

CALCIUM CHLORIDE

SAFETY DATA SHEETS

REV. DATE: 06/15 REV 2

1. PRODUCT AND COMPANY IDENTIFICATION

Company Identification:

Agri Empresa LLC
 6001 W. Industrial Ave
 Midland, TX 79706
 432-694-1994


24 Hour Emergency Telephone: Call Chemtrec 1-703-527-3887

Product Code: 04113

Product Name: Calcium Chloride Mini-Pellets 94-97% (Bulk)

2. HAZARD IDENTIFICATION

Precautionary Statements: If in contact with skin or eyes, flush with water for at least 15 minutes. Consult with a physician if irritation persists. May cause burns to eyes or skin after repeated exposure or without proper care. Treat burns as thermal burns.

SIGNAL WORD	HAZARD	HAZARD CODE	CATEGORY	HEALTH HAZARD STATEMENT
	Eye	H320	4	Can cause eye irritation, see notes below
	Skin	H316	2	May cause skin irritation, see notes below
	Inhalation			No potential risk
	Ingestion	H303	4	May cause irritation if swallowed, see notes below

Health Effect-Eyes:

Pellets 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.



2. HAZARD IDENTIFICATION (cont.)

- Health Effects-Skin:** 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 burn 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.
- Health Effects-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 irritation of the mouth, throat, and gastrointestinal tract.
- Health Effects-Inhalation:** Vapors are unlikely due to physical properties. Dust may cause irritation to upper respiratory tract.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	%
Calcium Chloride	010043-52-4	94 – 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	0 – 2%

4. FIRST AID MEASURES

- First Aid-Eyes:** Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel.
- First Aid-Skin:** Wash off in flowing water or shower.
- First Aid-Ingestion:** If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.
- First Aid-Inhalation:** Remove person to fresh air if effects occur. Consult a physician.
- Note to Physician:** If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to the reactions of the patient.



5. FIRE FIGHTING MEASURES

Flammable Properties:	Flash Point: Not applicable Method Used: Not applicable
Flammability Limits:	LFL: Not applicable. UFL: Not applicable.
Hazardous Combustion Products:	None.
Other Flammability Information:	None.
Extinguishing Media:	Non-combustible
Fire Fighting Instructions:	Keep unnecessary people away; isolate hazard area and deny unnecessary entry.
Protective Equipment for Fire Fighters:	Wear positive-pressure self-contained breathing apparatus and full protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Protect People:	Isolate and confine spill area. Spills may be a slipping hazard. Wear appropriate safety apparel during cleanup.
Protect the Environment:	Losses incidental to correct applications of this product in its intended uses are not expected to be harmful to the environment. Avoid entry of large amounts of product into sewers, natural waters, and drinking water supplies.
Clean Up Methods:	Spills should be collected to prevent contamination of waterways. Dike spill and recover quickly into suitable containers if reusing; or collect using absorbent material or sand. Small quantities may be flushed away with plenty of water. Walking surfaces may remain wet longer due to moisture being held by spilled product – avoid by thoroughly water washing surfaces.

7. HANDLING AND STORAGE

Handling:	Use cool water (Temperature less than 80 Degrees Fahrenheit, 27 Degrees Celsius) when dissolving calcium chloride. Heat developed by solutions is very high during mixing. Leather clothing and shoes will be damaged by calcium chloride. Avoid eye and prolonged skin contact.
Storage:	When exposed to the atmosphere, calcium chloride will pick up water and form a solution.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Control:	Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.
Respiratory Protection:	Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. In dusty atmospheres, use an approved dust respirator.
Hand Protection:	Impervious gloves that are chemical resistant.
Eye Protection:	Use safety glasses. For dusty operations or when handling solutions of the material, wear chemical goggles.
Skin Protection:	For brief contact, no precautions other than clean body-covering clothing should be needed. Use protective items such as face shield, gloves, boots, and apron or full-body suit will depend on operation. If skin comes in contact with contaminated clothing, removed the clothing immediately, was skin area with soap and water and launder clothing before reuse. If hands are cut or scratched, use gloves impervious to this material ever for brief exposure.
Exposure Guidelines:	Calcium Chloride: DOW IHG is 10 mg/m ³ . Sodium Chloride: DOW IHG is 10 mg/m ³ . Potassium Chloride: DOW IHG is 10 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid Pellets
Color:	White/Off-White.
Odor:	Odorless.
pH:	Not Determined.
Specific Gravity:	2.2
Density:	2.7 g/cm ³ , 20 degrees Celsius
Melting Temperature (C):	772 Degrees
Melting Temperature (F):	1424 Degrees
Boiling Point (C):	> 815 Degrees
Boiling Point (F):	> 1500 Degrees
Vapor Pressure (mmHg)	< 0.005 mmHg @ 20 Degrees Celsius
Vapor Density (Air-1):	Not Applicable
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water:	Very Soluble
Solubility in Solvents:	Not Determined
VOCs (lbs/gallon);	Not Determined
Viscosity, Dynamic (centipoise):	Not Determined
Viscosity, Kinematic (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole);	Not Determined



