Material Safety Data Sheet
D-Glucose-1-Phosphate Disodium Salt Tetrahydrate

ACC# 08226

**Section 1 - Chemical Product and Company Identification**

**MSDS Name:** D-Glucose-1-Phosphate Disodium Salt Tetrahydrate  
**Catalog Numbers:** S74566  
**Synonyms:** 17364-14-6 is for the anhydrous sodium salt (C6H13O9P.xNa), not the tetrahydrate. 56401-20-8 is for the anhydrous disodium salt of alpha-d-glucopyranose, 1-(dihydrogen phosphate). 32972-46-6 is also for the anhydrous disodium salt. There is no alpha designation in this name.  
**Company Identification:**  
Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410  
**For information, call:** 201-796-7100  
**Emergency Number:** 201-796-7100  
**For CHEMTREC assistance, call:** 800-424-9300  
**For International CHEMTREC assistance, call:** 703-527-3887

**Section 2 - Composition, Information on Ingredients**

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>56401-20-8</td>
<td>a-D-Glucopyranose, 1-(dihydrogenphosphate), disodium</td>
<td>100</td>
<td>260-154-1</td>
</tr>
</tbody>
</table>

**Section 3 - Hazards Identification**

**EMERGENCY OVERVIEW**

Appearance: not available solid.  
**Caution!** May cause eye and skin irritation. The toxicological properties of this material have not been fully investigated.  
**Target Organs:** None.

**Potential Health Effects**  
**Eye:** Dust may cause mechanical irritation.  
**Skin:** May cause skin irritation.  
**Ingestion:** No information found. The toxicological properties of this substance have not been fully investigated.  
**Inhalation:** No information available. The toxicological properties of this substance have not been fully investigated.  
**Chronic:** No information found.

**Section 4 - First Aid Measures**

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician: No specific antidote exists. Treat symptomatically and supportively.

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Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: ; Flammability: 1; Instability:

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Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

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Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place.

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Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-D-Glucopyranose, 1- (dihydrogen phosphate), disodium</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>D-Glucopyranose, 1- (dihydrogen phosphate), sodium salt</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>d-Glucopyranose, 1- (dihydrogen phosphate), disodium salt</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: a-D-Glucopyranose, 1-(dihydrogen phosphate), disodium: No OSHA Vacated PELs are listed for this chemical. D-Glucopyranose, 1-(dihydrogen phosphate), sodium salt: No OSHA Vacated PELs are listed for this chemical.
Section 9 - Physical and Chemical Properties

Physical State: Solid
Appearance: not available
Odor: none reported
pH: Not available.
Vapor Pressure: Negligible.
Vapor Density: Not applicable.
Evaporation Rate: Negligible.
Viscosity: Not available.
Boiling Point: Not applicable.
Freezing/Melting Point: Not available.
Decomposition Temperature: Not available.
Solubility: Soluble.
Specific Gravity/Density: Not available.
Molecular Formula: C6H11O9PNa2.4H2O
Molecular Weight: 304.12

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: High temperatures, dust generation.
Incompatibilities with Other Materials: Strong oxidizing agents.
Hazardous Decomposition Products: No data available.
Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#: 
CAS# 56401-20-8 unlisted.
CAS# 17364-14-6 unlisted.
CAS# 32972-46-6 unlisted.
LD50/LC50:
Not available.
Not available.
Not available.

Carcinogenicity:
CAS# 56401-20-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 17364-14-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 32972-46-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.
**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** Please refer to RTECS for specific information.

**Neurotoxicity:** No information available.

**Other Studies:**

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### Section 12 - Ecological Information

No information available.

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### Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

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### Section 14 - Transport Information

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shipping Name:</strong></td>
<td>Not regulated as a hazardous material</td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Hazard Class:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>UN Number:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Packing Group:</strong></td>
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<td></td>
</tr>
</tbody>
</table>

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### Section 15 - Regulatory Information

**US FEDERAL**

**TSCA**

CAS# 56401-20-8 is not listed on the TSCA inventory. It is for research and development use only.

CAS# 17364-14-6 is listed on the TSCA inventory.

CAS# 32972-46-6 is not listed on the TSCA inventory. It is for research and development use only.

**Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**Section 313**

No chemicals are reportable under Section 313.

**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**
None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**
- CAS# 56401-20-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
- CAS# 17364-14-6 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
- CAS# 32972-46-6 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**
California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**
Not available.

**Risk Phrases:**

**Safety Phrases:**

**WGK (Water Danger/Protection)**
- CAS# 56401-20-8: No information available.
- CAS# 17364-14-6: No information available.
- CAS# 32972-46-6: No information available.

**Canada - DSL/NDSL**
- CAS# 17364-14-6 is listed on Canada's NDSL List.

**Canada - WHMIS**
- WHMIS: Not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

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**Section 16 - Additional Information**

**MSDS Creation Date:** 9/02/1997  
**Revision #3 Date:** 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.