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
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.

SAF-T-DATA\(^{\text{tm}}\) Ratings (Provided here for your convenience)

<table>
<thead>
<tr>
<th>Health Rating</th>
<th>Flammability Rating</th>
<th>Reactivity Rating</th>
<th>Contact Rating</th>
<th>Lab Protective Equip</th>
<th>Storage Color Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - None</td>
<td>1 - Slight</td>
<td>1 - Slight</td>
<td>0 - None</td>
<td>GOGGLES; LAB COAT; PROPER GLOVES</td>
<td>Green (General Storage)</td>
</tr>
</tbody>
</table>
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:
This material in sufficient quantity and reduced particle size is capable of creating a dust explosion

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 @ 25C (77F).

Density:
1.54 @ 25C/4C

pH:
5.9 For 0.5 M aqueous solution

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

Boiling Point:
No information found.

Melting Point:
146C (295F)

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:**
Reacts 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.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>NTP Carcinogen</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>Dextrose Anhydrous (50-99-7)</td>
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</tr>
</tbody>
</table>

### 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>
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<tbody>
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<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Korea</th>
<th>DSL</th>
<th>NDSL</th>
<th>Phil.</th>
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<tr>
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<td>Yes</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>RQ</th>
<th>TPQ</th>
<th>List</th>
<th>Chemical Catg.</th>
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<tbody>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CERCLA</th>
<th>261.33</th>
<th>8(d)</th>
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</table>
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:**
No Changes.

**Disclaimer:**

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