

Safety Data Sheet

Calcium Chloride, Anhydrous

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Calcium Chloride, Anhydrous

Synonyms/Generic Names: None

SDS Number: 146.00

Product Use: For Educational Use Only

Manufacturer: Columbus Chemical Industries, Inc.

N4335 Temkin Rd. Columbus, WI. 53925

For More Information Contact: Ward's Science

5100 West Henrietta Rd. PO Box 92912-9012 Rochester, NY 14692

(800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Harmful by ingestion, Irritant

Target Organs: None
Signal Words: Danger

Pictograms:



GHS Classification:

Acute toxicity, Oral	Category 4
Serious eye damage	Category 1
Acute aquatic toxicity	Category 3

GHS Label Elements, including precautionary statements:

Hazard Statements:

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H402	Harmful to aquatic life.

Precautionary Statements:

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P280	Wear protective glove/eye protection/face protection.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact	
	lenses, if present and easy to do. Continue rinsing.	

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Potential Health Effects

Eyes	Causes eye irritation.	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.	
Skin	May be harmful if absorbed through skin. Causes skin irritation.	
Ingestion	Harmful if swallowed.	

NFPA Ratings

Health	1
Flammability	0
Reactivity	2
Specific hazard	Not Available

HMIS Ratings

Health	1
Fire	0
Reactivity	2
Personal	С

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#	EINECS# / ELINCS#	Formula	Molecular Weight
Calcium Chloride	100	10043-52-4	233-140-8	CaCl ₂	110.98 g/mol

4. FIRST-AID MEASURES

Eyes	In case of eye contact, rinse with plenty of water and seek medical attention if necessary.	
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not	
	breathing, give artificial respiration. Get medical attention if necessary.	
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated	
	clothing and wash using soap. Get medical attention if necessary.	
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If	
	conscious, wash out mouth with water. Get medical attention if necessary.	

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable)	Product is not flammable. Use appropriate media for adjacent fire. Cool	
extinguishing media	containers with water.	
Special protective equipment	Wear self-contained, approved breathing apparatus and full protective	
and precautions for firefighters	ers clothing, including eye protection and boots.	
Specific hazards arising from	Emits toxic fumes (hydrogen chloride gas, calcium oxides) under fire	
the chemical	conditions. See also Stability and Reactivity section.	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and	See section 8 for recommendations on the use of personal protective equipment.
emergency procedures	
Environmental precautions	Prevent spillage from entering drains. Any release to the environment
	may be subject to federal/national or local reporting requirements.
Methods and materials for	Pick up and arrange without creating dust. Sweep up and place in
containment and cleaning up	suitable, closed containers for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup
	materials in accordance with regulations.

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7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

Personal Protection

Eyes	Wear chemical safety glasses or goggles.	
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an	
	approved respirator.	
Skin	Wear nitrile or rubber gloves, apron or lab coat.	
Other	Not Available	

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White crystalline solid.
Odor	Odorless.
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	772°C (1421°F)
Initial boiling point and boiling range	1670°C (3038°F)
Flash point	Not Available
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Upper/lower flammability or explosive limit	Not Available
Vapor pressure	0.01 hPa (0.01 mmHg) at 20°C (68°F)
Vapor density	Not Available
Relative density	2.15 g/cm ³
Solubility (ies)	Soluble in water, acetone, alcohol, acetic acid.
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable	
Possibility of Hazardous Reactions	Will not occur.	
Conditions to Avoid	Exposure to moisture may affect product quality.	
Incompatible Materials	Strong acids, alkali and alkaline earth metals, borane/boron	
	oxides, zinc, methyl vinyl ether, bromine trifluoride.	
Hazardous Decomposition Products	S Calcium oxides, hydrogen chloride gas.	

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11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	LC50 – Rat – 1,000 mg/kg

Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is identified	
	as probable, possible or confirmed human carcinogen by IARC.	
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified	
	as a carcinogen or potential carcinogen by ACGIH.	
NTP	No components of this product present at levels greater than or equal to 0.1% is identified	
	as a known or anticipated carcinogen by NTP.	
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified	
	as a carcinogen or potential carcinogen by OSHA.	

Signs & Symptoms of Exposure

Skin	Itching, swelling, redness, pain.	
Eyes	Itching, redness, pain.	
Respiratory	Irritation, coughing, wheezing, occasional nose bleeding.	
Ingestion	Irritation, nausea, vomiting, gastrointestinal discomfort.	

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Specific Target Organ Toxicity	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	LC50 – Lepomis macrochirus – 10,650 mg/L – 96h	
Aquatic Invertebrate	EC50 – Daphnia magna – 52 mg/L – 48h	
Terrestrial	Not Available	

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste products or residues.
Product	Users should review their operations in terms of the applicable federal/national or
Containers	local regulations and consult with appropriate regulatory agencies if necessary
	before disposing of waste product container.

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The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.	
DSCL (EEC)	All ingredients are listed on the DSCL inventory.	
California Proposition 65	Not Listed	
SARA 302	Not Listed	
SARA 304	Not Listed	
SARA 311	Calcium Carbonate	
SARA 312	Calcium Carbonate	
SARA 313	Not Listed	
WHMIS Canada	Class D-2B: Material causing other toxic effects (TOXIC).	

16. OTHER INFORMATION

Revision	Date
Revision 1	01/07/2013

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