



Safety Data Sheet

CALCIUM CHLORIDE (ALL GRADES)

SECTION 1. IDENTIFICATION

Product Identifier	Calcium Chloride (All grades) Calcium Chloride 77%, Flake Calcium Chloride 83%, Flake Calcium Chloride 94% Food Grade Calcium Chloride 94% Prill Calcium Chloride High Test Fines
Other Means of Identification	CAS: 10043-52-4 Calcium dichloride
Product Use and Restrictions on Use	Industrial and commercial uses, drill mud additive
Initial Supplier Identifier	ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7 Phone: 800.387.7503 Fax: 888.281.8109 www.cleartech.ca
24-Hour Emergency Phone	306.664.2522

SECTION 2. HAZARD IDENTIFICATION

Serious eye damage / eye irritation Category 2

Pictograms



Signal Word: Warning

Hazard Statements

H319 Causes serious eye irritation.

Precautionary Statements

Prevention

- P264 Wash affected body parts thoroughly after handling.
P280 Wear protective gloves, eye protection, face protection.

Response

- P305 P351 P338 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 or attention.
P337 P313

Hazards Not Otherwise Classified

Not available



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SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients:

<i>Chemical name</i>	<i>Common name(s)</i>	<i>CAS number</i>	<i>Concentration (w/w%)</i>
Calcium dichloride	Calcium chloride	10043-52-4	75-100%

SECTION 4. FIRST-AID MEASURES

Description of necessary first-aid measures

Inhalation	Get medical advice / attention if you feel unwell or are concerned.
Ingestion	Get medical advice / attention if you feel unwell or are concerned.
Skin contact	Rinse skin with lukewarm, gently flowing water / shower for 5 minutes or until product is removed. If skin irritation occurs or if you feel unwell: Get medical advice / attention.
Eye contact	Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15 to 20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice / attention.

Most important symptoms and effects, both acute and delayed

Inhalation	May cause respiratory irritation.
Ingestion	May cause discomfort or nausea. Causes nausea and vomiting.
Skin contact	Not available
Eye contact	Causes serious eye irritation.
Further information	For further information see Section 11 Toxicological Information.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media	Extinguish fire using extinguishing agents suitable for the surrounding fire.
Unsuitable extinguishing media	Water jets are not recommended in fires involving chemicals.
Specific hazards arising from the chemical	Not available
Special protective equipment for fire-fighters	Wear NIOSH-approved self-contained breathing apparatus and chemical-protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions / Protective Equipment / Emergency Procedures	Wear appropriate personal protective equipment (See Section 08 Exposure Controls and Personal Protection). Stay upwind, ventilate area.
Environmental Precautions	Prevent material from entering waterways, sewers or confined spaces. Notify local health and wildlife officials. Notify operators of nearby water intakes.
Methods and Materials for Containment and Cleaning Up	Dry sweeping is not recommended. Pre-dampening the material or use of a vacuum is preferred. Shovel into clean, dry, labeled containers and cover. Flush area with water.



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SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling	<p>An eye wash bottle or eye wash station should be available, tested, and be near to the product being handled in accordance with provincial regulations.</p> <p>Use sensible workplace hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.</p> <p>Inspect containers for damage or leaks before handling. If the original label is damaged or missing replace with a workplace label. Have suitable emergency equipment for fires, spills and leaks readily available.</p>
Conditions for Safe Storage	<p>Store in a cool, dry, well-ventilated area, away from heat sources and incompatible materials. Always store in original labeled container. Keep containers tightly closed when not in use and when empty. Empty containers may contain hazardous residues. Protect label and keep it visible.</p>
Incompatibilities	<p>Water, zinc, bromide trifluoride, 2-furan percarboxylic acid</p>

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limits

There are no known exposure limits for this product.

Engineering controls

Ventilation Requirements	<p>Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions should be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.</p>
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Protective equipment

The following are recommendations only. It is the responsibility of the employer / user to conduct a hazard assessment of the process in which this product being used and determine the proper engineering controls and PPE for their process. Additional regulatory and safety information should be sought from local authorities and, if needed, a professional industrial hygienist.

