

# CALCIUM CHLORIDE

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	CALCIUM CHLORIDE
<b>Product Family</b>	Inorganic Salt
<b>Supplier</b>	Bri-Chem Supply Ltd., Bay 4, 5510 - 3rd Street SE, Calgary, Alberta, T2H 1J9, Bri-Chem Supply, 403-252-5904, www.brichemsupply.com
<b>Emergency Contact Information</b>	ChemTrec, (800) 424-9300, 24/7
<b>Use</b>	Drilling Fluid Additive

## 2. HAZARDS IDENTIFICATION

**Emergency Overview** White powder. Odourless. NOTE TO PHYSICIAN:  
If burn is present, treat as any thermal burn after decontamination.

### Potential Health Effects

<b>Inhalation</b>	Dust may cause irritation to upper respiratory tract.
<b>Skin Contact</b>	Prolonged exposure may cause skin irritation or burns, especially if skin is moist. When dissolving, the heat produced may cause more intense effects as well as thermal burns.
<b>Eye Contact</b>	May cause severe irritation with corneal injury, which may be slow to heal.
<b>Ingestion</b>	Large ingestions may cause gastrointestinal irritation or ulcerations.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration %	Other Identifiers
Calcium chloride	10043-52-4	77-94	

## 4. FIRST AID MEASURES

### First Aid Procedures

<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration and seek medical attention.
<b>Skin Contact</b>	Wash with soap and water. If adverse symptoms develop, seek medical attention.
<b>Eye Contact</b>	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water while holding the eyelid(s) open for 15 minutes. If adverse symptoms develop, seek medical attention.
<b>Ingestion</b>	If victim is conscious and alert, give large amounts of milk or water to drink. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Get medical attention, if adverse symptoms develop.
<b>Note to Physicians</b>	If burn is present, treat as any thermal burn after decontamination.

## 5. FIRE FIGHTING MEASURES

<b>Flammable Properties</b>	Does not burn or support combustion.
<b>Suitable Extinguishing Media</b>	Use extinguishing media appropriate for packaging and surrounding fire *.
<b>Protective Equipment and Precautions for</b>	Firefighters must wear appropriate breathing apparatus and clothing. Combustion produces toxic fumes.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use the Personal Protective Equipment recommended in Section 8 of this MSDS.
<b>Environmental Precautions</b>	It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.
<b>Methods for Containment and Clean-up</b>	Use appropriate safety equipment. Small spill: sweep up and put into approved DOT containers for disposal or re-use. Large spill: DO NOT allow to enter waterways; sweep or shovel into approved DOT containers for disposal or re-use. Flush residue with large amounts of water.

## 7. HANDLING AND STORAGE

<b>Handling</b>	Heat developed during diluting or dissolving is very hot. Use cool water when diluting or dissolving (temperatures less than 27°C).
<b>Storage</b>	Store in a cool, dry, well-ventilated place. Keep container tightly closed and away from incompatible materials. Prolonged storage may cause product to cake and become wet from atmospheric moisture.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Exposure Guideline Comments</b>	Nuisance Dust: 10 mg/m <sup>3</sup> .
<b>Engineering Controls</b>	Provide local and/or general exhaust ventilation to control airborne levels below exposure guidelines.
<b>Personal Protective Equipment (PPE)</b>	
<b>Eye/Face Protection</b>	Wear chemical safety goggles.
<b>Skin Protection</b>	Wear chemical protective clothing e.g. gloves, aprons and boots.
<b>Respiratory Protection</b>	In absence of proper ventilation, recommend NIOSH-approved dust respirator.
<b>General Hygiene Considerations</b>	It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Appearance</b>	White powder.
<b>Particle Size</b>	Not available
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>Molecular Formula</b>	CaCl <sub>2</sub>
<b>Molecular Weight</b>	Not available
<b>Boiling Point</b>	815 °C
<b>Decomposition Temperature</b>	Not available
<b>Melting Point</b>	772 °C
<b>Freezing Point</b>	Not available
<b>Relative Density (water = 1)</b>	1.85 - 2.20
<b>Bulk Density</b>	Not available
<b>Solubility in Water</b>	Very soluble (more than 50 g/100 mL)
<b>Solubility in Other Liquids</b>	Not available
<b>pH</b>	7.0 - 9.0
<b>Partition Coefficient,</b>	Not available

MSDS Name: Calcium Chloride - Canada - Ver. 1

Date of Preparation: November 14, 2013

Page 02 of 04

## n-Octanol/Water

<b>Viscosity-Kinematic</b>	Not available
<b>Surface Tension</b>	Not applicable
<b>Vapour Pressure</b>	0.005 mm Hg at 20 °C
<b>Vapour Pressure at 50 deg C</b>	Not available
<b>Saturated Vapour Concentration</b>	Not available
<b>Critical Temperature</b>	Not applicable
<b>Vapour Density (air = 1)</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Flash Point</b>	Not available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Normally stable.
<b>Incompatible Materials</b>	Corrosive to some metals. Avoid contact with metals such as brass, mild steel, aluminum or ferrous metals. Flammable hydrogen may be generated from contact with metals such as zinc. Avoid contact with sulfuric acid. Heat is generated when mixed with water. Splattering or boiling can occur.
<b>Hazardous Decomposition Products</b>	Does not decompose under normal conditions.
<b>Possibility of Hazardous Reactions</b>	Hazardous polymerization will not occur.

## 11. TOXICOLOGICAL INFORMATION

### General Comments

General irritancy of product is slight.

LD50 Oral Rat: 1000 mg/kg

### Skin Irritation/Corrosion

Prolonged exposure may cause skin irritation or burns especially if skin is moist. When dissolving, the heat produced may cause more intense effects as well as thermal burns.

### Eye Irritation/Corrosion

May cause severe irritation with corneal injury, which may be slow to heal.

### Effects of Short-Term (Acute) Exposure

#### Inhalation

Dust may cause irritation to the upper respiratory tract.

#### Ingestion

Large ingestions may cause gastrointestinal irritation or ulcerations.

### Effects of Long-Term (Chronic) Exposure

No known effects of chronic exposure.

No information was located for: Respiratory and/or Skin Sensitization, Carcinogenicity, Teratogenicity / Embryotoxicity, Reproductive Toxicity, Mutagenicity, Toxicologically Synergistic Materials

## 12. ECOLOGICAL INFORMATION

<b>General Comments</b>	No ecotoxicity or environmental fate data available. It is good practice to prevent releases into the environment.
-------------------------	--

## 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, provincial and local government regulations. Containers should NOT be re-used.

MSDS Name: Calcium Chloride - Canada - Ver. 1

Date of Preparation: November 14, 2013

Page 03 of 04

Containers should be disposed of in accordance with government regulations.

## 14. TRANSPORT INFORMATION

### Shipping Information

Not regulated under Canadian TDG Regulations.

### Other Transport Information

**Special Shipping Information** Not applicable

## 15. REGULATORY INFORMATION

### Canada

#### WHMIS Classification



Class D2B

D2B - Toxic (Skin irritant; Eye irritant)

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

## 16. OTHER INFORMATION

**MSDS Prepared By** Bri-Chem Supply Ltd

**Date of Preparation** November 14, 2013

### Disclaimer

This Health and Safety information is correct to the best of our knowledge and belief at the date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.