

CALCIUM GLUCONATE GEL

MATERIAL SAFETY DATA SHEET



Class D2B – Toxic (No effects expected under normal conditions of use.)

SECTION 1 - PRODUCT INFORMATION

Supplier:

Pharmascience Inc.
6111, Royalmount Avenue
Montréal, Québec, H4P 2T4.
1-888- 550-6060

Manufacturer:

Calgonate Corporation
875 Centerville Road, Building 2, unit 4B6
Warwick, Rhode Island, 02886
(401) 615-2811

Trade name: Calcium Gluconate Gel

Chemical name: A mixture of calcium gluconate, methylparaben and water in a gel base.

Product use: Topical application for use in the treatment of hydrofluoric acid burns

Formula number: N/A

WHMIS classification: D2B (toxic – temporary effects)

SECTION 2 - HAZARDOUS INGREDIENTS

| INGREDIENT | CAS # | PIN (UN) | % WEIGHT | EXPOSURE LIMITS (route, species) |
|-------------------|-----------|----------|----------|--|
| Calcium Gluconate | 299-28-5 | | 2.5% | LD50: 950 mg/kg (IV, rat, mouse) LD50: 2890 mg/kg (subcutaneous, rat) TLV: 15 mg/m ³ |
| Methylparaben | 99-76-3 | | <10% | LD50: > 7500 mg/kg (oral, rat) LD50: > 8000 mg/kg (oral, mouse) LD50: 6000 mg/kg (oral, rabbit) LD50: 1200 mg/kg (subcutaneous, mouse) LD50: 500 mg/kg (subcutaneous, rat) |
| (Water) | 7732-18-5 | | >75% | |
| (Gel Base) | | | <10% | |

LD50 = Lethal dose in 50% of animals tested (specify route)

TLV = Threshold limit values (The amounts of chemicals in the air that almost all healthy adult workers are predicted to be able to tolerate without adverse effects averaged over an 8-hour workday/40 hour work week.)

SECTION 3 - PHYSICAL DATA

The following physical data are approximate only and do not represent specification values. They should only be used in the context of this material safety data sheet.

Physical state: Aqueous and viscous gel

Appearance: Colourless
Odour: Isopropyl alcohol
Odour threshold (level at which it can be smelled): N/A
Specific gravity (water=1): N/A
Vapour pressure (psig at 21°C): N/A
Vapour density (air=1): N/A
Evaporation rate (n-butyl acetate= 1): N/A
Boiling point (°C): N/A
Freezing point: N/A
pH: 6.0-7.0
Coefficient of water/oil distribution: N/A
Solubility in water (% by weight at 20°C): N/A
% volatile by volume: N/A

SECTION 4 - FIRE OR EXPLOSION HAZARD

WHMIS flammability classification: N/A

Flammability (determined by flame projection): N/A

Conditions of flammability: The product contains combustible ingredients, however, as it has a high water content, the risk of combustion is considered to be very low.

Means of extinction: Dry chemical, CO₂, foam, water

Flash point: N/A **Method used:** N/A

The flash point is the lowest temperature at which a fuel-air mixture present above the surface of a liquid will ignite if an ignition source is introduced.

Flammable limits in air (% by volume): **Lower:** N/A **Upper:** N/A

The Lower Flammable Limit (also known as the Lower Explosive Limit or LEL) is the minimum concentration of the fuel in the oxidizer (usually air) that is sufficient to allow burning to occur. Below the Lower Flammable Limit, the fuel-oxidizer mixture is too lean and no burning will occur. The Upper Flammable Limit (also known as the upper explosive limit or UEL) is the maximum concentration of the fuel in the oxidizer (usually air) that is sufficient to allow burning to occur. Above the Upper Flammable Limit, the fuel-oxidizer mixture is too rich and no burning will occur.

Auto-ignition temperature: N/A

The auto-ignition temperature is the minimum temperature at which a substance will ignite in the air when there is no ignition source present.

Hazardous combustion products: Carbon monoxide (CO) and Carbon dioxide (CO₂).

Explosion data:

Sensitivity to shock: N/A

Sensitivity to static discharge: N/A

SECTION 5 - REACTIVITY DATA

Chemical stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature (room temperature) and pressure. Avoid storage in hot, unventilated areas.

Incompatibility: May react with oxidizing agents and strong bases. Calcium gluconate is incompatible with clindamycin phosphate.

Conditions of reactivity: Avoid storage in hot, unventilated areas.

Hazardous decomposition products (combustion): Carbon monoxide (CO) and Carbon dioxide (CO₂).

SECTION 6 - TOXICOLOGICAL PROPERTIES

Possible routes of entry:

- Inhalation (breathing)
- Skin/eye contact (localized irritation)
- Skin/eye absorption (systemic)
- Ingestion (systemic) – May cause gastric irritation and hypercalcemia

Effects of acute exposure:

Calcium gluconate: May be irritating to skin, eyes, respiratory tract and mucous membranes. Ingestion of a large quantity may cause gastro-intestinal irritation and hypercalcemia.

Methylparaben: May be irritating to skin, eyes, respiratory and gastro-intestinal systems. If contact with skin occurs, it may cause contact dermatitis. If ingested, it may cause a slight burning sensation. If inhaled, it might cause respiratory difficulties.

Effects of chronic exposure:

Methylparaben: Might cause hypersensitivity

Exposure limits: N/A

Irritancy of product: N/A

Sensitization to product: N/A

Carcinogenicity of product: N/A

Reproductive toxicity: N/A

Teratogenicity: N/A

Mutagenicity: N/A

Synergistic products: N/A

SECTION 7 – PREVENTIVE MEASURES

Recommendations listed in this section indicate the type of equipment, which will provide protection against over-exposure to this product. Conditions of use, adequacy of engineering or other control measures and actual exposures will dictate the need for specific protection devices at your workplace.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Protective gloves: Not normally required

Eye protection: Not normally required

Other protective equipment: Not normally required

Ventilation: Not normally required

Specific engineering controls to be used: N/A

Steps to be taken in case material is released or spilled: Use absorbent material. Wash the area with water.

Waste disposal method: Dispose of in accordance with local, provincial and federal regulations.

Handling procedures and equipment: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature (room temperature) and pressure. Avoid contact with oxidizing agents and strong bases.

Storage requirements: This material is considered stable under normal storage temperature and pressure conditions. Store in a cool, well-ventilated area at room temperature.

Special shipping information: Avoid storage in hot, unventilated areas. Avoid contact with incompatibilities.

UN Product Identification Number (PIN) (Transportation of Dangerous Goods Act): N/A

SECTION 8 – FIRST AID MEASURES

Inhalation: Remove patient to fresh air. Get medical attention if the person is having difficulty breathing.

Skin contact: Flush exposed skin with copious amounts of water and soap. Consult a physician if irritation develops.

Eye contact: Flush with copious amounts of water for at least 15 minutes, holding the eyes open wide. Consult a physician.

Ingestion: Wash out mouth with water, provided person is conscious. Get medical attention

SECTION 9 – PREPARATION INFORMATION

Prepared by: Ali Zouaoui and Clotilde Tassé, Medical Information, Pharmascience, 1-888-550-6060

Date of preparation: September 30, 2003

Revised by: Elpida Sidiropoulos, Medical and Scientific Information, Pharmascience

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