



Print Date: March 22, 2024

## Section 1: Product & Company Information

Product Identifier: Calcium Chloride, Pellets

Other Means of Identification Product Number: 163002

**Recommended Use and Restrictions on** 

Use

Recommended Use: Ice melting Restrictions on Use: No data available.

Manufacturer / Importer / Supplier / Distributor Information

> Company Name: CORECHEM Inc. Address: 4320 Greenway Drive Knoxville, TN 37918 USA

Information Telephone Number: 1-865-524-4239 Fax Number: 1-865-524-3375 Website: www.corecheminc.com Contact Person: Regulatory Manager E-mail: regulatory@corecheminc.com

Emergency Phone Number: Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

Section 2: Hazards Identification

#### GHS Hazard Classification(s)

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

## Physical Hazard(s)

Not classified.

### Health Hazard(s)

Acute Toxicity, Oral - 4 Corrosion/Irritation, Skin - 2 (Corrosion)Damage/Irritation, Eye - 2A

#### Environmental Hazard(s)

Not classified.

Label Elements Signal Word WARNING

### Hazard Symbol(s)



## Hazard Statement(s)

H302: Harmful if swallowed. H315: Causes skin Irritation. H319: Causes serious eye Irritation.

#### **Precautionary Statements**

General

Not applicable.

#### Prevention

P264: Wash face, hands and any exposed skin thoroughly after handling. P270: Do not eat, drink or smoke when using this product.



# **SAFETY DATA**

Print Date: March 22, 2024

P280: Wear protective gloves/protective clothing/eye protection/face protection.

#### Response

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

- P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
- P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
- Continue rinsing. P321: Specific treatment (see supplemental first aid instructions on this label).
- P330: Rinse mouth.
- P332 + P313: If skin irritation occurs: Get medical advice/attention.
- P337 + P313: If eye irritation persists: Get medical advice/attention.
- P362: Take off contaminated clothing and wash before reuse.

#### Storage

P403 + P233: Store in a well-ventilated place. Keep container tightly closed. P405: Store locked up.

#### Disposal

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

### Hazard(s) not otherwise classified (HNOC)

None known.

## Section 3: Composition/Information on Ingredients

#### Substance

Chemical Identity <sup>2</sup>	Common Name/Synonym(s)	CAS # 3	Weight %	Impurity or Stabilizing Additive
Calcium Chloride	Calcium Dichloride, Calcium Chloride	10043-52-4	90 - 100%	No
	pellets			

1. Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.

2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.

3. "--"Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

## Section 4: First-Aid Measures

#### **General Information**

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

#### Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Move to uncontaminated area. Consult a physician. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### **Skin Contact**

Take off immediately all contaminated clothing. Wash off IMMEDIATELY with plenty of water for at least 15-20 minutes. Get medical attention immediately! Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes.

## Eye Contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

#### Ingestion

Call a physician or poison control center immediately. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

## Most important symptoms/effects, acute and delayed

#### Symptoms

Irritating to eyes. Direct abrasion of cornea from solid, erythema and burn from reaction with water, conjunctival swelling and cornea opacification from hypertonic solution and heat., respiratory system and skin.

Indication of immediate medical attention and special treatment

## needed

Hazards

No data available.



#### Treatment

Print Date: March 22, 2024

SAFETY DATA

Treat symptomatically. Symptoms may be delayed. Chronic Exposures to skin and mucous membranes that cause irritation may cause a chronic dermatitis or mucosal membrane problem.

## Section 5: Fire-Fighting Measures

#### **General Fire Hazards**

The product is non-combustible.