Eye and face protection	<p>Where there is potential eye or face exposure, tightly fitting chemical goggles are recommended.</p>
Hand and body protection	<p>Where handling this product it is recommended that skin contact is avoided.</p>
Respiratory protection	<p>If exposed or concerned, wear appropriate dust mask. Reevaluate any respiratory protection used regularly, as their protective effects tend to degrade over time.</p>

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	<p>Solid</p>
Colour	<p>White to off-white</p>
Odour	<p>Not available</p>
Odour threshold	<p>Not available</p>
pH	<p>Not applicable</p>
Melting point / freezing point	<p>~772 °C</p>
Initial boiling point and boiling range	<p>~1670 °C</p>
Flash point	<p>Not applicable</p>



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Evaporation rate	Not available
Flammability	Not flammable
Upper flammable limit	Not available
Lower flammable limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	2.2 g/cm ³
Solubility	Soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not applicable
Specific gravity	Not applicable
Particle characteristics	Particle size: Not available Particle shape: Flakes, powder, or beads

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Reacts with water to generate heat. Hygroscopic.
Stability	This product is stable if stored according to the recommendations in Section 07.
Possibility of hazardous reactions	Not available
Conditions to avoid	Avoid contact with incompatible materials. Exposure to moisture and air.
Incompatible materials	Water, zinc, bromide trifluoride, 2-furan percarboxylic acid
Hazardous decomposition products	Not available

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity (LD50 / LC50 values)

<i>Component</i>	<i>Route</i>	<i>Species</i>	<i>Value</i>	<i>Exposure time</i>
Calcium chloride	Oral	Rat	2301 mg/kg bw	
Calcium chloride	Dermal	Rabbit	>5000 mg/kg bw	

Toxic Health Effect Summary

Chemical characteristics	No known effects
Skin	Irritation/corrosiveness studies conducted under OECD test guidelines indicate that calcium chloride is not/slightly irritating to skin
Ingestion	May cause discomfort or nausea. Causes nausea and vomiting.
Inhalation	May cause respiratory irritation.



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Eye contact	Irritation/corrosiveness studies conducted under OECD test guidelines indicate that calcium chloride is severely irritating to eyes of rabbits.
Sensitization	This product and its components at their listed concentration have no known sensitizing effects.
Mutagenicity	This product and its components at their listed concentration have no known mutagenic effects.
Carcinogenicity	This product and its components at their listed concentration have no known carcinogenic effects.
Reproductive toxicity	This product and its components at their listed concentration have no known reproductive effects.
Specific organ toxicity	This product and its components at their listed concentration have no known effects on specific organs.
Aspiration hazard	Not available
Synergistic materials	Not available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

<i>Component</i>	<i>Type</i>	<i>Species</i>	<i>Value</i>	<i>Exposure Time</i>
Calcium chloride	EC50	Selenastrum capricornutum	2900 mg/L	72 hours
	EC50	Daphnia magna	1062 mg/L	48 hours
	LC50	Pimephales promelas	4630 mg/L	96 hours

Biodegradability	The domestic substance list categorizes calcium chloride as persistent.
Bioaccumulation	The domestic substance list categorizes calcium chloride as non-bioaccumulative.
Mobility	This product is water soluble, is not predicted to adsorb to soil and may contaminate ground water.
Other adverse effects	Not available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste From Residues / Unused Products	Dispose in accordance with all federal, provincial, and local regulations including the Canadian Environmental Protection Act.
Contaminated Packaging	Do not remove label, follow label warnings even after the container is empty. Empty containers should be recycled or disposed of at an approved waste handling facility.

SECTION 14. TRANSPORT INFORMATION

UN number	This product does not meet the definition of dangerous goods per Part 2 of Transport of Dangerous Goods Regulations
UN proper shipping name and description	Not available
Transport hazard class(es)	Not available
Packing group	Not available
Excepted quantities	Not available
Environmental hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
Special precautions	No special precautions



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Transport in bulk	ERAP index: not available
Additional information	MARPOL 73/78 and IBC Code: Secure containers (full or empty) during shipment and ensure all caps, valves, or closures are secured in the closed position.

SECTION 15. REGULATORY INFORMATION

All components of this product appear on the domestic substance list.

SECTION 16. OTHER INFORMATION

Date of latest revision: March 30, 2026

Note: The responsibility to provide a safe workplace remains with the buyer / user. The buyer / user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results and assume no liability for damages incurred by the use of this material. It is the responsibility of the buyer / user to comply with all applicable laws and regulations regarding handling, using, reselling and shipping this product.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the RDC Responsible Distribution® initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns, please call our customer service center.

References:

- 1) *NIOSH Pocket Guide to Chemical Hazards*; U.S. Department of Health and Human Services, <https://www.cdc.gov/niosh/npg/default.html>
- 2) *WorkSafe BC E-Limit*; Workers' Compensation Board of British Columbia, <https://elimit.online.worksafebc.com/>
- 3) *ECHA - Registered Substance Dossier*; European Chemicals Agency, <https://chem.echa.europa.eu/100.030.115>
- 4) *Transportation of Dangerous Goods Regulations*; Transport Canada, <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2001-286/index.html>
- 5) Globally Harmonized System of Classification and Labeling of Chemicals (GHS) *Seventh revised edition*
- 6) International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) 2007 Edition
- 7) The ACS Style Guide