



Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300

# MATERIAL SAFETY DATA SHEETS

## SECTION I

### PRODUCT AND COMPANY IDENTIFICATION

**Product: Calcium Gluconate, monohydrate**  
**This MSDS is valid for all grades and catalog #'s**

Synonyms: Gluconic Acid, calcium salt, monohydrate;  
Calcium-D-Gluconate; Calcium Hexagluconate;  
Formula: C<sub>12</sub>-H<sub>22</sub>-Ca-O<sub>14</sub>-H<sub>2</sub>O

Manufacturer: PHARMCO-AAPER  
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CHEMTREC 1-800-424-9300

## SECTION II

### COMPOSITION /INFORMATION ON INGREDIENTS

% by Material CAS # TLV/PE LC50/LD50  
weight L

% by weight	Material	CAS #	TLV/PE L	LC50/LD50
100	Calcium Gluconate, monohydrate	18016-24-5	Not available	ORAL (LD50): Acute: >5000 mg/kg [Rat].

## SECTION III

### HAZARDS IDENTIFICATION

**Potential Acute Health Effects:** Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

Repeated or prolonged exposure is not known to aggravate medical condition.

## SECTION IV

### FIRST AID

Obtain medical attention for all cases of over-exposure.

**Eye Contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

**Skin Contact:** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

**Hazardous Skin Contact:** Not available.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Hazardous Inhalation:** Not available.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Hazardous Ingestion:** Not available.

## SECTION V

### FIRE FIGHTING MEASURES

**Fire:**

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition temperature: Not available

Flash point: Not available

Flammable limits: Not available

Products of Combustion: These products are carbon oxides (CO, CO<sub>2</sub>). Some metallic oxides.

**Fire Hazards:** Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

**Explosion Hazards:** Slightly explosive in presence of open flames and sparks.

**Fire Extinguishing Media:** Non-explosive in presence of shocks.

**Special Information:** SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

## SECTION VI

### SPILL/ACCIDENTAL RELEASE MEASURES

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by

spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:** Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

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#### SECTION VII HANDLING AND STORAGE

**Precautions:** Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

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#### SECTION VIII EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:** Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

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#### SECTION IX PHYSICAL AND CHEMICAL PROPERTIES

**Physical State/Appearance:** Solid.

**Molecular Weight:** 448.39 g/mole

**Odor:** Odorless.

**Taste:** Tasteless.

**Color:** Not available.

**pH (1% Solution in Water):** Not available.

**Boiling Point:** Not available.

**Melting Point:** Decomposition temperature: 100°C (212°F)

**Critical Temperature:** Not available.

**Specific Gravity:** Not available.

**Vapor Pressure (mm Hg):** Not applicable

**Vapor Density (Air=1):** Not available.

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Water/Oil Dist. Coefficient:** Not available.

**Ionicity (in water):** Not available.

**Dispersion Properties:** See solubility in water.

**Solubility:** Soluble in hot water. Partially soluble in cold water. Solubility in cold water: 30 g/l (20 deg. C) Solubility in hot water: 110 g/l (80 deg. C)

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#### SECTION X STABILITY/REACTIVITY INFORMATION

**Stability:** The product is stable

**Instability Temperature:** Not available

**Conditions of Instability:** Excess heat, incompatible materials

**Incompatibilities:** Reactive with oxidizing agents.

**Corrosivity:** Not available

**Special Information:** Not available

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#### SECTION XI TOXICOLOGICAL INFORMATION

**Routes of Entry:** Inhalation. Ingestion

**Toxicity to Animals:** Acute oral toxicity (LD50): >5000 mg/kg [Rat].

**Chronic Effects on Humans:** Not available

**Other Toxic Effects on Humans:** Slightly hazardous in case of skin contact (irritant) of ingestion, of inhalation.

**Special Information on Toxicity to Animals:** Lowest Published Lethal: LDL [Rat] - Route: Oral; Dose: 10000 mg/kg LDL [Mouse] - Route: Oral; Dose: 10000 mg/kg

**Special Information on Chronic Effects/Toxicity on Humans:** Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation. Ingestion: Ingestion of large amounts may cause gastrointestinal tract irritation with nausea. It may affect respiration (dyspnea, cyanosis), and heart (ventricular fibrillation). Other symptoms may include weakness, depression, and prostration. It is expected to be a low ingestion hazard

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#### SECTION XII ECOLOGICAL INFORMATION

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Information on Products of Biodegradation:** Not available.

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#### SECTION XIII DISPOSAL CONSIDERATIONS

**Waste Disposal:**

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#### SECTION XIV TRANSPORTATION INFORMATION

**DOT Classification:** DOT Not a DOT controlled material (United States).

**UN:** Not applicable.

**Special Provisions for Transport:** Not applicable.

**SECTION XV**  
**REGULATORY INFORMATION**

**Federal and State Regulations:**

**Other Classifications:**

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): This product is not classified according to the EU regulations.

**Protective Equipment:** Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

**References:** Not available.

**Other Special Considerations:** Not available.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of Hazardous Substances equal or greater than the reportable quantities (RQs) in 40 CFR 302.4. Components present in this product at a level which could require reporting under the statute are: **NONE**

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The information contained herein is based on data considered to be accurate based on the material as packaged. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It is the user's obligation to determine the conditions of safe use of the product. While this MSDS is based on technical data judged to be reliable, PHARMCO-AAPER assumes not responsibility for the completeness or accuracy of the information contained herein.