10. STABILITY AND REACTIVITY

Stability Data:	Stable under normal handling and storage conditions.
Incompatibility with Other Materials:	Calcium Chloride will: accelerate corrosion of most metals exposed to air; attack aluminum (and most of its alloys) and yellow brass; react with sulfuric acid to form hydrogen chloride which is corrosive, irritating and, reactive; give an exothermic reaction with water-reactive materials such as sodium; result in a runaway polymerization reaction with methyl vinyl ether (Bretherick, 1979); and in solution form react with zinc (galvanizing) to yield hydrogen gas which is explosive (Ibid). (Bretherick, L. 1979, Handbook of Reactive Chemical Hazards, 2 nd Ed.)
Hazardous Decomposition:	None.
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	
Skin:	The LD50 for skin absorption in rabbits is > 5000 mg/kg for CaCl ₂
Ingestion:	The oral LD50 for rats is 967-1669 mg/kg for CaCl ₂ (100% basis)
Mutagenicity:	For CaCl ₂ , in vitro mutagenicity studies were negative.

12. ECOLOGICAL INFORMATION

Environmental Fate:	Partitioning from water to n-octanol is not applicable.
Persistence/ Degradability:	Inhibitory concentration (IC50) in OECD "Activated sludge, Respiration Inhibition Test" (Guideline # 209) is greater than 1000 mg/L
Ecotoxicology:	Based largely or completely on data for major components. Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species). Acute LC50 for bluegill (<i>Lepomis macrochirus</i>) is 8400-10650 mg/L. Acute LC50 for mosquito fish (<i>Gambusia affinis</i>) is 13400 mg/L at 96 hr. Algal growth inhibition EC50 is 3130 mg/L in <i>Nitzschia linearis</i> at 120 hr. Acute LC50 for unspecified marine fish is 2400 mg/L at 48 hr. Acute LC50 for water flea (<i>Daphnia magna</i>) is 759-3005 mg/L at 48 hr.



13. DISPOSAL CONSIDERATIONS

Disposal Method: Any disposal practice must be in compliance with all federal, state/provincial, and local laws and regulations. State/provincial and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Regulations may also vary in different locations. Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate, or otherwise inappropriate. Waste characterization and disposal compliance are the responsibility solely of the party generating the waste or deciding to discard or dispose of the material. None of these waste management options should be considered “arranging for disposal”

Product as sold is not a RCRA hazardous waste when disposed.

Refer to 40 CFR Section 261, and/or any other appropriate federal, state, provincial, or local requirements for proper classification information. For additional information see SDS Regulatory Information (Section 15).

As a service to its customers, Dow can provide lists of companies which recycle, reprocess, or manage chemicals. Telephone Dow’s Customer Information Center at 517-832-1556 or 1-800-258-2436 in the U.S. for further details.

14. TRANSPORT INFORMATION

United States DOT Information: Not regulated

Canadian TDG Information: Not regulated

15. REGULATORY INFORMATION

The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer’s responsibility to ensure that its activities comply with federal, state or provincial, and local laws and regulations. See other sections for health and safety information.



15. REGULATORY INFORMATION (cont.)

U.S. Regulations:

SARA 313 Information: 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 applicable definitions, to meet the following categories.

An immediate health hazard: This product has been categorized as an “immediate health hazard” due to possible effects on the eye.

Toxic Substances Control Act (TSCA)

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

The CAS number(s) for TSCA are:

CAS # 010043-52-4

CAS # 007647-14-5

CAS # 007447-40-7

CAS # 010476-85-4

CAS # 007732-18-5

State Right-To-Know: This product is not known to contain any substances subject to the disclosure requirements of: New Jersey or 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 possible effects on the eye.

Comprehensive Environmental Response Compensation and Liability Act (CERCLA or Superfund):

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

Canadian Regulations:

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

D2B

D2B- eye or skin irritant

Refer elsewhere in the SDS 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 SDS 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):

<u>Components</u>	<u>CAS #</u>	<u>Amount (%w/w)</u>
Calcium Chloride	010043-52-4	94-96%

Canadian TDG Information: For guidance, the Transportation of Dangerous Goods Classification for this product is: For TDG regulatory information. If required, consult transportation regulations, product shipping papers, or your DOW representative.



16. OTHER INFORMATION

HMIS:

Health (2) Fire (0) Reactivity (1)

DISCLAIMER STATEMENT:

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if the material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

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