

Material Safety Data Sheet (MSDS)

Product Name: Sucrose Pulverised

MSDS Generate Date: 20-05-2017

Revision Date: 30-12-2024

Supplier:

Rawpharma Biz Pvt Ltd

1101- City Centre 2,

Science City Road,

Sola Ahmedabad Gujarat,

India - 380060.

Contact No.: +91 97272 88479

Email: info@rawpharmabiz.com

Website: www.rawpharmabiz.com

1. Identification of the Substance and Company

Product Name: Sucrose Pulverised

Chemical Name: Sucrose

Synonyms: Pulverised Sugar, Powdered Sugar, Fine Sucrose, Confectioner's Sugar, Pharmaceutical Sugar

CAS Number: 57-50-1

Molecular Formula: $C_{12}H_{22}O_{11}$

Molecular Weight: 342.30 g/mol

Recommended Use:

Pharmaceutical excipient, food ingredient, nutraceutical formulations, tablet manufacturing, dry syrups, confectionery products, beverages, and dietary applications.

2. Hazard Identification

GHS Classification: Sucrose Pulverised is **not classified as hazardous** according to the Globally Harmonized System (GHS).

Potential Health Effects

Inhalation: Fine dust may cause temporary irritation of the nose, throat, and upper respiratory tract.

Skin Contact: Prolonged or repeated contact may cause mild dryness or irritation.

Eye Contact: Fine particles may cause temporary redness, watering, and mechanical irritation.

Ingestion: Low toxicity under normal conditions of use. Excessive consumption may cause temporary gastrointestinal discomfort.

Physical Hazards: Fine sucrose powder may form combustible dust-air mixtures in enclosed spaces when dispersed in sufficient concentrations.

Environmental Hazards: No significant environmental hazards are expected.

Precautionary Statements:

- Avoid breathing dust.
- Minimize dust generation.
- Keep away from heat, sparks, flames, and other ignition sources.
- Maintain good housekeeping to prevent dust accumulation.
- Wash hands thoroughly after handling.

3. Composition / Information on Ingredients

Chemical Name: Sucrose

CAS Number: 57-50-1

Molecular Formula: $C_{12}H_{22}O_{11}$

Chemical Family: Carbohydrate (Disaccharide)

Purity: Typically 99.5% minimum (depending on specification)

Sucrose Pulverised consists primarily of highly purified finely milled sucrose manufactured from cane sugar or beet sugar. The product contains trace moisture and naturally occurring impurities maintained within applicable pharmaceutical or food-grade quality specifications.

4. First Aid Measures

Inhalation: Move the affected person to fresh air. If irritation or breathing difficulty persists, obtain medical attention.

Skin Contact: Wash thoroughly with soap and water.

Eye Contact: Immediately flush eyes with plenty of clean water for at least 15 minutes. Remove contact lenses if present. Seek medical attention if irritation continues.

Ingestion: Rinse mouth with water. Drink water if discomfort develops. Seek medical advice if excessive quantities have been consumed.

Most Important Symptoms:

- Mild respiratory irritation
- Temporary eye irritation
- Mild gastrointestinal discomfort

5. Fire Fighting Measures

Suitable Extinguishing Media: Water spray, Dry chemical powder, Carbon dioxide (CO₂), Alcohol-resistant foam.

Unsuitable Extinguishing Media: Do not use high-pressure water jets that may disperse combustible dust.

Fire Hazards: Sucrose Pulverised is combustible. Fine powder may form explosive dust-air mixtures under certain conditions.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, and irritating organic fumes.

Protective Equipment: Firefighters should wear self-contained breathing apparatus (SCBA) and full protective clothing.

6. Accidental Release Measures

Personal Precautions:

- Avoid creating airborne dust.
- Eliminate all ignition sources.
- Ensure adequate ventilation.
- Wear suitable personal protective equipment.

Environmental Precautions: Prevent excessive quantities from entering drains, sewers, or waterways.

Cleanup Methods: Carefully sweep or vacuum the material using explosion-proof equipment where appropriate. Collect into suitable containers for reuse or disposal while minimizing dust generation.

7. Handling and Storage

Handling

- Avoid breathing dust.
- Prevent excessive dust formation.
- Keep away from ignition sources.
- Use appropriate ventilation.
- Observe good manufacturing and hygiene practices.

Storage

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

Protect from moisture, excessive humidity, contamination, direct sunlight, and strong odors.

8. Exposure Controls / Personal Protection

- **Engineering Controls:** Provide effective ventilation and dust extraction systems where fine powder is handled.

Personal Protective Equipment:

- **Respiratory Protection:** Approved particulate respirator where excessive dust is present.
- **Eye Protection:** Safety glasses or chemical safety goggles.
- **Hand Protection:** Protective gloves.
- **Skin Protection:** Suitable protective clothing where required.

