

**MSDS****Material Safety Data Sheet**24 Hour Emergency Telephone: 908-859-2151  
CHEMTREC: 1-800-424-9300National Response in Canada  
CANUTEC: 613-996-6666Outside U.S. and Canada  
Chemtrec: 703-527-3887**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.From: Mallinckrodt Baker, Inc.  
222 Red School Lane  
Phillipsburg, NJ 08865

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

# SUCROSE

MSDS Number: S7394 --- Effective Date: 06/26/00

## 1. Product Identification

**Synonyms:** alpha-D-glucopyranosyl-beta-D-fructofuranoside; sugar**CAS No.:** 57-50-1**Molecular Weight:** 342.3**Chemical Formula:** C<sub>12</sub>H<sub>22</sub>O<sub>11</sub>**Product Codes:**

J.T. Baker: 4072, 4074, 4097, 4842

Mallinckrodt: 1397, 7723, 8360

## 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Sucrose	57-50-1	90 - 100%	Yes

## 3. Hazards Identification

### Emergency Overview

**CAUTION! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR. NUISANCE DUST. HIGH CONCENTRATIONS MAY IRRITATE EYES AND RESPIRATORY TRACT.****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. Nuisance dust. Inhalation of high concentrations may cause coughing and upper respiratory tract irritation.

**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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## 4. First Aid Measures

**Inhalation:**

Remove to fresh air. Get medical attention for any breathing difficulty.

**Ingestion:**

If large amounts were swallowed, give water to drink and get medical advice.

**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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## 5. Fire Fighting Measures

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Minimum explosible concentration in air: 0.045 g/l.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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## 6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

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## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. 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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## 8. Exposure Controls/Personal Protection

### Airborne Exposure Limits:

Sucrose:

- OSHA Permissible Exposure Limit (PEL) -

Respirable fraction: 5 mg/m<sup>3</sup> (TWA)

Total dust: 15 mg/m<sup>3</sup> (TWA)

- ACGIH Threshold Limit Value (TLV) -

10 mg/m<sup>3</sup> (TWA), A4 - Not classifiable as a human carcinogen

### Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

### Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece 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:

Safety glasses.

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## 9. Physical and Chemical Properties

### Appearance:

Monoclinic sphenoidal crystals.

### Odor:

Characteristic caramel.

### Solubility:

1 gm/0.5 ml water

### Density:

## SUCROSE

1.59

### **pH:**

Solutions are neutral to litmus.

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

0

### **Boiling Point:**

Not applicable.

### **Melting Point:**

160 - 186C (320 - 367F)

### **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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## 10. Stability and Reactivity

### **Stability:**

Stable under ordinary conditions of use and storage.

### **Hazardous Decomposition Products:**

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

### **Hazardous Polymerization:**

Will not occur.

### **Incompatibilities:**

Oxidizers, sulfuric acid and nitric acid.

### **Conditions to Avoid:**

Heat, flames, ignition sources and incompatibles.

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## 11. Toxicological Information

Oral rat LD50: 29700 mg/kg; investigated as a mutagen, reproductive effector.

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Sucrose (57-50-1)	No	No	None

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## 12. Ecological Information

### **Environmental Fate:**

No information found.

### **Environmental Toxicity:**

No information found.

## 13. 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.

## 14. Transport Information

Not regulated.

## 15. Regulatory Information

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-----\Chemical Inventory Status - Part 1\-----
Ingredient                                     TSCA   EC     Japan  Australia
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Sucrose (57-50-1)                             Yes    Yes    No     Yes

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-----\Chemical Inventory Status - Part 2\-----
Ingredient                                     Korea  DSL   NDSL   Phil.
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Sucrose (57-50-1)                             Yes    Yes   No     Yes

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-----\Federal, State & International Regulations - Part 1\-----
Ingredient                                     -SARA 302-   -SARA 313-
RQ      TPQ      List   Chemical Catg.
-----
Sucrose (57-50-1)                             No    No    No     No

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-----\Federal, State & International Regulations - Part 2\-----
Ingredient                                     CERCLA      -RCRA-      -TSCA-
261.33      8(d)
-----
Sucrose (57-50-1)                             No          No          No

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Chemical Weapons Convention: No      TSCA 12(b): No      CDTA: No  
 SARA 311/312: Acute: No      Chronic: No      Fire: Yes      Pressure: No  
 Reactivity: No      (Pure / 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.

# 16. Other Information

**NFPA Ratings:** Health: **0** Flammability: **1** Reactivity: **0**

**Label Hazard Warning:**

CAUTION! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR. NUISANCE DUST. HIGH CONCENTRATIONS MAY IRRITATE EYES AND RESPIRATORY TRACT.

**Label Precautions:**

Avoid dust cloud in presence of an ignition source.

Maintain adequate ventilation.

Keep container closed.

**Label First Aid:**

If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 8.

**Disclaimer:**

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**Prepared by:** Strategic Services Division

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