

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

LOVELAND PRODUCTS, INC.
P.O. Box 1286 • Greeley, CO 80632-1286

24-Hour Emergency Phone: 1-800-424-9300

Medical Emergencies: 1-866-944-8565

U.S. Coast Guard National Response Center: 1-800-424-8802

PRODUCT NAME: LEAF LIFE® ORGANO-CAL

CHEMICAL NAME: Calcium Chloride

CHEMICAL FAMILY: Agricultural Mineral

EPA REG. NO.: not applicable

MSDS Number: 1000176097-13-LPI

MSDS Revisions: Section 16

Date of Issue: 06/25/13

Supersedes: 10/30/12

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN - CAUTION – Harmful if swallowed. CAUSES IRRITATION. Avoid breathing spray mists. Avoid contact with eyes, skin, open cuts or sores, and clothing. In case of contact, flush with water. Get medical attention for eyes. This liquid foliar concentrate is derived from Calcium Chloride and related chlorides. Nausea and vomiting could be expected upon large dose ingestion. The acute ingestive effects are described as nausea, chills, and diarrhea. Eye or skin contact with these products could cause irritation (particularly in sensitive persons), and respiratory irritation could be expected from the unprotected inhalation of fertilizer dusts. Product users should avoid prolonged or repeated skin contact by wearing impervious gloves, long sleeve shirt, long pants, socks and rubber boots. Goggles for eye protection are recommended. Wash thoroughly after handling and using this product.

This product is an amber liquid with mild 'dry' odor. Primary routes of entry are Inhalation, eye contact and skin contact.

3. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Ingredients:	Percentage by Weight:	CAS No.	TLV (Units)
Calcium (Ca), derived from	13.00	Mixture	not listed
Calcium Chloride		10043-52-4	not listed
Potassium Chloride		7447-40-7	not listed
Sodium Chloride		7647-14-5	not listed
Strontium Chloride		10476-85-4	not listed
Other ingredients	87.00		

4. FIRST AID MEASURES

If in eyes:	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If on skin or clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
If swallowed:	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If inhaled:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method):	Not applicable
FLAMMABLE LIMITS (LFL & UFL):	Not applicable
EXTINGUISHING MEDIA:	Considered non-combustible, use medium appropriate to surrounding fire. Dry chemical, CO ₂ , foam, water spray, or fog.
HAZARDOUS COMBUSTION PRODUCTS:	Calcium chloride may decompose in a fire situation to give off oxides of carbon, chlorine-containing compounds and other unknown hazardous components.
SPECIAL FIRE FIGHTING PROCEDURES:	Wear self-contained breathing apparatus and full protective gear.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	This product decomposes at >350°F (176.7°C). Smoke and fumes from fire may contain hazardous components.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Avoid breathing mists and vapors. Sweep up dry spills immediately and transfer to suitable containers for possible land application according to label use or for disposal. Check local, state and federal regulations for proper disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Avoid breathing dusts or spray mists. Avoid prolonged or repeated skin contact. Avoid eye contact. Wash hands thoroughly after handling this product. Calcium chloride gives off heat on contact with water. When mixing, always add dry calcium chloride slowly to water, with continuous agitation.

STORAGE: Store in original containers only. Keep containers tightly closed when not in use. Store in a cool, dry well-ventilated area, preferably in a locked storage area away from children, feed and food products, and seed. Store at ambient temperatures. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Not normally required.

RESPIRATORY PROTECTION: Not normally required, if vapors or mists exceed acceptable levels, wear a NIOSH approved pesticide respirator.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-resistant gloves.

OSHA PEL 8 hr TWA
Not established

ACGIH TLV-TWA
Not established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Amber liquid with mild 'dry' odor

SPECIFIC GRAVITY (Water = 1): 1.351 g/ml

VAPOR PRESSURE: Proprietary

PERCENT VOLATILE (by volume): Negligible

BULK DENSITY: 11.28 lbs/gal

BOILING POINT: 212°F (100°C)

EVAPORATION RATE: Not established

SOLUBILITY: Soluble

pH: 6.0 – 7.0 (10% solution)

SALT OUT: 38°F (3.3°C)

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat and moisture. Avoid use of aluminum, copper or brass fittings on spray equipment.

INCOMPATIBILITY: Will form insoluble precipitates when mixed with phosphorous or sulfur products. Mixing with boric acid plus calcium oxide or bromine trifluoride may cause a violent reaction. May react with zinc, tin, aluminum, and similar material to release hydrogen gas.

HAZARDOUS DECOMPOSITION PRODUCTS: Calcium chloride may decompose in a fire situation to give off oxides of carbon, chlorine-containing compounds and other unknown hazardous components.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (mouse): 1940 mg/kg (Calcium Chloride)

Eye Irritation (rabbit): May cause irritation

Inhalation LC₅₀ (rat): May cause respiratory tract irritation.

Carcinogenic Potential: None listed in OSHA, NTP, IARC or ACGIH

Acute Dermal LD₅₀ (mouse - intravenous): 42 mg/kg (CaCl)

Skin Irritation (rabbit): May cause moderate to severe irritation.

Skin Sensitization (guinea pig): Not established.

12. ECOLOGICAL INFORMATION

Drift or runoff may adversely affect non-target plants. Do not apply directly to water. Do not contaminate water when disposing of equipment wash water. Do not apply when weather conditions favor drift from target area.

13. DISPOSAL CONSIDERATIONS

Do not reuse container. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: NOT REGULATED BY USDOT.

U.S. Surface Freight Classification: FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI; LIQUID (NMFC 68140, SUB 5; CLASS 50)

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA		HMIS
	1 Health	0 Least	1 Health
	0 Flammability	1 Slight	0 Flammability
	1 Instability	2 Moderate	1 Reactivity
		3 High	B PPE
		4 Severe	

SARA Hazard Notification/Reporting
SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N
 Delayed N Reactive Y

Reportable Quantity (RQ) under U.S. CERCLA: Not listed
SARA, Title III, Section 313: Not listed
RCRA Waste Code: Not listed
CA Proposition 65: Not listed

16. OTHER INFORMATION

MSDS STATUS: Section 16 revised
PREPARED BY: Registrations and Regulatory Affairs **REVIEWED BY:** Environmental Health and Safety
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