Material Safety Data Sheet	MOLYCHEM
D-MANNOSE 99% FOR BIOCHEMISTRY	VERSION : 02 DATE OF ISSUE : 26-08-2019 SUPERSEDES : 01
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1. Identification of the substance/mixture and of the company/undertaking **1.1. Product identifier** Trade name : D (-) MANNOSE FOR BIOCHEMISTRY Product code : 70395 **Identification of the product** : D-MANNOSE 99% CAS No :3458-28-4 1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only. **1.3.** Details of the supplier of the safety data sheet **Company identification : MOLYCHEM** Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel: +91 22 4066 8111, 2205 7772 . Fax: + 91 22 2203 4442. Email: info@molychem.net Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co., Kulgaon, Badlapur (E), Dist.-Thane-421 503. **1.4. Emergency telephone number** Emergency number : +91 22 4066 8111 (10:00am - 6:00 pm). 2. Hazards identification -DSD 2.1. Classification of the substance or mixture Classification EC 67/548 or EC 1999/45 Not classified. Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP) Not classified. **2.2. Label elements** Labelling EC 67/548 or EC 1999/45 Not classified. Labelling Regulation EC 1272/2008 (CLP) Not classified. 2.3. Other hazards **Other hazards**: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH. 3. Composition/information on ingredients **Substance / Preparation : D-MANNOSE 99%** CAS No :3458-28-4 Substance. Contains no other components or impurities which will influence the classification of the product.

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4. First aid measures

4.1. Description of first aid measures

Inhalation : Assure fresh air breathing. Allow the victim to rest.

Skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

Ingestion : Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand. **Unsuitable extinguishing media** : Do not use a heavy water stream.

Surrounding fires : Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures For emergency responders : Equip cleanup crew with proper protection.

Ventilate area.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

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Clean up methods : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

7. Handling and storage

7.1. Precautions for safe handling

Handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

Technical protective measures : Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.7.3. Specific end use(s)

Specific end use(s) : None.

8. Exposure controls/personal protection

8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

• **Respiratory protection** : Wear approved mask.

• Hand protection : Wear protective gloves.

• Eye protection : Chemical goggles or safety glasses.

• Others : When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties Physical state at 20 °C : Solid.
Odour threshold : No data available.
pH value : Not applicable.
Melting point [°C] : 132°C
Decomposition point [°C] : N/A
Critical temperature [°C] : N/A
Auto-ignition temperature [°C] : N/A
Flammability (solid, gas) : N/A
Flash point [°C] : N/A

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Boiling point [°C] : N/A **Initial boiling point** [°C] : N/A **Final boiling point** [°C] : N/A **Evaporation rate** : N/A Vapour pressure [20°C] : N/A Vapour pressure mm/Hg : N/A Vapour density : N/A **Density [g/cm3]** : 1,539 **Relative density, gas (air=1)** : N/A **Relative density, liquid (water=1)** : N/A Solubility in water [% weight] : Soluble in water **Solubility in water** : N/A Log Pow octanol / water at 20°C : No data available. Solubility : N/A Viscosity at 40°C [mm2/s] : N/A 9.2. Other information **Explosive properties** : N/A **Explosion limits - upper [%]** : N/A **Explosion limits - lower [%]** : N/A **Oxidising properties** : No data available. **10. Stability and reactivity 10.1. Reactivity Reactivity** : Not established. **10.2.** Chemical stability Chemical stability : Stable under recommended storage conditions. 10.3. Possibility of hazardous reactions Hazardous reactions : Not established. **10.4.** Conditions to avoid **Conditions to avoid** : Direct sunlight. Extremely high or low temperatures. **10.5.** Incompatible materials Materials to avoid : Strong acids. Strong bases. **10.6. Hazardous decomposition products** Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide. **11.** Toxicological information **11.1. Information on toxicological effects** Acute toxicity • Inhalation : Based on available data, the classification criteria are not met.

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Dermal : Based on available data, the classification criteria are not met.
Ingestion : Based on available data, the classification criteria are not met.
Corrosion : Based on available data, the classification criteria are not met.
Irritation : Based on available data, the classification criteria are not met.
Sensitization : Based on available data, the classification criteria are not met.
Mutagenicity : Based on available data, the classification criteria are not met.
Carcinogenicity : Based on available data, the classification criteria are not met.
Carcinogenicity : Based on available data, the classification criteria are not met.
Toxic for reproduction : Based on available data, the classification criteria are not met.
STOT-single exposure : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

<u>12. Ecological information</u>

12.1. Toxicity

Toxicity information : Not established.

12.2. Persistence - degradability

Persistence - degradability : Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

Environmental precautions : Avoid release to the environment.

<u>13. Disposal considerations</u>

13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

<u>14. Transport information</u>

14.1. Land transport (ADR-RID)
General information : Not regulated.
14.2. Sea transport (IMDG) [English only]
General information : Not regulated.

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14.3. Air transport (ICAO-IATA) [English only] General information : Not regulated.

15. Regulatory information

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

Safety, health and environmental : Ensure all national/local regulations are observed. **regulations/legislation specific for the substance or mixture**

REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.

REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

16. Other information

Abbreviations and acronyms : PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 **Further information** : None.

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