 7707855700 sales@labogens.com - www.Labogens.com | | |
| 1.4. Emergency telephone number | | |
| Emergency number | : +91 7707855700 (9:00am - 6:00 pm) | |
| SECTION 2: Hazards identification | | |
| 2.1. Classification of the substance | | |
| | | |
| Classification according to Regulation (EC) No. 1272/2008 [CLP] Serious eye damage/eye H319 irritation, Category 2 | | |
| Full text of classification categories and H s | tatements : see section 16 | |

Classification according to Directive 67/548/EEC or 1999/45/EC

Xi; R36 Full text of R-phrases: see section 16 Safety Data Sheet

Adverse physicochemical, human health and environmental effects

No additional information available

| 2.2. Label elements | |
|-----------------------------------|---|
| Labelling according to Regulation | on (EC) No. 1272/2008 [CLP] |
| Hazard pictograms (CLP) | GHS07 |
| Signal word (CLP) | : Warning |
| Hazard statements (CLP) | : H319 - Causes serious eye irritation |
| Precautionary statements (CLP) | : P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing |

2.3. Other hazards

No additional information available

| SECTION 3: Composition/information on ingredients | | | |
|---|-----------|--|--|
| 3.1. | Substance | | |
| Name | | : L-ORNITHINE MONOHYDROCHLORIDE FOR BIOCHEMISTRY | |
| CAS No |) | : 3184-13-2 | |

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

| 3.2. | Mixture |
|--------|------------------------------------|
| Not ap | blicable |
| SECT | DN 4: First aid measures |
| | |
| A 4 | Description of first aid resources |

| 4.1. Description of first aid measu | Ires |
|---------------------------------------|--|
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice. |
| First-aid measures after skin contact | : Wash skin with plenty of water. If skin irritation occurs: Get 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. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion | : Rinse mouth out with water. If you feel unwell, seek medical advice. |
| 4.2. Most important symptoms an | d effects, both acute and delayed |
| Symptoms/injuries after eye contact | : Causes serious eye irritation. |
| 4.3. Indication of any immediate n | nedical attention and special treatment needed |

Treat symptomatically.

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| SECTION 5: Firefighting measures | |
|---|---|
| 5.1. Extinguishing media | |
| Suitable extinguishing media | : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |
| | |
| 5.2. Special hazards arising from t | he substance or mixture |
| No additional information available | |
| | |
| 5.3. Advice for firefighters | |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. |
| SECTION 6: Accidental release measu | res |
| 6.1. Personal precautions, protecti | ive equipment and emergency procedures |
| | |
| 6.1.1. For non-emergency personnel | |
| Emergency procedures | : Evacuate unnecessary personnel. |
| 6.1.2. For emergency responders | |
| Protective equipment | : Use personal protective equipment as required. |
| Emergency procedures | : Stop release. |
| | |
| 6.2. Environmental precautions | |
| Avoid release to the environment. | |
| 6.3. Methods and material for cont | ainment and cleaning up |
| Methods for cleaning up | : Clear up rapidly by scoop or vacuum. |
| 3 • F | |
| 6.4. Reference to other sections | |
| No additional information available | |
| SECTION 7: Handling and storage | |
| 7.4 Descentions for only here the | |
| 7.1. Precautions for safe handling | . De net ret in even en elvin en en elettring |
| Precautions for safe handling | : Do not get in eyes, on skin, or on clothing. |
| Hygiene measures | : Wash thoroughly after handling. |
| 7.2. Conditions for safe storage, in | cluding any incompatibilities |
| Storage conditions | : Store in original container. Keep container tightly closed. Store in a dry place. |
| - | |
| 7.3. Specific end use(s) | |
| No additional information available | |
| SECTION 8: Exposure controls/person | al protection |
| 8.4 Control newspace | |
| 8.1. Control 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 | : Wear respiratory protection | |
| SECTION 9: Physical and chemical properties | | |
| 9.1. Information on basic physical ar Physical state | the chemical properties | |
| Colour | : White powder. | |
| Odour | : odourless. | |
| Odour threshold | : No data available | |
| рН | : No data available | |
| Relative evaporation rate (butylacetate=1) | : No data available | |
| Melting point | : 245 °C | |
| Freezing point | : No data available | |
| Boiling point | : No data available | |
| Flash point | : No data available | |
| Auto-ignition temperature | : No data available | |
| Decomposition temperature | : 233 °C | |
| 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 | |
| Solubility | : Water: Soluble in water | |
| 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 | | |
| No additional information available | | |
| SECTION 10: Stability and reactivity | | |
| 10.1. Reactivity | | |

No additional information available

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| 10.2. Chemical stability | |
|--|----------------------------------|
| Stable under normal conditions. | |
| 10.3. Possibility of hazardous reaction | ons |
| No additional information available | |
| 10.4. Conditions to avoid | |
| Direct sunlight. Air contact. Moisture. | |
| 10.5. Incompatible materials | |
| No additional information available | |
| 10.6. Hazardous decomposition prod | lucts |
| No additional information available | |
| SECTION 11: Toxicological information | |
| 11.1. Information on toxicological eff | ects |
| Acute toxicity | : Not classified |
| | |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : Not classified |
| Specific target organ toxicity (repeated exposure) | : Not classified |
| Aspiration hazard | : Not classified |
| | |

SECTION 12: Ecological information

| 12.1. | Toxicity | | |
|--------|--------------------------------|--|--|
| No add | litional information available | | |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

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| 12.4. Mobility in soil | | | |
|--|--------------------------------------|------------|-----|
| No additional information available | | | |
| | | | |
| 12.5. Results of PBT and vPvB asse | essment | | |
| No additional information available | | | |
| | | | |
| | | | |
| 12.6. Other adverse effects | | | |
| No additional information available | | | |
| SECTION 13: Disposal considerations | | | |
| SECTION 13. Disposal considerations | | | |
| 13.1. Waste treatment methods | | | |
| No additional information available | | | |
| SECTION 14: Transport information | | | |
| In apportance with ADD / DID / IMDO / H | | | |
| In accordance with ADR / RID / IMDG / I/ | | | |
| | | | |
| 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) Proper Shipping Name (IATA) | : Not applicable : 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 | | |
| | | | |
| IMDG | | | |
| Transport hazard class(es) (IMDG) | : Not applicable | | |
| | | | |
| ΙΑΤΑ | | | |
| Transport hazard class(es) (IATA) | : Not applicable | | |
| | | | |
| ADN | | | |
| Transport hazard class(es) (ADN) | : Not applicable | | |
| | | | |
| RID | · Not applicable | | |
| Transport hazard class(es) (RID) | : Not applicable | | |
| 14.4. Packing group | | | |
| Packing group (ADR) | : Not applicable | | |
| Packing group (IMDG) | : Not applicable | | |
| Packing group (IATA) | : Not applicable | | |
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| Packing group (ADN) Packing group (RID) | : Not applicable : 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

No data available

- Transport by sea No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

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

L-ORNITHINE MONOHYDROCHLORIDE FOR BIOCHEMISTRY is not on the REACH Candidate List L-ORNITHINE MONOHYDROCHLORIDE FOR BIOCHEMISTRY 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.BImSchV

15.2. Chemical safety assessment

No additional information available

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SECTION 16: Other information

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

| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
|--------------|---|
| H319 | Causes serious eye irritation |
| R36 | Irritating to eyes |
| 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