SAFETY DATA SHEET
Liquid Gluconate LT 60%
2.2. Label Elements

Label Elements  This product has no label elements under CLP or GHS

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:  Liquid Gluconate 60 LT

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Gluconate</td>
<td>No classification</td>
<td>25%</td>
</tr>
<tr>
<td>No. CAS</td>
<td>527-07-1</td>
<td></td>
</tr>
<tr>
<td>No CE</td>
<td>208-407-7</td>
<td></td>
</tr>
<tr>
<td>Gluconic Acid</td>
<td>No classification</td>
<td>35%</td>
</tr>
<tr>
<td>No. CAS</td>
<td>526-95-4</td>
<td></td>
</tr>
<tr>
<td>No CE</td>
<td>208-401-4</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>No classification</td>
<td>40%</td>
</tr>
<tr>
<td>No CAS</td>
<td>7732-18-5</td>
<td></td>
</tr>
<tr>
<td>No CE</td>
<td>231-791-2</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4: First Aid Measures

4.1. Description of First-Aid Measures

Skin:  Wash with soap and plenty of water.

Eyes:  Wash thoroughly with plenty of water for at least 15 minutes, and seek medical advice.

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:  Can cause irritation and redness to susceptible individuals.
SAFETY DATA SHEET
Liquid Gluconate LT 60%

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

Ingestion: Can cause irritation if large amounts are swallowed. You may experience nausea and stomach pain. There may be vomiting and diarrhea.

Inhalation: May cause respiratory irritation in susceptible individuals. Can 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 monoxide carbon dioxide.

5.3. Advice for Fire Fighters

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

5.4 Other Information

None

### SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions: Use appropriate protective clothing. See section 8.
### 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: see sections 8 and 13

### Section 7: Handling and Storage

#### 7.1. Precautions for Safe Handling

Handling requirements: Use suitable protective clothing. Make sure there is adequate ventilation in the area.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

- **Storage conditions:** Store in a cool, well-ventilated area. Keep away from direct sunlight.

- **Packaging:** plastic or lined poly drums.

#### 7.3. Specific End Use(s)

No special requirement

### SECTION 8: Exposure Controls/Personal Protection

#### 8.1. Control Parameters

None established:
### 8.2. Exposure Controls

<table>
<thead>
<tr>
<th>Engineering measures</th>
<th>Provide sufficient ventilation of the area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory protection</td>
<td>Respirator with particle filter</td>
</tr>
<tr>
<td>Hand Protection</td>
<td>Protective gloves</td>
</tr>
<tr>
<td>Eye Protection</td>
<td>Safety goggles, provide eye wash stations</td>
</tr>
<tr>
<td>Skin Protection</td>
<td>Protective clothing. Provide safety shower</td>
</tr>
<tr>
<td>Environmental</td>
<td>No special requirement</td>
</tr>
</tbody>
</table>

### Section 9: Physical and Chemical Properties

#### 9.1. Information on Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Clear yellow to light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>pH</td>
<td>3.0 – 3.4</td>
</tr>
<tr>
<td>Melting point</td>
<td>Data not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt;100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>Data not available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Data not available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Data not available</td>
</tr>
<tr>
<td>Upper Explosion Limit</td>
<td>Data not available</td>
</tr>
<tr>
<td>Lower Explosion Limit</td>
<td>Data not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Data not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Data not available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.3</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Complete</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Data not available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>&lt; 14°F</td>
</tr>
<tr>
<td>Viscosity</td>
<td>32 Cp at 25 °C</td>
</tr>
<tr>
<td>Oxidizing substances</td>
<td>Non-oxidizing</td>
</tr>
<tr>
<td>Peso molecular</td>
<td>Data not available</td>
</tr>
</tbody>
</table>

#### 9.2. Other Information

Other Information: Not applicable

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1. Reactivity

Reactivity: Stable under recommended storage and transport 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

10.4. Conditions to Avoid

Conditions to Avoid: Direct sunlight

10.5. Incompatible Materials

Materials to Avoid: Strong Oxidizers

10.6. Hazardous Decomposition Products

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

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on 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

Contact on 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.

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

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

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

12.2. Persistence and Degradability

Persistence and Degradability: Readily and rapidly biodegradable

12.3. Bioaccumulative Potential

Bioaccumulative Potential: Product does not bioaccumulate

12.4. Mobility in Soil

Mobility: Soluble in water

12.5. Results of PBT and vPvB Assessment

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

12.6. Other Adverse Effects

Other Adverse Effects: Not expected to cause significant environmental impact.
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Liquid Gluconate LT 60%

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

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.

SECTION 15: REGULATORY INFORMATION

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

Specific Regulations


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.
SAFETY DATA SHEET
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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.

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