



SIGMA-ALDRICH

# Material Safety Data Sheet

Date Printed: 03/24/2008  
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Version 1.30

## Section 1 - Product and Company Information

**Product Name** Calcium gluconate, anhydrous Meets USP testing specifications  
**Product Number** C8231  
**Brand** Sigma-Aldrich

**Company** Sigma-Aldrich  
**Street Address** 3050 Spruce Street  
**City, State, Zip, Country** SAINT LOUIS, MO 63103 US  
**Technical Phone:** 800-325-5832  
**Fax:** 800-325-5052  
**Emergency Phone:** 314-776-6555

## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
CALCIUM D-GLUCONATE MONOHYDRATE, MEETS USP TESTING SPECS.	299-28-5	No	206-075-8	

**Formula** C<sub>12</sub>H<sub>22</sub>CaO<sub>14</sub>  
**Synonyms** Calcicol, Calciofon, Calcipur, Calcium D-gluconate, Calcium hexagluconate, Calglucol, Calglucon, Dragocal, Ebucin, Glucal, Glucobiogen, Gluconate de calcium (French), Gluconato di calcio (Italian), D-Gluconic acid, calcium salt (2:1) (9CI), Kalpren, Novcod

## Section 3 - Hazards Identification

**HMIS Rating**  
 Health: 0 Flammability: 0 Reactivity: 0

**NFPA Rating**  
 Health: 0 Flammability: 0 Reactivity: 0

For additional information on toxicity, please refer to Section 11.

## Section 4 - First Aid Measures

**Oral Exposure**  
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

**Inhalation Exposure**  
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

**Dermal Exposure**  
In case of contact, immediately wash skin with soap and copious amounts of water.

**Eye Exposure**  
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

## Section 5 - Fire Fighting Measures

**Autoignition Temp:** N/A

**Extinguishing Media Suitable**  
Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

**Firefighting Protective Equipment**  
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Specific Hazard(s)**  
Emits toxic fumes under fire conditions.

## Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution(s)**  
Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

**Methods for Cleaning Up**  
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

## Section 7 - Handling and Storage

**Handling User Exposure**  
Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**Storage Suitable**  
Keep tightly closed.

## Section 8 - Exposure Controls / PPE

**Engineering Controls**  
Safety shower and eye bath, Mechanical exhaust required.

**Personal Protective Equipment Respiratory**  
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks.

**Hand**  
Protective gloves.

**Eye**  
Chemical safety goggles.

**General Hygiene Measures**  
Wash thoroughly after handling.

## Section 9 - Physical/Chemical Properties

**Appearance** Color White Form Powder

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Molecular Weight 430.38 AMU

pH N/A  
BP/BP Range N/A  
MP/MP Range N/A  
Freezing Point N/A  
Vapor Pressure N/A  
Vapor Density N/A  
Saturated Vapor Conc. N/A  
SG/Density N/A  
Bulk Density N/A  
Odor Threshold N/A  
Volatile% N/A  
VOC Content N/A  
Water Content N/A  
Solvent Content N/A  
Evaporation Rate N/A  
Viscosity N/A  
Partition Coefficient N/A  
Decomposition Temp. 100 °C  
Flash Point °F N/A  
Flash Point °C N/A

Explosion Limits N/A

Flammability N/A  
Autoignition Temp N/A  
Optical Rotation Degree of Rotation  
+11 - +9 (+/-1)

Solvent: H<sub>2</sub>O 12 g/l

Solubility  
Solubility in Water: Slightly Soluble.

N/A = not available

## Section 10 - Stability and Reactivity

Stability  
Stable  
Stable.  
Materials to Avoid  
Strong oxidizing agents

Hazardous Decomposition Products  
Hazardous Decomposition Products  
Carbon monoxide, Carbon dioxide

Hazardous Polymerization  
Hazardous Polymerization  
Will not occur.

## Section 11 - Toxicological Information

Route of Exposure  
Skin Contact  
May cause skin irritation.  
Skin Absorption  
May be harmful if absorbed through the skin.  
Eye Contact  
May cause eye irritation.  
Inhalation  
May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

## Ingestion

May be harmful if swallowed.

## Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: EW2100000

## Toxicity Data

Intramuscular - Infant: 10 GM/KG (LDLO)

Remarks: Brain and Coverings: Meningeal changes.

Lungs, Thorax, or Respiration: Fibrosis, focal (pneumoconiosis).

Nutritional and Gross Metabolic: Changes in: Body temperature increase.

Intravenous - Rat: 950 MG/KG (LD50)

Intraperitoneal - Mouse: 2200 MG/KG (LD50)

Subcutaneous - Mouse: 2890 MG/KG (LD50)

Intravenous - Mouse: 950 MG/KG (LD50)

## Section 12 - Ecological Information

No data available.

## Section 13 - Disposal Considerations

### Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.  
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.  
Observe all federal, state, and local environmental regulations.

## Section 14 - Transport Information

### DOT

Proper Shipping Name: None

Non-Hazardous for Transport This substance is considered to be nonhazardous for transport.

### IATA

Non-Hazardous for Air Transport Non-hazardous for air transport.

## Section 15 - Regulatory Information

### United States Regulatory Information

SARA Listed: No

TSCA Inventory Item: Yes

### Canada Regulatory Information

#### WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

## Section 16 - Other Information

### Disclaimer

For R&D or manufacturing use. Not for prescription compound or other uses.

**Warranty**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. SigmaAldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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