MSDS Number: D0835 ** ** ** Effective Date: 11/02/01 ** ** ** Supersedes: 11/17/99

24 Hour Emergency Telephone: 908-664-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6866

Outside U.S. and Canada
Chemtx: 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.

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

DEXTROSE, ANHYDROUS

1. Product Identification

Synonyms: D-glucose, anhydrous; dextrosol; dextrose U.S.P. anhydrous; corn sugar; grape sugar
CAS No.: 50-99-7
Molecular Weight: 180.16
Chemical Formula: C6H12O6
Product Codes:
J.T. Baker: 1916, 1919, 1920, 4893, 5587
Mallinckrodt: 4908, 4912, 4915, 7730

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dextrose Anhydrous</td>
<td>50-99-7</td>
<td>90 - 100%</td>
<td>No</td>
</tr>
</tbody>
</table>

3. 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.

http://www.jtbaker.com/msds/englishhtml/D0835.htm

12/17/02
J.T. Baker SAF-T-DATA™ 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)

Potential Health Effects

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.

4. 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.

5. Fire Fighting Measures

Fire:
Not considered to be a fire hazard.

Explosion:
Not considered to be an explosion hazard under normal conditions.

Fire Extinguishing Media:
Use any means suitable for extinguishing surrounding fire.

Special Information:
Wear full protective clothing and breathing equipment for high-intensity fire or potential explosion conditions.

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. 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.

7. 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.

8. 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 dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. 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.

9. Physical and Chemical Properties

Appearance:
Colorless crystals or white crystalline powder.

Odor:
Odorless.

Solubility:
1 g/1.1 ml water @ 25°C (77°F).

Density:
1.54 @ 25°C/4°C

pH:
5.9 For 0.5 M aqueous solution

% Volatiles by volume @ 21°C (70°F):
0

Boiling Point:
No information found.

Melting Point:
146°C (295°F)

Vapor Density (Air=1):
No information found.

Vapor Pressure (mm Hg):
No information found.

Evaporation Rate (BuAc=1):
No information found.

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:
React with sodium nitrite plus potassium nitrite, sodium peroxide plus potassium nitrate.

Conditions to Avoid:
Moisture and incompatibles.

11. Toxicological Information

Oral rat LD50: 25800 mg/kg. Investigated as a tumorigen, mutagen, reproductive effector.

\begin{tabular}{|l|c|c|c|}
  \hline
  \textbf{Ingredient} & \textbf{NTP Carcinogen} & \textbf{IARC Category} \\
  \hline
  Dextrose Anhydrous (50-99-7) & No & None \\
  \hline
\end{tabular}

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

---
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
<th>Japan</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dextrose Anhydrous (50-99-7)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
---

---
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Korea</th>
<th>DSL</th>
<th>NDSL</th>
<th>Phil.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dextrose Anhydrous (50-99-7)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
---

---
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CERCLA</th>
<th>TSCA</th>
<th>RCRA</th>
<th>SARA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dextrose Anhydrous (50-99-7)</td>
<td>261.33</td>
<td>8(d)</td>
<td>SARA 302- SARA 313-</td>
<td></td>
</tr>
</tbody>
</table>
---

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

Australian Hazchem Code: None allocated.
Poison Schedule: None allocated.
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: 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:
MSDS Section(s) changed since last revision of document include: 8.

Disclaimer:
***************************************************************************

Mallinckrodt Baker, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. MALLINCKRODT BAKER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, MALLINCKRODT BAKER, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.
***************************************************************************

Prepared by: Environmental Health & Safety
Phone Number: (314) 654-1600 (U.S.A.)