SAFETY DATA SHEET  
SODIUM GLUCONATE

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product Name: Sodium Gluconate  
REACH Registered Name: Sodium Gluconate  
REACH registered number: Exemption under Annex V  
CAS #: 527-07-1  
EC#: 208-407-7  
Product Code: 71111, 71112, 71115, 71120  
Synonyms: Sodium Salt of gluconic acid, Sodium 2,3,4,5,6, pentahydroxy-hexanoate  
INCI Name: Sodium Gluconate

1.2. Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Chelating agent in foods, cleaning applications, electroplating, concrete admixtures

1.3. Details of the Supplier of the Safety Data Sheet

Company Name: PMP Fermentation Products, Inc.  
900 NE Adams Street  
Peoria, Illinois 61603, USA  
Telephone: 1-309-637-0400 8 am – 4 pm CST M-F  
Fax: 1-309-637-9302  
E mail: sales@pmpinc.com

1.4. Emergency Contact

Chemtrec: 1-(800) 424-9300

Section 2: Hazards Identification

2.1. Classification of the Substance or Mixture

Classification under CLP: This product has no classification under CLP

2.2. Label Elements

Label elements: This product has no label elements
### 2.3. Other Hazards

PBT: This product is not identified as a PBT substance

### Section 3: Composition/Information on Ingredients

#### 3.1. Substances

Chemical Identity: Sodium Gluconate

### Section 4: First Aid Measures

#### 4.1. Description of First Aid Measures

- **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.
- **Inhalation:** If adverse effects occur, get medical attention.

#### 4.2. Most Important Symptoms and Effects, Both Acute and Delayed

- **Skin:** May cause irritation and redness for susceptible individuals.
- **Eyes:** May cause mild irritation. Eyes may water profusely.
- **Ingestion:** May cause irritation if large amounts are swallowed. Nausea and stomach pain may occur. There may be vomiting and diarrhea.
- **Inhalation:** May cause respiratory irritation in susceptible individuals. May cause shortness of breath, sneezing and coughing.

**Delayed/Immediate effects:** Long-term inhalation of excessive dust may cause delayed lung injury.

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Need

**Immediate/Special Treatment:** Eye wash stations should be available
Section 5: Fire Fighting Measures

5.1. Extinguishing Media

Extinguishing Media: Water, carbon dioxide, foam, halogen

5.2. Special Hazards Arising from the Substance or Mixture

Exposure Hazards: In combustion, emits toxic fumes of carbon dioxide/carbon monoxide. Dust in air can be an explosion hazard.

5.3. Advice for Fire Fighters

Advice for Fire Fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions: Wear suitable protective clothing. Refer to section 8. Do not create dust.

6.2. Environmental Precautions

Environmental Precautions: Do not discharge into drains or rivers.

6.3. Methods and Material for Containment and Cleaning up

Clean-Up Procedures: Collect as much as possible for use or disposal in a properly labeled container. Flush remainder into normal drainage with copious amounts of water.

6.4. Reference to Other Sections

Reference to Other Sections: Refer to sections 8 and 13
Section 7: Handling and Storage

7.1. Precautions for Safe Handling

Handling Requirements: Wear suitable protective clothing. Ensure there is sufficient ventilation in the area. Avoid generating dust.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a cool, well-ventilated area. Keep away from direct sunlight. Avoid contact with water and humidity.

Suitable Packaging: Paper, plastic or poly lined bags or drums.

7.3. Specific End Use(s)

Specific End Use(s): No special requirement

Section 8: Exposure Controls/Personal Protection

8.1. Control Parameters

<table>
<thead>
<tr>
<th>State</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>-</td>
<td>-</td>
<td>4 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>USA</td>
<td>-</td>
<td>-</td>
<td>5 mg/m³</td>
<td>-</td>
</tr>
</tbody>
</table>

8.2. Exposure Controls

Engineering measures: Provide sufficient ventilation of the area
Respiratory protection: Respirator with particle filter
Hand protection: Protective gloves
Eye protection: Safety goggles. Provide eye wash stations
Skin protection: Protective clothing. Provide safety shower
Environmental: No special requirement
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SODIUM GLUCONATE

Section 9: Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

State: Granular powder
Color: White to tan
Odor: Odorless
pH: 6.8 – 7.2 (10% aq. Solution)
Melting Point/Range: 192 – 202°C
Boiling Point: Not applicable
Flash Point: Not applicable
Evaporation Rate: Not applicable
Flammability: Not applicable
Upper Explosion Limit: Not applicable
Lower Explosion Limit: Not applicable
Vapor Pressure: 7.23 x10^{-18} mmHg/ 1 x 10^{-18} kPa @ 25°C
Vapor Density: unknown
Relative Density: 945 kg/m³ granular; 705 kg/m³ powder
Solubility in Water: Highly soluble, 5.9 x 10^5 mg/L @ 25°C
Auto-Ignition Temperature: Not applicable
Decomposition Temperature: > 210°C
Viscosity: Not applicable
Oxidizing: Non-oxidizing
Molecular Weight: 218.13

