

I - PRODUCT IDENTIFICATION

Product: Calcium Chloride 94-97%

Chemical Family:

Formula: CaCl₂

CAS Number: Calcium Chloride	010043-52-4	90-97%
Sodium Chloride	007647-14-5	1-2%
Potassium Chloride	007447-40-7	2-3%
Strontium Chloride	010476-85-4	0-1%
Water	007732-18-5	

Synonyms:

COMPANY IDENTIFICATION

AllChem Performance Products

6010 NW First Place

Gainesville, FL 32607

Tel: 352-378-9696

II – COMPOSITION, INFORMATION ON INGREDIENTS

	Exposure Limits	
Chemical or Common Name:	OSHA PEL:	ACGIH TLV:

Calcium Chloride	90-97%
Sodium Chloride	1-2%
Potassium Chloride	2-3%
Strontium Chloride	0-1%
Water	

III – HAZARDS IDENTIFICATION

Primary Route(s) of Entry:

Ingestion:	()
Inhalation:	()
Skin Contact:	()
Eye Contact:	()

Primary Health Hazards (Acute and Chronic):

Carcinogenity Listings:

OSHA:	()
NTP:	()
IARC:	()

Signs & Symptoms of Exposure:

Ingestion: Single dose oral toxicity is considered to be low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury;

swallowing amounts larger than that may cause injury. Ingestion may cause gastrointestinal irritation or ulcerations.

Inhalation: Vapors are unlikely due to physical properties. Dust may cause irritation to upper respiratory tract.

Skin Contact: Short single exposure not likely to cause significant skin irritation.

Prolonged or repeated exposure may cause skin irritation, even a burn.

May cause more severe response if skin is damp or if material is confined to skin. May cause more severe response if skin is abraded (scratched or cut). When dissolving, the heat produced may cause more intense effects as well as thermal burns. Not classified as corrosive according to DOT. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

Eye Contact: Product may cause slight eye irritation. Dusts may cause severe irritation with corneal injury. Effects may be slow to heal. When dissolving, the heat produced may cause more intense effects as well as thermal burns.

Systemic & Other Effects: No relevant information found.

Medical Conditions Aggravated By Exposure:

IV – FIRST AID MEASURES

Emergency and First Aid Procedures:

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Inhalation: Remove to fresh air if effects occur. Consult a physician.

Skin Contact: Wash off in flowing water or shower.

Eye Contact: Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel.

V – FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARD DATA

Flash Point: (Method Used) Not applicable

Flammable Limits:

LEL: Not applicable

UEL: Not applicable

Extinguishing Media: This material does not burn. If exposed to fire from another source, use suitable extinguishing agent for that fire.

Special Fire-fighting Procedures: Keep people away. Isolate fire area and deny unnecessary entry.

Unusual Fire and Explosion Hazards: Not applicable

Protective Equipment for Fire Fighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and full protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves).

VI- ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Spilled Or Released:

Protect People: Isolate area. Avoid contact with eyes and skin, may be a slipping hazard. Stop leak if it can be done safely. Wash exposed body areas thoroughly after handling. Use appropriate safety equipment.

Protect the environment: For small spills: losses incidental to correct applications of this product in its intended uses are not expected to be harmful to the environment.

For large spills: Avoid contamination of drinking water, natural water, ground water or any waterway. Losses incidental to correct applications of this product in its intended uses are not expected to be harmful to the environment.

Cleanup: For small spills: Contain spill if possible. Collect material in suitable and properly labeled containers. Flush residue with plenty of water.

For large spills: Dike and transfer to suitable and properly labeled containers. Flush residue with plenty of water.

VII – HANDLING AND STORAGE

Precautions to Be Taken in Handling and Storage:

Handling: Heat developed during diluting or dissolving is very high. Use cool water when diluting or dissolving (temperature less than 80°F, 27°C).

Storage: Keep containers tightly closed when not in use. Store in a dry place, protect from atmospheric moisture.

Other Precautions:

VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: In dusty atmospheres, use an approved dust respirator.

Atmospheric levels should be maintained below the exposure guideline.

Ventilation: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Other protective clothing or Equipment:

Eye/Face Protection: Use safety glasses. For dusty operations or when handling solutions of the material, wear chemical goggles.

Skin Protection: When prolonged or frequently contact could occur, use protective clothing impervious to this material. Selection of specific items such as face shields, gloves, boots, apron or full-body suits will depend on the operation.

Remove contaminated clothing immediately, wash skin area with soap and water and launder clothing before reuse. If hands are cut or scratched, use gloves impervious to this material even for brief exposures.