9. Physical and Chemical Properties

Appearance: White fine crystalline powder

Odor: Odorless

Taste: Sweet

Physical State: Fine solid powder

pH (10% Solution): Approximately 6.0–7.5

Melting Point: Approximately 186°C (decomposes)

Boiling Point: Not applicable

Bulk Density: Varies according to particle size

Specific Gravity: Approximately 1.59

Solubility: Freely soluble in water; practically insoluble in ethanol

Flash Point: Not applicable

Auto-Ignition Temperature: Approximately 350°C (dust cloud)

Explosive Properties: Fine powder may form explosive dust-air mixtures

Oxidizing Properties: None

Vapor Pressure: Not applicable

Vapor Density: Not applicable

10. Stability and Reactivity

Reactivity: Stable under recommended storage conditions.

Chemical Stability: Stable during normal handling and storage.

Conditions to Avoid: Excessive heat, Moisture, Open flames, Static discharge, Dust accumulation.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and irritating combustion products.

11. Toxicological Information

Acute Toxicity: Low acute toxicity.

Skin Irritation: May cause slight irritation after prolonged contact.

Eye Irritation: Fine dust may cause temporary mechanical irritation.

Respiratory Effects: Dust may irritate the upper respiratory tract.

Carcinogenicity: Not classified as carcinogenic.

Mutagenicity: No known mutagenic effects.

Reproductive Toxicity: No known reproductive hazards.

12. Ecological Information

Ecotoxicity: No significant environmental toxicity is expected.

Persistence and Degradability: Readily biodegradable.

Bioaccumulative Potential: Not expected to bioaccumulate.

Mobility: Highly soluble in water.

13. Disposal Considerations

Dispose of unused product and contaminated packaging in accordance with applicable local, regional, and national regulations.

Prevent unnecessary release into drains, sewers, and natural waterways.

14. Transport Information

Sucrose Pulverised is not classified as dangerous goods under ADR/RID, IMDG, IATA, or other international transport regulations. Although the material is non-toxic and non-corrosive, its very fine particle size can generate combustible dust clouds during handling. Appropriate precautions should therefore be taken during transportation to minimize dust formation, prevent moisture absorption, avoid contamination, and protect packaging from damage.

UN Number: Not regulated.

UN Proper Shipping Name: Not regulated.

Transport Hazard Class: Not regulated.

Packing Group: Not regulated.

Environmental Hazard: Not classified as environmentally hazardous.

Marine Pollutant: No.

Road Transport (ADR/RID): The product is not regulated as dangerous goods for road or rail transportation. Transport in clean, dry, tightly sealed laminated bags, HDPE bags, fiber drums, or approved food/pharmaceutical containers. Protect packages from rain, excessive humidity, contamination, and physical damage throughout transportation.

Sea Transport (IMDG): Sucrose Pulverised is not regulated under the International Maritime Dangerous Goods (IMDG) Code. It is not considered a marine pollutant. Containers should remain tightly sealed and protected from seawater, moisture, and contamination throughout shipment.

Air Transport (IATA): The product is not regulated as dangerous goods under International Air Transport Association (IATA) regulations. Standard commercial packaging is acceptable provided containers remain sealed and protected against moisture and mechanical damage.

Special Transport Precautions:

- Transport only in clean, dry, tightly sealed containers.
- Protect from moisture, rain, excessive humidity, and direct sunlight.
- Prevent package damage during loading and unloading.
- Minimize dust generation during handling.
- Keep away from open flames, sparks, and other ignition sources where dust may accumulate.
- Secure cargo properly to prevent shifting during transportation.
- Maintain good housekeeping practices to reduce combustible sugar dust accumulation in transport and storage areas.

Transport in Bulk According to MARPOL Annex II and IBC Code: Not applicable.

Emergency Transport Information: In the event of accidental spillage during transportation, isolate the affected area if necessary and eliminate all potential ignition sources. Avoid creating airborne dust. Carefully sweep or vacuum the spilled material using suitable equipment and collect it into appropriate containers for recovery or disposal. Prevent material from entering drains, sewers, or waterways. Personnel performing cleanup should wear appropriate personal protective equipment, including respiratory protection where dust concentrations are elevated.

15. Regulatory Information

- Sucrose Pulverised should be handled in accordance with applicable occupational safety, food safety, pharmaceutical, environmental, and chemical handling regulations.
- The product is not classified as hazardous according to the Globally Harmonized System (GHS).

16. Other Information

The information contained in this Material Safety Data Sheet is based on current scientific knowledge and industrial experience. It is intended to provide guidance for the safe handling, storage, transportation, and disposal of the product. It does not constitute a warranty of product characteristics or suitability for any specific application. Users are responsible for ensuring compliance with all applicable regulations.

- **MSDS Generate Date:** 20-05-2017
- **Revision Date:** 30-12-2024
- **Website:** www.rawpharmabiz.com
- MSDS are based on the manufacturer's provided information.