

# SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Revision date: 30/03/2019

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

### 1.1 Product identifiers

|                |                              |
|----------------|------------------------------|
| Product name   | D-(+)-Mannose                |
| Product Number | PSR11431                     |
| Brand          | PureSynth research chemicals |
| CAS No.        | 3458-28-4                    |

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratories Chemicals

### 1.3 Details of the supplier of the safety data sheet

|         |                                            |
|---------|--------------------------------------------|
| Company | PureSynth Research Chemicals Pvt. Ltd.     |
|         | A-27, A.P.I.E, Hyderabad, Telangana-500037 |

### 1.4 Emergency telephone number

Worldwide Helpline No.: 1800-120-1234-34

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

### 2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

### 2.3 Other hazards: This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

| Common names & Synonyms | Mol. formula                                  | CAS number    |
|-------------------------|-----------------------------------------------|---------------|
| -                       | C <sub>6</sub> H <sub>12</sub> O <sub>6</sub> | 3458-28-4     |
| Component               | Classification                                | Concentration |
| -                       | -                                             | -             |

#### SECTION 4: First aid measures

##### Description of first aid measures

|                                                                                   |                                                                                                                     |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>General advice</b>                                                             | Consult a physician. Show this safety data sheet to the doctor in attendance.                                       |
| <b>If inhaled</b>                                                                 | After inhalation: fresh air                                                                                         |
| <b>In case of skin contact</b>                                                    | In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.             |
| <b>In case of eye contact</b>                                                     | After eye contact: rinse out with plenty of water. Remove contact lenses.                                           |
| <b>If swallowed</b>                                                               | After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.                  |
| <b>Most important symptoms and effects, both acute and delayed</b>                | The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 |
| <b>Indication of any immediate medical attention and special treatment needed</b> | No data available                                                                                                   |

#### SECTION 5: Fire fighting measures

|                                                              |                                                                                                    |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <b>Extinguishing media</b>                                   | Water Foam Carbon dioxide (CO <sub>2</sub> ) Dry powder                                            |
| <b>Suitable extinguishing media</b>                          | Carbon oxides                                                                                      |
| <b>Special hazards arising from the substance or mixture</b> | Combustible.<br>Development of hazardous combustion gases or vapors possible in the event of fire. |
| <b>Advice for fire-fighters</b>                              | In the event of fire, wear self-contained breathing apparatus.                                     |
| <b>Further information</b>                                   | Prevent fire extinguishing water from contaminating surface water or the ground water system.      |

#### SECTION 6: Accidental release measures

|                                                                            |                                                                                                                                                                                                              |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, and consult an expert. For personal protection see section 8.                         |
| <b>Environmental precautions</b>                                           | Do not let product enter drains.                                                                                                                                                                             |
| <b>Methods and materials for containment and cleaning up</b>               | Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10).<br>Take up dry. Dispose of properly. Clean up affected area.<br>Avoid generation of dusts. |
| <b>Reference to other sections</b>                                         | For disposal see section 13.                                                                                                                                                                                 |

#### SECTION 7: Handling and storage

|                                                                     |                                                                                                                     |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Precautions for safe handling</b>                                | For precautions see section 2.2.                                                                                    |
| <b>Conditions for safe storage, including any incompatibilities</b> | Tightly closed. Storage class (TRGS 510): 11: Combustible Solids. Recommended storage temperature-room temperature. |
| <b>Specific end use(s)</b>                                          | Apart from the uses mentioned in section 1.2 no other specific uses are stipulated                                  |

## SECTION 8: Exposure controls / Personal protection

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Control parameters</b>                | Ingredients with workplace control parameters                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Exposure controls</b>                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Appropriate engineering controls</b>  | No data available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Personal protective equipment:</b>    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Eye / face protection</b>             | Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses.                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Skin protection</b>                   | This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves                                                                                                                                                                                                                      |
| <b>Body Protection</b>                   | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Respiratory protection</b>            | Required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.<br>Recommended Filter type: Filter type P1 The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.<br>These measures have to be properly documented. |
| <b>Control of environmental exposure</b> | Do not let product enter drains.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## SECTION 9: Physical and chemical properties