9.2. Other Information

Other Information: Not applicable

Section 10: Stability and Reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport and storage conditions

10.2. Chemical Stability

Chemical Stability: Stable under normal conditions

10.3. Possibility of Hazardous Reactions

Hazardous Reactions: Hazardous reactions will not occur under normal conditions
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SODIUM GLUCONATE

10.4. Conditions to Avoid

Conditions to Avoid: Direct sunlight, moist air and humidity

10.5. Incompatible Materials

Materials to Avoid: Strong Oxidizers

10.6. Hazardous Decomposition Products

Hazardous Decomposition Products: In combustion, emits toxic fumes of carbon dioxide/carbon monoxide.

Section 11: Toxicological Information

11.1. Information of Toxicological Effects

Toxicity Values:

<table>
<thead>
<tr>
<th>Route</th>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>LD50</td>
<td>&gt;2000</td>
<td>mg/kg</td>
</tr>
<tr>
<td>Intravenous</td>
<td>Rabbit</td>
<td>LD50</td>
<td>7630</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

Symptoms/Routes of Exposure

Skin Contact: May cause irritation and redness for susceptible individuals.

Eyes: May cause mild irritation. Eyes may water profusely.

Ingestion: May cause irritation if large amounts are swallowed. Nausea and stomach pain may occur. There may be vomiting and diarrhea.

Inhalation: May cause respiratory irritation in susceptible individuals. May cause shortness of breath, sneezing and coughing.

Delayed/Immediate effects: Long-term inhalation of excessive dust may cause delayed lung injury.

Carcinogenicity: Not applicable
Mutagenicity: Not applicable
Teratogenicity: Not applicable
Reproductive Toxicity: Not applicable
ECOTOXICITY VALUES:

<table>
<thead>
<tr>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>96H LC50</td>
<td>&gt; 1000.0</td>
<td>mg/L</td>
</tr>
<tr>
<td>Daphnid</td>
<td>48H LC50</td>
<td>&gt; 1000.0</td>
<td>mg/L</td>
</tr>
<tr>
<td>Green Algal</td>
<td>96H EC50</td>
<td>&gt; 1000.0</td>
<td>mg/L</td>
</tr>
<tr>
<td>Fish</td>
<td>ChV*</td>
<td>&gt; 100.0</td>
<td>mg/L</td>
</tr>
<tr>
<td>Daphnid</td>
<td>ChV</td>
<td>&gt; 100.0</td>
<td>mg/L</td>
</tr>
<tr>
<td>Algal</td>
<td>ChV</td>
<td>&gt; 100.0</td>
<td>mg/L</td>
</tr>
<tr>
<td>Bacteria</td>
<td>EC50</td>
<td>&gt; 5000.0</td>
<td>mg/L</td>
</tr>
</tbody>
</table>

- Chronic Value

PERSISTENCE AND DEGRADABILITY:

Persistency and Degradability: Readily and rapidly biodegradable

BIOACCUMULATIVE POTENTIAL:

Bioaccumulative Potential: Product does not bioaccumulate

MOBILITY IN SOIL:

Mobility: Soluble in water

RESULTS OF PBT AND vPvB ASSESSMENT:

PBT Identification: This substance is not identified as a PBT substance.

OTHER ADVERSE EFFECTS:

Other Adverse Effects: Not expected to cause significant environmental impact.

DISPOSAL CONSIDERATIONS:

Disposal Operations: In accordance with applicable regulations. Normally can be flushed down sewers.
Recovery Operations: No information available
Disposal of Packaging: Contaminated containers must not be treated as household waste. Where practical, containers and packaging should be recycled by a licensed contractor.

Section 14: Transport Information

Transport Class: This product does not require a classification for transport. This product is not dangerous, not hazardous, and not restricted for transport by air

Section 15: Regulatory Information

15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture


Directive 96/82/EC does not apply

Europe Risk Phrases not classified in Europe

Europe Safety Phrases not classified in Europe

15.2. Chemical Safety Assessment

Chemical Safety Assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.
Section 16: Other Information

Other Information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010

There are no exposure levels set for the specific product. The following levels should be adhered to based on US regulations:

Total inhalable dust (8 hour TWA): 15 mg/m³

Legal Disclaimer: 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.

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