RADCHEM
LABORATORY CHEMICALS AND CONSUMABLES

MATERIAL SAFETY DATA SHEET

CALCIUM GLUCONATE MONOHYDRATE

1. Chemical Product and Company information.

Product name: Calcium Gluconate, monohydrate

Contact Information:
Radchem cc
PO Box 166982
Brackendowns
Alberton 1454
Telephone : **011 867 3726 / 2864**

2. Hazard Identification

Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

3. Composition / information on ingredients

CAS #: 18016-24-5

Synonym: Calcicol, Calciofon, Calcipur, Calglucol, Calglucon, Dragocal, Educin, Glucal, Glucobiogen, Kalpren, Novocal; Gluconic Acid, calcium salt, monohydrate; Calcium-D-Gluconate; Calcium Hexagluconate;

Chemical Name: Calcium Gluconate, monohydrate

Chemical Formula: C12-H-22-Ca-O14-.H2O

4. First Aid Measures

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.

Serious 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.

Serious 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.

Serious Ingestion: Not available.

5. Fire-fighting measures

Flammability of the Product: May be combustible at high temperature

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances: Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: As with most organic solids, fire is possible at elevated temperatures

Special Remarks on Explosion Hazards: Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard.

6. 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.

7. 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.

8. 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.

9. Physical and chemical properties

Physical state and appearance: Solid	**Odour Threshold:** Not available
Odour: Odourless	**Ionicity (in Water):** Not available.

Taste: Tasteless **Colour:** Not available **Boiling Point:** Not available **Melting Point:** Decomposition temperature: 100°C **Critical Temperature:** Not available **Specific Gravity:** Not available **Vapour Density:** Not available **Volatility:** 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)

10. Stability and reactivity

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents

Corrosivity: Not available

Special Remarks on Reactivity: Not available

Special Remarks on Corrosivity: Not available

Polymerization: Will not occur.

11. 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 Remarks on Toxicity to Animals: Lowest Published Lethal: LDL [Rat] - Route: Oral; Dose: 10000 mg/kg LDL [Mouse] - Route: Oral; Dose: 10000 mg/kg

Special Remarks on Chronic Effects on Humans: Not available

Special Remarks on other Toxic Effects 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 (dyspnoea, cyanosis)), and heart (ventricular fibrillation). Other symptoms may include weakness, depression, and prostration. It is expected to be a low ingestion hazard.

12. 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 Remarks on the Products of Biodegradation: Not available

13. Disposal considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

DOT Classification: Not a DOT controlled material

Identification: : Not applicable

Special Provisions for Transport: Not available

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