

# Safety Data Sheet

## Calcium Chloride, Anhydrous

**CAROLINA**<sup>®</sup>  
www.carolina.com

### Section 1 Product Description

**Product Name:** Calcium Chloride, Anhydrous  
**Recommended Use:** Science education applications  
**Synonyms:** Calcium Chloride, Granular, Pellets, Lumps  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**WARNING**



Harmful if swallowed. Causes serious eye irritation.

**GHS Classification:**

Serious Eye Damage/Eye Irritation Category 2A, Acute Toxicity - Oral Category 4

<b>Acute Toxicity Dermal Contains</b>	100 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Gas Contains</b>	100 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Vapor Contains</b>	100 % of the mixture consists of ingredient(s) of unknown toxicity
<b>Acute Toxicity Inhalation Dust/Mist Contains</b>	100 % of the mixture consists of ingredient(s) of unknown toxicity

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Calcium Chloride, Anhydrous	10043-52-4	100

### Section 4 First Aid Measures

**Emergency and First Aid Procedures**

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.  
**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  
**Skin Contact:** After contact with skin, wash immediately with plenty of water.  
**Ingestion:** IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

# Safety Data Sheet

**Fire and/or Explosion Hazards:** Fire or heat may produce products of Calcium Oxide and Hydrochloric Acid and/or Chlorine gas.  
**Hazardous Combustion Products:** Hydrogen chloride, Calcium Oxides

## Section 6 Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area. Avoid the generation of dusts during clean-up.  
Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Contain the discharged material. Do not allow the spilled product to enter public drainage system or open waterways.

## Section 7 Handling and Storage

**Handling:** Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Leather clothing and shoes will be damaged. Keep away from oxidizing materials and strong acids. Moisture; Product is hygroscopic. Avoid contact with skin and eyes. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.  
**Storage:** Keep container tightly closed in a cool, well-ventilated place.  
**Storage Code:** Green - general chemical storage

## Section 8 Protection Information

<b>Chemical Name</b>	<b>ACGIH</b>		<b>OSHA PEL</b>	
	<b>(TWA)</b>	<b>(STEL)</b>	<b>(TWA)</b>	<b>(STEL)</b>
No data available	N/A	N/A	N/A	N/A

### Control Parameters

**Engineering Measures:** No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.  
**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.  
**Respiratory Protection:** No respiratory protection required under normal conditions of use.  
**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.  
**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.  
**Gloves:** Nitrile

## Section 9 Physical Data

<b>Formula:</b> CaCl <sub>2</sub>	<b>Vapor Pressure:</b> <0.005
<b>Molecular Weight:</b> 110.99	<b>Evaporation Rate (BuAc=1):</b> N/A
<b>Appearance:</b> Colorless to pale yellow Solid	<b>Vapor Density (Air=1):</b> N/A
<b>Odor:</b> None	<b>Specific Gravity:</b> 2.2
<b>Odor Threshold:</b> No data available	<b>Solubility in Water:</b> Soluble
<b>pH:</b> 8.0 - 9.0, conc: 35 % (solution)	<b>Log Pow (calculated):</b> No data available
<b>Melting Point:</b> Not established 772 C	<b>Autoignition Temperature:</b> No data available
<b>Boiling Point:</b> 815 C	<b>Decomposition Temperature:</b> No data available
<b>Flash Point:</b> No data available	<b>Viscosity:</b> No data available
<b>Flammable Limits in Air:</b> N/A	<b>Percent Volatile by Volume:</b> Negligible

## Section 10 Reactivity Data

# Safety Data Sheet

**Reactivity:** No data available  
**Chemical Stability:** Stable under normal conditions.  
**Conditions to Avoid:** Exposure to air. Keep lid tightly closed when not in use.  
**Incompatible Materials:** Bromine Trifluoride, Methyl Vinyl Ether, Strong acids, Zinc  
**Hazardous Decomposition Products:** Calcium Oxides, Hydrogen chloride  
**Hazardous Polymerization:** Will not occur

## Section 11 Toxicity Data

**Routes of Entry:** Inhalation, ingestion, eye or skin contact.  
**Symptoms (Acute):** Respiratory disorders  
**Delayed Effects:** No data available

Acute Toxicity:	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
<b>Chemical Name</b> Calcium Chloride, Anhydrous	10043-52-4	Oral LD50 Rabbit 1384 mg/kg	Not determined	Not determined

Carcinogenicity:	CAS Number	IARC	NTP	OSHA
<b>Chemical Name</b> No data available	10043-52-4	Not listed	Not listed	Not listed

**Chronic Effects:**  
**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.  
**Target Organ Effects:**  
**Acute:** See Section 2  
**Chronic:** Tumorigenic data cited., Not listed as a carcinogen by IARC, NTP or OSHA.

## Section 12 Ecological Data

**Overview:** Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.  
**Mobility:** No data  
**Persistence:** No data  
**Bioaccumulation:** No data  
**Degradability:** No data  
**Other Adverse Effects:** No data

Chemical Name	CAS Number	Eco Toxicity
Calcium Chloride, Anhydrous	10043-52-4	96 HR LC50 LEPOMIS MACROCHIRUS 10650 MG/L [STATIC] 48 HR LC50 DAPHNIA MAGNA 2400 MG/L

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** Not Determined

## Section 14 Transport Information

**Ground - DOT Proper Shipping Name:** Not a DOT controlled material  
**Air - IATA Proper Shipping Name:** Not regulated for air transport by IATA.

## Section 15 Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

# Safety Data Sheet

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
No data available	10043-52-4	No	No	No	No	No

## Section 16

## Additional Information

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health