

**MATERIAL SAFETY DATA SHEET (MSDS)****D (+) MANNOSE (FOR BIOCHEMISTRY)****1. Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Trade name : D (+) MANNOSE (FOR BIOCHEMISTRY)

Product code : M0131200025

Identification of the product : D-MANNOSE99%  
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**SUVCHEM  
Chaitanya Tower, 2nd Floor, Office # 206,  
Siddharth Nagar, S.V. Road,  
Goregaon (West), Mumbai - 400062,  
Maharashtra, India.  
Contact: +91 22 28725393 / 94 / 95  
Email ID: info@suvchem.com/care@suvchem.com**1.4. Emergency telephone number**

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

**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)**

**MATERIAL SAFETY DATA SHEET (MSDS)**
**D (+) MANNOSE (FOR BIOCHEMISTRY)**
**2. Hazards identification -DSD (continued)**

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-MANNOSE99%

Substance.

Contains no other components or impurities which will influence the classification of the product.

**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.

## MATERIAL SAFETY DATA SHEET (MSDS)

### D (+) MANNOSE (FOR BIOCHEMISTRY)

#### 5. Fire-fighting measures (continued)

##### 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

**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

## MATERIAL SAFETY DATA SHEET (MSDS)

### D (+) MANNOSE (FOR BIOCHEMISTRY)

#### 7. Handling and storage (continued)

**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.

**Colour** : White powder

**Odour** : Odorless

**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

**Boiling point [°C]** : N/A

**Initial boiling point [°C]** : N/A

**Final boiling point [°C]** : N/A

**MATERIAL SAFETY DATA SHEET (MSDS)**
**D (+) MANNOSE (FOR BIOCHEMISTRY)**
**9. Physical and chemical properties (continued)**

Evaporation rate	: N/A
Vapour pressure [20°C]	: N/A
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm <sup>3</sup> ]	: 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 [mm <sup>2</sup> /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**

**MATERIAL SAFETY DATA SHEET (MSDS)**
**D (+) MANNOSE (FOR BIOCHEMISTRY)**
**10. Stability and reactivity (continued)**

**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.
- **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.

**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.

**STOT-repeated exposure** : Based on available data, the classification criteria are not met.

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

**12. Ecological information**
**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.

**MATERIAL SAFETY DATA SHEET (MSDS)**
**D (+) MANNOSE (FOR BIOCHEMISTRY)**
**12. Ecological information (continued)**
**12.6. Other adverse effects**

Environmental precautions : Avoid release to the environment.

**13. Disposal considerations**
**13.1. Waste treatment methods**

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

**14. Transport information**
**14.1. Land transport (ADR-RID)**

General information : Not regulated.

**14.2. Sea transport (IMDG), [English only]**

General information : Not regulated.

**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 regulations/legislation specific for the substance or mixture : Ensure all national/local regulations are observed.

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.

**MATERIAL SAFETY DATA SHEET (MSDS)**

**D (+) MANNOSE (FOR BIOCHEMISTRY)**

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

**DISCLAIMER:**

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

**End of document**