

Material Safety Data Sheet (MSDS)

Product Name: Dextrose Monohydrate

MSDS Generate Date: 20-05-2017

Revision Date: 30-12-2024

Supplier:

Rawpharma Biz Pvt Ltd

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1. Identification of the Substance/Preparation and Company

- **Product Name:** Dextrose Monohydrate
- **Synonyms:** Glucose Monohydrate, Corn Sugar
- **Chemical Formula:** $C_6H_{12}O_6 \cdot H_2O$
- **CAS Number:** 14431-43-7
- **Recommended Use:** Food ingredient, pharmaceutical excipient, nutritional supplement, fermentation substrate

2. Hazard Identification

Dextrose Monohydrate is not classified as hazardous according to GHS classification.

Dust generated during handling may cause mild irritation to eyes and respiratory tract.

Excessive ingestion may cause gastrointestinal discomfort.

3. Composition / Information on Ingredients

Dextrose Monohydrate consists of $\geq 99.0\%$ pure **Dextrose Monohydrate (Glucose Monohydrate)**.

No hazardous impurities or additives are present in concentrations requiring disclosure.

4. First Aid Measures

- **Eye Contact:** Rinse immediately with plenty of clean water for several minutes.
- **Skin Contact:** Wash thoroughly with soap and water.
- **Inhalation:** Move the affected person to fresh air. Seek medical attention if irritation persists.
- **Ingestion:** Rinse mouth with water. If large quantities are ingested, seek medical advice.

5. Fire Fighting Measures

- **Suitable Extinguishing Media:** Water spray, foam, dry chemical powder, carbon dioxide
- **Specific Hazards:** Combustible dust may form explosive mixtures with air
- **Protective Equipment:** Firefighters should wear self-contained breathing apparatus

6. Accidental Release Measures

Avoid generating dust.

Sweep or vacuum the spilled material and place it in a suitable container for reuse or disposal.

Ensure adequate ventilation during cleanup.

7. Handling and Storage

Handle in accordance with good industrial hygiene practices.

Avoid excessive dust formation.

Store in a cool, dry, and well-ventilated area in tightly closed containers.

Protect from moisture and contamination.

8. Exposure Controls / Personal Protection

- **Engineering Controls:** Adequate general ventilation
- **Personal Protective Equipment:**
 - Eye protection: Safety goggles if dust is present
 - Skin protection: Protective gloves if required
 - Respiratory protection: Dust mask if exposure limits are exceeded

9. Physical and Chemical Properties

- **Appearance:** White crystalline powder
- **Odour:** Odourless
- **Taste:** Sweet
- **Solubility:** Freely soluble in water
- **pH (10% solution):** 4.0 – 6.0
- **Melting Point:** Approximately 83°C (with decomposition)

10. Stability and Reactivity

Stable under normal conditions of storage and use.

Avoid exposure to excessive heat and moisture.

Incompatible with strong oxidizing agents.

Decomposition may produce carbon monoxide and carbon dioxide.

11. Toxicological Information

Non-toxic under normal conditions of use.

May cause mild eye irritation due to dust exposure.

No known chronic or carcinogenic effects.

12. Ecological Information

Biodegradable and environmentally safe.

No known adverse effects on aquatic or terrestrial organisms.

13. Disposal Considerations

Dispose of product and packaging in accordance with local, state, and national regulations.

Product may be disposed of as non-hazardous waste.

14. Transport Information (Detailed)

Dextrose Monohydrate is **not classified as a dangerous good** for transportation.

Road Transport (ADR / RID):

- UN Number: Not applicable
- Hazard Class: Not regulated
- Packing Group: Not applicable
- Environmental Hazard: No

Sea Transport (IMDG):

- UN Number: Not listed
- IMDG Class: Not regulated
- Marine Pollutant: No

Air Transport (IATA / ICAO):

- UN Number: Not applicable
- Hazard Class: Not restricted

Special Transport Precautions:

Transport in clean, dry, sealed containers.

Protect from moisture and physical damage during transit.

Avoid rough handling to prevent dust formation.

15. Regulatory Information

This product complies with applicable food and pharmaceutical regulations (USP / BP / IP / FCC where applicable).

Not listed as hazardous under OSHA, REACH, or GHS regulations.

16. Other Information

The information provided in this MSDS is based on current knowledge and is intended for guidance only.

The user is responsible for ensuring compliance with applicable laws and suitability for specific applications.

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- **Website:** www.rawpharmabiz.com
- MSDS are based on the manufacturer's provided information.