|                                                       |                                 |
|-------------------------------------------------------|---------------------------------|
| <b>Appearance</b>                                     | Form: Solid<br>Colour: white    |
| <b>Odour</b>                                          | No data available               |
| <b>pH - Value</b>                                     | No data available               |
| <b>Density</b>                                        | 1.54 g/cm <sup>3</sup> at 20 °C |
| <b>Boiling Point</b>                                  | No data available               |
| <b>Melting Point</b>                                  | 133 – 140 °C                    |
| <b>Solubility in water</b>                            | No data available               |
| <b>Flash point</b>                                    | No data available               |
| <b>Vapour pressure</b>                                | No data available               |
| <b>Auto -ignition temperature</b>                     | No data available               |
| <b>Vapour density</b>                                 | No data available               |
| <b>Flammability (solid, gas)</b>                      | No data available               |
| <b>Evaporation rate</b>                               | No data available               |
| <b>Partition coefficient: n- octanol / water</b>      | No data available               |
| <b>Viscosity</b>                                      | No data available               |
| <b>Explosive properties</b>                           | No data available               |
| <b>Upper / lower flammability or explosive limits</b> | No data available               |
| <b>Oxidizing properties</b>                           | No data available               |

**Other safety information:** No data available

## SECTION 10: Stability and reactivity

|                                           |                                                                                                                                                                                           |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                         | The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed. |
| <b>Chemical stability</b>                 | The product is chemically stable under standard ambient conditions (room temperature).                                                                                                    |
| <b>Possibility of hazardous reactions</b> | Violent reactions possible with: Strong oxidizing agents                                                                                                                                  |
| <b>Condition to avoid</b>                 | No information available                                                                                                                                                                  |
| <b>Incompatible materials</b>             | No data available.                                                                                                                                                                        |
| <b>Hazardous decomposition products</b>   | In the event of fire: see section 5                                                                                                                                                       |

## SECTION 11: Toxicological information

|                                                                             |                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Acute toxicity</b>                                                       | No data available                                                                                                                                                                                                                                           |
| <b>Skin corrosion/irritation</b>                                            | No data available                                                                                                                                                                                                                                           |
| <b>Serious eye damage/eye irritation</b>                                    | No data available                                                                                                                                                                                                                                           |
| <b>Respiratory or skin sensitization</b>                                    | No data available                                                                                                                                                                                                                                           |
| <b>Germ cell mutagenicity</b>                                               | No data available                                                                                                                                                                                                                                           |
| <b>Carcinogenicity</b>                                                      | No data available                                                                                                                                                                                                                                           |
| <b>Reproductive toxicity</b>                                                | No data available                                                                                                                                                                                                                                           |
| <b>Specific target organ toxicity - single exposure</b>                     | No data available                                                                                                                                                                                                                                           |
| <b>Specific target organ toxicity - repeated exposure Aspiration hazard</b> | No data available                                                                                                                                                                                                                                           |
| <b>Additional Information</b>                                               | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |
| <b>Endocrine disrupting properties</b>                                      | To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.                                                                                                                                   |
| <b>Product:</b>                                                             |                                                                                                                                                                                                                                                             |
| <b>Assessment</b>                                                           |                                                                                                                                                                                                                                                             |

## SECTION 12: Ecological information

|                                           |                                                                                                                                                                                                                                                             |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Toxicity</b>                           | No data available                                                                                                                                                                                                                                           |
| <b>Persistence and degradability</b>      | No data available                                                                                                                                                                                                                                           |
| <b>Bio accumulative potential</b>         | No data available                                                                                                                                                                                                                                           |
| <b>Mobility in soil</b>                   | No data available                                                                                                                                                                                                                                           |
| <b>Results of PBT and vPvB assessment</b> | This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.                                                        |
| <b>Endocrine disrupting properties</b>    | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |
| <b>Product:</b>                           |                                                                                                                                                                                                                                                             |
| <b>Assessment</b>                         |                                                                                                                                                                                                                                                             |
| <b>Other adverse effects</b>              | No data available                                                                                                                                                                                                                                           |

## SECTION 13: Disposal considerations

|                                |                                                                                                                                                         |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Waste treatment methods</b> | Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste |
| <b>Products</b>                |                                                                                                                                                         |

2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleansed containers like the product itself.

**Contaminated packaging**      Dispose of as unused product.

#### SECTION 14: Transport information

|                  | UN no. | UN proper shipping name | Hazard Class(es) | Packaging group | Marine Pollutant |
|------------------|--------|-------------------------|------------------|-----------------|------------------|
| <b>ADR / RID</b> | -      | Not dangerous goods     | -                | -               | No               |
| <b>IMDG</b>      | -      | Not dangerous goods     | -                | -               | No               |
| <b>IATA</b>      | -      | Not dangerous goods     | -                | -               | No               |

#### SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/200

##### Chemical safety assessment

For this product a chemical safety assessment was not carried out.

#### SECTION 16: Other information

The information in this SDS is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The user must be determined suitability of this information for his application.