

1 Identification

Product Name: D-(+)Mannose

Catalog Number: M027

Company: Caisson Laboratories

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Recommended Use: For research and laboratory use only.

Restrictions On Use: This product is intended for research and laboratory use only. This product is not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

2 Hazard(s) Identification

Classification of the Substance or Mixture

GHS Classification: Not a hazardous substance or mixture.

GHS Label elements, including precautionary statements

Signal Word: Not Hazardous

Hazard Statements

Not a hazardous substance or mixture.

Precautionary Statements

Not a hazardous substance or mixture.

Pictograms:

3 Composition / Information on Ingredients

Synonyms: D-(+)-Mannose; D-Mannipyranose

Formula: C₆H₁₂O₆

Molecular Weight (g/mol): 180.16

CAS Number: 3458-28-4

EC Number: 222-392-4

Component	Concentration (%)	Classification
D-Mannose	99 - 100	Not a hazardous substance or mixture.

4 First-Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Route of Exposure

If swallowed: If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.

In case of skin contact: Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists.

In case of eye contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Get medical attention.

If inhaled: Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention.

Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

Recommendation for immediate medical care and special treatment needed: No data available

5 Fire-Fighting Measures

Suitable extinguishing media: Use water spray, dry chemical powder, alcohol-resistant foam, or carbon dioxide. Use extinguishing media suitable for surrounding fire.

Special protective equipment and precautions for fire-fighters: Wear self-contained breathing apparatus and protective clothing.

Special hazards arising from the substance or mixture: Carbon oxides

Additional Information: No data available

6 Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Avoid dust formation. Avoid breathing vapors, mist or gas. For personal protection see section 8.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and material for containment and cleanup: Sweep up and shovel. Keep in suitable, closed containers for disposal.

7 Handling and Storage

Precautions for safe handling: Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

Conditions for safe storage: Keep in a tightly closed container and store in a cool, dry, and well-ventilated area.

Recommended storage temperature: Room Temperature

Incompatibilities: Reactive with oxidizing agents.

8 Exposure Controls / Personal Protection

OSHA Permissible Exposure Limits (PELs): None

ACGIH Threshold Limit Values (TLVs): None

Engineering controls: Handle in accordance to general industrial hygiene and safety practice.

Personal Protective Equipment (PPE)

Eye/face protection: Wear chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.

Skin protection: Wear protective gloves.

Respiratory protection: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Body protection: Wear lab coat, gown, or coveralls to protect from exposure.

9 Physical and Chemical Properties

Appearance: White Crystalline Powder

pH: No data available

Solubility: Soluble in water

Specific Gravity: 1.539

Melting Range: 133 - 140 °C (271 - 284 °F)

Odor: Odorless

Odor Threshold: No data available

Viscosity: No data available

Relative Density: No data available

Evaporation Rate: No data available

Initial Boiling Point and Boiling Range: No data available

Flash Point: No data available

Flammability (Solid, gas): No data available

Flammability Upper/Lower Limits: No data available

Partition Coefficient: n-octanol/water: No data available

Vapor Density: No data available

Vapor Pressure: No data available

Auto-ignition Temperature: No data available

Decomposition Temperature: No data available

10 Stability and Reactivity

Reactivity: No data available

Chemical stability: No data available

Possibilities of hazardous reactions: No data available

Conditions to avoid: Excessive heat, moisture, dust generation

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products: Carbon oxides

11 Toxicological Information

Toxicity: No data available

Carcinogenicity

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by OSHA.

Reproductive toxicity: No data available

Symptoms associated with overexposure: Irritation, gastrointestinal upset, breathing difficulties

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

Target Organs: Lungs

Medical conditions aggravated by exposure: None identified

Routes of entry: Inhalation, Ingestion

NIOSH/RTECS: Not listed

12 Ecological Information

Toxicity: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other adverse effects: No data available

13 Disposal Considerations

Disposal of Product: Dispose in accordance with all applicable federal, state, and local environmental regulations.

Disposal of Packaging: Dispose of as unused product.

14 Transport Information

DOT (US)

Proper Shipping Name: CHEMICALS, N.O.S (NON-REGULATED)

UN/NA number: N/A Class: N/A Packaging group: N/A Hazard Label: N/A

Reportable Quantity (RQ): N/A

Poison Inhalation Hazard: N/A

IMDG

Proper Shipping Name: CHEMICALS, N.O.S (NON-REGULATED)

UN number: N/A Class: N/A Packaging group: N/A Hazard Label: N/A

IATA

Proper Shipping Name: CHEMICALS, N.O.S (NON-REGULATED)

UN Number: N/A Class: N/A Packaging group: N/A Hazard Label: N/A

15 Regulatory Information

TSCA: Listed

SARA Title III

Section 302 (EHS) Ingredients: No

Section 313 Ingredients: No

Section 304 (EHS/CERCLA) Ingredients: No

Section 311/312 Hazard: No SARA Hazards

16 Other Information

HMIS Rating

Health hazard: 0

Chronic health hazard:

Flammability: 0

Physical hazard: 0

NFPA Rating

Health hazard: 0

Fire hazard: 0

Reactivity: 0

Special Hazard:

Further information: All chemicals may pose unknown hazards and should be used with caution. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Caisson Laboratories, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.

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