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## Material Safety Data Sheet

Mallinckrodt Baker, Inc.  
222 Rod School Lane  
Phillipsburg, NJ 08865

MALLINCKRODT



24 Hour Emergency Telephone: 800-368-2151  
CHEMTREC: 1-800-424-9300

National Response in Canada  
CANUTEC: 615-883-4000

Outside U.S. and Canada  
Chemtrec: 202 485 7616

NOTE: CHEMTREC, CANUTEC and National  
Response Center emergency numbers to be  
used only in the event of chemical emergencies  
involving a spill, leak, fire, exposure or accident  
involving chemicals

All non-emergency questions should be directed to Customer Service (1-800-562-2537) for assistance

# DEXTROSE MONOHYDRATE POWDER USP

SDS Number: D0832 --- Effective Date: 12/08/96

## Product Identification

Synonyms: D-glucose, monohydrate; dextrosol; dextrose, monohydrate, powder

CAS No.: 50-99-7 (Anhydrous)

Molecular Weight: 198.17

Chemical Formula:  $\text{CHO}(\text{CHOH})_4\text{CH}_2\text{OH} \cdot 2\text{H}_2\text{O}$

Product Codes: J.T. Baker: 1910, 1912, 5590 Mallinckrodt: 8834

## Composition/Information on Ingredients

| Ingredient         | CAS No  | Percent   | Hazardous |
|--------------------|---------|-----------|-----------|
| Dextrose Anhydrous | 50-99-7 | 90 - 100% | No        |

## Hazards Identification

### Emergency Overview

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

J.T. Baker SAF-T-DATA<sup>(tm)</sup> Ratings (Provided here for your convenience)

Health Rating: 0 - None  
Flammability Rating: 1 - Slight  
Reactivity Rating: 1 - Slight  
Contact Rating: 0 - None  
Lab Protective Equip: GOGGLES; LAB COAT  
Storage Color Code: Orange (General Storage)

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### **Potential Health Effects**

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#### **Inhalation:**

Not expected to be a health hazard.

#### **Ingestion:**

Extremely large oral dosages may produce gastrointestinal disturbances.

#### **Skin Contact:**

No adverse effects expected.

#### **Eye Contact:**

No adverse effects expected but dust may cause mechanical irritation.

#### **Chronic Exposure:**

No information found.

#### **Aggravation of Pre-existing Conditions:**

No information found.

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## **. First Aid Measures**

#### **Inhalation:**

Not expected to require first aid measures.

#### **Ingestion:**

Not expected to require first aid measures.

#### **Skin Contact:**

Not expected to require first aid measures.

#### **Eye Contact:**

Wash thoroughly with running water. Get medical advice if irritation develops.

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## **. Fire Fighting Measures**

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire.

**Special Information:**

Use protective clothing and breathing equipment appropriate for the surrounding fire.

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## **. Accidental Release Measures**

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

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## **. Handling and Storage**

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

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## **. Exposure Controls/Personal Protection**

**Airborne Exposure Limits:**

None established.

**Ventilation System:**

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

**Personal Respirators (NIOSH Approved):**

For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Wear protective gloves and clean body-covering clothing.

**Eye Protection:**

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

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## Physical and Chemical Properties

**Appearance:**

Colorless crystals or white crystalline powder.

**Odor:**

Odorless.

**Solubility:**

ca. 1 g/1.1 ml water @ 25C (77F).

**Specific Gravity:**

1.54

**pH:**

5.9 For 0.5 M aqueous solution

**% Volatiles by volume @ 21C (70F):**

0

**Boiling Point:**

No information found.

**Melting Point:**

83C (181F)

**Vapor Density (Air=1):**

No information found.

**Vapor Pressure (mm Hg):**

No information found.

**Evaporation Rate (BuAc=1):**

No information found.

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## 0. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage. <50C the Hydrated crystalline form is stable.

**Hazardous Decomposition Products:**

Carbon dioxide and carbon monoxide may form when heated to decomposition.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Reacts with sodium nitrite plus potassium nitrite, sodium peroxide plus potassium nitrate.

**Conditions to Avoid:**

Heat, incompatibles.

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## 1. Toxicological Information

Investigated as a tumorigen, mutagen, reproductive effector. For Dextrose (anhydrous): Oral rat LD50: 25800 mg/kg .

|                              |                      |             |               |
|------------------------------|----------------------|-------------|---------------|
| -----\Cancer Lists\-----     |                      |             |               |
| Ingredient                   | ---NTP Carcinogen--- |             | IARC Category |
|                              | Known                | Anticipated |               |
| -----                        |                      |             |               |
| Dextrose Anhydrous (50-99-7) | No                   | No          | None          |

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## 2. Ecological Information

**Environmental Fate:**

No information found.

**Environmental Toxicity:**

No information found.

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## 3. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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## 4. Transport Information

Not regulated.

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## 5. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----  
Ingredient TSCA EC Japan Australia  
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Dextrose Anhydrous (50-99-7) Yes Yes Yes Yes

-----\Chemical Inventory Status - Part 2\-----  
Ingredient Korea --Canada-- DSL NDSL Phil.  
-----  
Dextrose Anhydrous (50-99-7) Yes Yes No Yes

-----\Federal, State & International Regulations - Part 1\-----  
Ingredient -SARA 302- -SARA 313-  
RQ TPQ List Chemical Catg.  
-----  
Dextrose Anhydrous (50-99-7) No No No No

-----\Federal, State & International Regulations - Part 2\-----  
Ingredient CERCLA -RCRA- -TSCA-  
261.33 8(d)  
-----  
Dextrose Anhydrous (50-99-7) No No No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No  
RA 311/312: Acute: No Chronic: No Fire: No Pressure: No  
Activity: No (Mixture / Solid)

**Australian Hazchem Code:** No information found.

**Poison Schedule:** No information found.

### WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 6. Other Information

**NFPA Ratings:** Health: 0 Flammability: 0 Reactivity: 0

### Label Hazard Warning:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

### Label Precautions:

None.

### Label First Aid:

Not applicable.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

Mixture. New 16 section MSDS format, all sections have been revised.

**Disclaimer:**

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