#### Suitable (and Unsuitable) Extinguishing Media

#### Suitable Extinguishing Media

Extinguishing powder, alcohol resistant foam, carbon dioxide, water fog

Unsuitable Extinguishing Media

## Do not use water jet.

#### Specific Hazards Arising from the Chemical

Formed under Fire conditions: Hydrogen Chloride gas, Calcium Oxide

#### **Special Protective Equipment and Precautions for Firefighters**

#### **Special Fire-Fighting Equipment Procedures**

Keep Unnecessary people away, Isolate hazard area and deny entry. This material does not burn. Fight fire for other material that is burning. Water should be applied in large quantities as fine spray. Wear NIOSH approved breathing apparatus operated in pressure demand mode. Wear protective firefighting clothing. Avoid contact with this material during fire fighting operations. If contact is likely change to full chemical resistant firefighting clothing with self-contained Breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post fire, or non-fire clean-up situations, refer to the relevant Sections.

#### Special Protective Equipment for Fire-Fighters

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

## Section 6: Accidental Release Measures

#### Personal Precautions, Protective Equipment and Emergency Procedures

Evacuate spill area. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Stay upwind and keep out of low area. Remove all possible sources of ignition in the surrounding area. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment. Ventilate contaminated area thoroughly shut off leaks if possible without personal risk. Spilled material may cause a slipping hazard on some surfaces.

#### Methods and Materials for Containment and Clean-Up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Flush residue with plenty of water.

#### Notification Procedures

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

#### **Environmental Precautions**

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Inform authorities if large amounts are involved.

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## Section 7: Handling and Storage

#### **Precautions for Safe Handling**

Use caution when handling/transferring. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe mist or vapor. Use only with adequate ventilation. Wear appropriate personal protective equipment. Transfer and storage systems should be compatible. Observe good industrial hygiene practices. Heat developed during diluting or dissolving is very high. Use cool water when dilution or dissolving (Temperatures less than 80 °F, 27 °C ) Avoid contact with eyes.

#### Conditions for Safe Storage, including any Incompatibilities

Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (See Section 10). Ensure that all local regulations regarding handling and storage facilities are followed. Protect from atmospheric Moisture.

## **Section 8: Exposure Controls/Personal Protection**

#### **Control Parameters**

**Occupational Exposure Limits** 

The product does not contain any relevant quantities of hazardous materials with critical values that have to be monitored in the workplace.



# SAFETY DATA

#### Print Date: March 22, 2024

#### **Biological Limit Values**

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

#### **Appropriate Engineering Controls**

Use local Exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

### Individual protection measures, such as personal protective equipment (PPE)

## **General Information**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

### Eye/Face Protection

Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed. For Dusty operations or when handling solutions of the material, wear chemical goggles.

## Skin Protection

#### Hand Protection

Wear appropriate chemical resistant gloves.

#### Other

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### **Respiratory Protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information

### **Hygiene Measures**

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

## **Section 9: Physical and Chemical Properties**

Appearance:	
Physical State:	Solid (Pellets)
Color:	White to light gray
Odor:	Odorless
Odor Threshold:	No data available.
pH:	No data available.
Melting Point/Freezing Point:	772 °C
Initial Boiling Point and Boiling	1,670 °C
Range:	
Flash Point:	Not applicable.
Evaporation Rate (butyl acetate=1):	No data available.
Flammability (solid, gas):	No data available.
<b>Upper/Lower Limit on Flammability</b>	or Explosive Limits
Flammability Limit – Upper:	No data available.
Flammability Limit – Lower:	No data available.
Explosive Limit – Upper:	No data available.
Explosive Limit – Lower:	No data available.
Vapor Pressure:	No data available.
Vapor Density (air = 1):	No data available.
Relative Density (water=1):	2.15 (20 °C)
Bulk Density:	58-66 lb/ft3
Solubility(ies):	
Solubility in water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-	No data available.
octanol/water):	
Auto-Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.



# SAFETY DATA

# SHEET

Viscosity:

No data available.

Print Date: March 22, 2024

Other Information: Molecular Weight: Formula:

110.99 g/mol CaCl<sub>2</sub>

## Section 10: Stability and Reactivity

## Reactivity

Hygroscopic. Liberates large amounts of heat when dissolving in water or aqueous acids.

