MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Sodium Gluconate F.C.C.

Formula: HOCH₂(CHOH)₄COONa (C₆H₁₁O₇.Na)

Chemical Name: Sodium 2,3,4,5,6, pentahydroxy-hexanoate

Responsible Company: PMP Fermentation Products, Inc
900 NE Adams St, Peoria,IL 61603

Product Use: Chelating agent

Information Phone No. (309) 637-0400 8 am – 4 pm CST M-F
Chemtrec Phone No (800) 424-9300

2 HAZARDS IDENTIFICATION

Inhalation: Long-term inhalation of excessive dust may cause delayed lung injury. May cause respiratory irritation in susceptible individuals.

Skin: May cause irritation for susceptible individuals.

Eyes: Can cause eye damage

Ingestion: May cause toxic effects if large amounts are swallowed. No effects known for rare accidental swallowing

NFPA Ratings: HEALTH 1 FIRE 0 REACTIVITY 0
Canadian WHMIS: Not Classified

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient: Sodium Gluconate (100%)

CAS No. 527-07-1

4 FIRST AID MEASURES

Inhalation: If adverse effects occur, get medical attention.

Skin: Wash thoroughly with soap and water.

Eyes: Flush immediately with water or physiological saline for 15 minutes. Get prompt medical attention.

Ingestion: Get medical attention if adverse effects occur.

Other Important Medical or Precautionary Information: None.
5  **FIRE FIGHTING MEASURES**

Flash Point (Method):  \(n/a\)  
Explosion Limits:  Upper:  \(n/a\)  Lower:  \(n/a\)

Extinguishing Media:  Water, carbon dioxide, foam, halogen.

Special Firefighting Procedures and Hazards:  Dust in air can be an explosion hazard. Wear eye protection.

6  **ACCIDENTAL RELEASE MEASURES**

Spills and Leaks:  
Collect as much as possible for use or disposal. Flush remainder into normal drainage or into ground with copious amounts of water.

7  **HANDLING AND STORAGE**

Storage and Handling:  Avoid generating dust.

Empty Containers:  No special precautions.

Other Precautions:  If substantial dust is in air, take measures to remove sources of ignition to prevent possible dust combustion or explosion. Promptly ventilate the area. Adopt procedures to minimize dust generation.

8  **EXPOSURE CONTROL/PERSONAL PROTECTION**

<table>
<thead>
<tr>
<th>TLV</th>
<th>CARCINOGEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuisance Dust  (15 \text{ mg/m}^3) (total)</td>
<td>no</td>
</tr>
<tr>
<td>(Particulates not otherwise regulated)  (5 \text{ mg/m}^3) (respirable)</td>
<td></td>
</tr>
</tbody>
</table>

Inhalation:  Wear approved dust respirator when visible dust is present, and/or if irritation occurs.

Skin:  Wear protective clothing as needed.

Eyes:  Wear dust proof goggles.

Ingestion:  No effects known for rare accidental swallowing. Avoid swallowing.
9 CHEMICAL AND PHYSICAL PROPERTIES

Appearance: White to yellow powder or granules
Boiling Point: n/a
Odor: none
Melting Point: n/a
pH: 6.8-7.2 (10% in water)
Vapor Pressure (mm Hg): n/a
Water Solubility: Soluble
Spec. Gravity (H₂O=1): n/a

Other: Bulk Density: free flow = 56 lb/ft³; packed = 66 lb/ft³

10 STABILITY AND REACTIVITY

Stable: X
Unstable: ___
Precautions: __________
Incompatibility: __ Strong Oxidizers
Hazardous Decomposition Products: n/a
Hazardous Polymerization Occurs: ______  Does Not Occur: ___ X

11 TOXICOLOGICAL INFORMATION

LD50 (rat) > 2000 (mg/kg bw)
Carcinogenicity Not applicable
Mutagenicity Not applicable
Teratogenicity Not applicable
Reproductive Toxicity Not applicable

12 ECOLOGICAL INFORMATION

Predicted toxicity values are:

Fish 96-h LC50 > 1000.0 mg/L
Daphnid 48-h LC50 > 1000.0 mg/L
Green algal 96-h EC50 > 1000.0 mg/L
Fish Chronic Value (ChV) > 100.0 mg/L
Daphnid ChV > 100.0 mg/L
Algal ChV > 100.0 mg/L

Biological Fate: No bioconcentration in aquatic organisms and rapid biodegradation/disappearance in the environment, i.e. 40% in 5 days.

13 DISPOSAL CONSIDERATIONS

Waste Disposal: In accordance with applicable regulations. Normally can be flushed down sewers. Not a hazardous waste under RCRA criteria.

14 TRANSPORT INFORMATION

DOT Shipping Name: None
DOT: Not Regulated
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15 REGULATORY INFORMATION

Reportable for SARA Title III, S.313 (Form R): None

Inventory Status:

<table>
<thead>
<tr>
<th>Country</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA USA</td>
<td>Yes</td>
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<tr>
<td>DSL Canada</td>
<td>Yes</td>
</tr>
<tr>
<td>EINECS Europe</td>
<td>Yes</td>
</tr>
<tr>
<td>AICS Australia</td>
<td>Yes</td>
</tr>
<tr>
<td>MITI Japan</td>
<td>Yes</td>
</tr>
</tbody>
</table>

16 OTHER INFORMATION

Revision Date: 4/12/11

The information herein has been compiled from sources believed to be reliable and is accurate to the best of our knowledge. However, PMP Fermentation Products, Inc. cannot give any guarantees regarding information from other sources, and expressly does not make any warranties, nor assumes any liability, for its use.