Work/Hygienic Practices:

IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: >1500°F, >815°C

Vapor Pressure (mm Hg): <0.005 mmHg @ 20°C

Vapor Density (Air=1): Not applicable.
Solubility in Water: Very soluble.
Appearance and odor: White to off-white solid. Odorless
Specific Gravity (H₂O=1): 2.2°
Percent volatile by volume:
Melting Point: Approx. 1424°F, 772°F
Evaporation Rate:

X – STABILITY AND REACTIVITY

Stability: Unstable Stable. Hygroscopic.
 Conditions to Avoid: None known.
Incompatibility with other materials: Corrosive to some metals. Corrosive when wet.
 Flammable hydrogen may be generated from contact with metals such as zinc or sodium. Avoid contact with sulfuric acid. Heat is generated when mixed with water. Spattering or boiling can occur.
Hazardous Decomposition or By-Products: Does not decompose.
Hazardous Polymerization: May Occur Will Not Occur
 Conditions to Avoid:

XI- TOXICOLOGICAL INFORMATION

Acute Toxicity:
 Skin: The LD50 for skin absorption in rabbits is >5000 mg/kg.
 Ingestion: The oral LD50 for rats is between 967-1668 mg/kg.
Target Organ Toxicity:
Reproductive and Development Toxicity:
Carcinogenicity:
Mutagenicity: (effects in Genetic Material): For CaCl₂, in vitro mutagenicity studies were negative.

XII- ECOLOGICAL INFORMATION

Environmental Fate:
 Movement & partitioning: Partitioning from water to n-octanol is not applicable.
 Degradation & persistence: Inhibitory concentration (IC50) in OECD Activated Sludge Respiration Inhibition Test (OECD Test NO. 209) is greater than 1000 mg/L.
Ecotoxicology: Based largely or completely on data for major component (s). Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 >100 mg/L in most sensitive species).
 Acute LC50 in bluegill (Lepomis Macrochirus) is 8400-10650 mg/L.
 Acute LC50 in mosquito fish (Gambusia affinis) is 13400 mg/L.
 Acute LC50 in water flea Daphnia magna is 759-3005.

ENVIRONMENTAL HAZARDS (PR Notice 93-10)

This product is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water board or Regional Office of the EPA.

XIII – DISPOSAL CONSIDERATIONS

Waste Disposal Method: All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

For unused and uncontaminated product, the preferred options include sending to a licensed, permitted: reclaimer, landfill, or waste water treatment system.

XIV - TRANSPORTATION DATA

U.S. Department of Transportation - 49 CFR

NOT D.O.T REGULATED - when shipped domestically by land.

Proper Shipping Name:

Hazard Class/Division Number:

ID Number:

Packing Group:

Label Required:

Placard Required:

Marine Pollutant:

Emergency Telephone Number: Chemtrec 800-424-9300

International Maritime Organization - IMDG

Proper Shipping Name:

Hazard Class/Division Number:

ID Number:

Packing Group:

Label Required:

Placard Required:

Marine Pollutant:

Emergency Telephone Number: Chemtrec 202-483-7616 [call collect]

Canadian TDG Information:

NOT T.D.G REGULATED – when shipped domestically by land.

XV - REGULATORY INFORMATION

SARA Section 313: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (Sara Title III) and is considered, under application definitions, to meet the following categories:

An immediate health hazard.

This product has been categorized as an "immediate Health hazard" due the possibility of eye or skin irritation.

TSCA: All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

Calcium Chloride	010043-52-4
Potassium Chloride	007447-40-7
Sodium Chloride	007647-14-5
Strontium Chloride	010476-85-4

STATE RIGHT-TO-KNOW: This product is not known to contain any substances subject to the disclosure requirements of:

New Jersey
Pennsylvania

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. This product has been categorized as a "Hazardous Chemical" due to the possibility of eye or skin irritations.

COMPERHESIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILTIY ACT (CERCLA, OR SUPERFUND):

To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

CANADIAN RGULATIONS:

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this Product is:

D2B – eye or skin irritant

Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

CPR STATEMENT: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

HAZARDOUS PRODUCTS ACT INFORMATION: This product contains the following ingredients which are Controlled Products and/or on the Ingredient Disclosure List (Canadian HPA section 13 and 14):

Components:	CAS#:	AMOUNTS (%w/w):
Calcium Chloride	010043-52-4	90-97%

XVI - ADDITIONAL INFORMATION

ALWAYS COMPLY WITH ALL APPLICABLE INTERNATIONAL, FEDERAL, STATE AND LOCAL REGULATIONS REGARDING THE TRANSPORTATION, STORAGE, USE AND DISPOSAL OF THIS CHEMICAL.

Due to the changing nature of regulatory requirements, the REGULATORY INFORMATION listed in Section XV of this document should NOT be considered all-inclusive or authoritative. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

The information in this MSDS 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 MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Revised: 10/16/2000