#### **Chemical Stability**

Material is stable under normal conditions.

### **Possibility of Hazardous Reactions**

Hazardous polymerization does not occur. The substance is hygroscopic and will absorb water by contact with the moisture in the air.

#### **Conditions to Avoid**

Excessive heat. Water, moisture.

#### **Incompatible Materials**

Heat is generated when mixed with water or aqueous acids. Spattering and boiling can occur. Avoid contact with: Bromide Trifluoride, 2-furan per carboxylic acid because calcium chloride is incompatible with those substances. Contact with zinc forms flammable hydrogen gas, which can be explosive. Catalyzes exothermic polymerization of methyl vinyl ether. Attacks metals in the presence of moisture and may release flammable hydrogen Gas. Reaction of bromide impurity with oxidizing materials may generate trace levels of impurities such as bromates.

#### **Hazardous Decomposition Products**

Formed under fire conditions: Hydrogen Chloride gas, calcium oxide.

## Section 11: Toxicological Information

#### Information on routes of exposure

Ingestion: Harmful if swallowed. May cause irritation of the gastrointestinal tract.

Inhalation: Inhaling dust may cause irritation to upper respiratory tract (nose and throat.)

- Skin Contact: Skin irritation. Direct abrasion of skin from solid. Erythema and burn from reaction with water. Prolonged contact and occlusion may cause more severe symptoms. Damage is localized to contact areas.
- Eye Contact: Eye irritation. Direct abrasion of cornea from solid, erythema and burn from reaction with water. Conjunctival swelling and cornea opacification from hypertonic solution and heat.

### Information on Toxicological Effects

## Acute Toxicity (List all possible routes of exposure)

Oral

Calcium Chloride: LD50 (Rat): 1 g/kg

#### Dermal

Calcium Chloride: LD50: 5,000 mg/kg

#### Inhalation

No data available.

### **Repeated Dose Toxicity**

. No data available.

#### Skin Corrosion/Irritation

Causes mild skin irritation.

#### Serious Eye Damage/Eye Irritation

Causes serious eye irritation.

## Respiratory/Skin Sensitization

Not a skin sensitizer.

## Carcinogenicity

#### IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### US. National Toxicology Program (NTP) Report on Carcinogens

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.



# **SAFETY DATA**

Print Date: March 22, 2024

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Germ Cell Mutagenicity

In Vitro

No mutagenic components identified.

In Vivo

No mutagenic components identified.

#### Reproductive Toxicity

No components toxic to reproduction

#### Specific Target Organ Toxicity – Single Exposure

Respiratory tract irritation.

#### Specific Target Organ Toxicity – Repeated Exposure

None known.

## **Aspiration Hazard**

Not classified.

#### **Other Effects**

None known.

## Section 12: Ecological Information

Ecotoxicity

## Acute Hazards to the Aquatic Environment

Fish

Calcium Chloride: LC50 (Fathead minnow (Pimephales promelas), 96 h): 3,930 - 5,360 mg/l Mortality

#### **Aquatic Invertebrates**

Calcium Chloride: LC50 (Water flea (Daphnia magna): 759 mg/l Mortality Sodium Chloride: LC50 (Water Flea (Daphnia magna): 4,571 mg/l Potassium Chloride: EC50, Water flea (Daphnia magna), immobilization: 590 mg/l Potassium Chloride: LC50, Water flea (Ceriodaphnia dubia) 3,470 mg/l

#### **Toxicity to Aquatic Plants**

No data available.

#### **Chronic Hazards to the Aquatic Environment**

Fish

No data available.

#### **Aquatic Invertebrates**

No data available.

## Toxicity to Aquatic Plants

No data available.

## Persistence and Degradability

## Biodegradation

There are no data on the degradability of this product. **BOD/COD Ratio** No data available.

### **Bioaccumulative Potential**

#### **Bioconcentration Factor (BCF)**

Calcium Chloride and its dissociated forms (Calcium and Chloride ions) are ubiquitous in the environment. Calcium and Chloride ions can also be found as constituents in organisms. Considering its dissociation properties, calcium chloride is not expected to accumulate in living organisms. Partition Coefficient n-octanol / water (log Kow)

No data available.

## **Mobility in Soil**

Calcium Chloride is not expected to be absorbed in soil due to its dissociation properties and high-water solubility. It is expected to dissociate into calcium and chloride free ions or it may from stable inorganic or organic salts with other counter ions, leading to different fates between calcium and chloride ions in



# SAFETY DATA

#### Print Date: March 22, 2024

soil and water components. Calcium ions may bind to soil particulate or may form stable inorganic salts with sulfate and carbonate ions. The chloride ion is mobile in soil and eventually drains into surface water because it is readily dissolved in water.

#### Other Adverse Effects

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

## **Section 13: Disposal Considerations**

#### **Disposal Instructions**

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. Reuse when possible. All disposal practices must be in compliance with all federal, state, provincial and local laws and regulations. Regulations may vary in different areas.

#### **Contaminated Packaging**

Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.

## **Section 14: Transportation Information**

### US Department of Transportation (DOT)

This material is not regulated as a hazardous material for transport by the U.S. Department of Transportation in accordance with 49 CFR 172.101.

## **Section 15: Regulatory Information**

#### **US Federal Regulations**

#### Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

## Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

#### Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

#### Emergency Planning and Community Right-To-Know Act (EPCRA)

#### EPCRA 302 Extremely Hazardous Substance

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### EPCRA 304 Emergency Response Notification

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

## EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard: No Sudden Release of Pressure: No Reactive: No Acute (Immediate) Health Hazard: Yes Chronic (Delayed) Health Hazard: No

## EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

## California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

## Section 16: Other Information

Hazardous Materials Identification System (HMIS®) Classification Health Hazard: 2 Chronic Health Hazard: /



# **SAFETY DATA**

Print Date: March 22, 2024

## SHEET

## Flammability: 0

Physical Hazard: 0

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

## National Fire Protection Association (NFPA 704) Rating

Health Hazard: 2 Fire Hazard: 0 Reactivity Hazard: 0

Special: N/A

(Hazard Rating: 0 - Minimal / 1 - Slight / 2 - Moderate / 3 - Serious / 4 - Severe)

Prepared By: Regulatory Manager Version #: 001 Issue Date: August 25, 2015 Last Revised By: Regulatory Assistant C Last Revision Date: 3/18/2024 Current Revision: 02 Sections Revised: Changes were made to sections 4-5, 8-9, and 11

## Key to Abbreviations and Acronyms

ATE - Acute Toxicity Estimate ACGIH - American Conference of Industrial Hygienists BCF - Bioconcentration Factor AIHA - American Industrial Hygiene Association BEI - Biological Exposure Indices EC50 - Effective concentration, 50% IDHL - Immediately Dangerous to Life and Health CAS - Chemical Abstracts Service DOT - US Department of Transportation Kg – Kilogram I – Liter EPA – US Environmental Protection Agency lb – Pound GHS - Globally Harmonized System of Classification and Labelling of Chemicals LC50 - Lethal Concentration, 50% IARC - International Agency for Research on Cancer LD50 - Lethal Dose, 50% IATA - International Air Transport Association mg - milligram IBC - Intermediate Bulk Container ml – milliliter IMDG - International Maritime Dangerous Goods N/A – Not Applicable NIOSH - National Institute for Occupational Safety and Health N/D - Not Determined NTP - National Toxicology Program PEL – Permissible Exposure Limit OSHA - US Occupational Health and Safety Administration REL – Recommended Exposure Limit SARA - US EPA Superfund Amendments and Reauthorization Act STEL – Short-term Exposure Limit TSCA – US EPA Toxic Substances Control Act UN - United Nations TWA - Time weighted average

## References

HSDB® - Hazardous Substances Data Bank

## Disclaimer

The information in this SDS was obtained from sources which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.