

# MATERIAL SAFETY DATA SHEET

CAL-SOURCE® PREMIUM 16 9-0-3

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: CAL-SOURCE® PREMIUM 16 9-0-3 FOR FOLIAR AND SOIL APPLICATIONS

CHEMICAL NAME: Inorganic/Organic Chemical Fertilizer Suspension

CHEMICAL FAMILY: Low Chloride Calcium Suspension

MSDS Number: 7105746-12-LPI

MSDS Revisions: New

Date of Issue: 04/30/12

Supersedes: New

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN - CAUTION** – May cause mild eye and skin irritation. Avoid contact with skin, eyes, open cuts, or sores. In case of contact, flush with water. Get medical attention for eyes. This blended liquid fertilizer suspension is derived from Urea, Protein Hydrolysate, Calcium Nitrate, Ammonium Nitrate, Potassium Nitrate, Boric Acid, and Zinc EDTA. 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 mists. 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 a thick green suspension with slight odor.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Total Nitrogen (N) (from Calcium Nitrate, Calcium Ammonium Nitrate, Potassium Nitrate, Urea, Protein Hydrolysate)	9.00	10124-37-5 15245-12-2 7757-79-1 57-13-6 9015-54-7	not listed not listed not listed not listed not listed
Soluble Potash (K <sub>2</sub> O) (from Potassium Nitrate)	3.00	7757-79-1	not listed
Calcium (Ca) (from Calcium Nitrate, Calcium Ammonium Nitrate)	9.00	10124-37-5 15245-12-2	not listed not listed
Boron (B) (from Boric Acid)	0.15	10043-35-3	not listed
Zinc (Zn) (from Zinc EDTA)	0.15	14025-21-9	not listed
Fertilizer salts and inert ingredients	78.70		

## 4. FIRST AID MEASURES

<b>If in eyes:</b>	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.
<b>If on skin or clothing:</b>	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.
<b>If swallowed:</b>	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.
<b>If inhaled:</b>	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.

**NOTES TO PHYSICIAN:** Ammonium nitrate has been used as a diuretic in oral doses of 2 to 4 grams. Average or large doses may cause nausea and vomiting. Acidosis may occur in presence of impaired renal function; also during prolonged use in person with normal kidney function. Nitrite formation in intestines may cause methemoglobinemia.

## 5. FIRE FIGHTING MEASURES

<b>FLASH POINT (°F/Test Method):</b>	Does not flash.
<b>FLAMMABLE LIMITS (LFL &amp; UFL):</b>	Ammonia gas: LFL: 16%; UFL: 25%.
<b>EXTINGUISHING MEDIA:</b>	Use media appropriate for surrounding fire.
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	Ammonia gas may evolve from product at high temperatures.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	Wear self-contained breathing apparatus and full protective gear. If heated to dryness, immediately ventilate the structure to prevent pressure build-up, which will increase the possibility of explosion.
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b>	Product may burn if all water has evaporated or boiled away.

**6. ACCIDENTAL RELEASE MEASURES**

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**

Wear appropriate personal protective equipment (refer to Section 8). Pick up the material with absorbent material and place in a container for proper disposal in accordance with local, state and federal regulations.

**ENVIRONMENTAL PRECAUTIONS:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**7. HANDLING AND STORAGE**

**HANDLING:**

Wear protective eyewear and chemical resistant gloves. Wash thoroughly with soap and water after handling.

**STORAGE:**

Store in a cool, well-ventilated area away from heat or flame. Store in original container. Store at temperatures between 41°F and 104°F (5°C and 40°C). Keep tightly closed. In handling system or storage, avoid the formation of solid material from evaporation or salting out. Do not reuse empty container. Do not contaminate water, food or feed by storage or disposal.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:**

Work in well-ventilated area. Local exhaust may be required if working in confined space.

**RESPIRATORY PROTECTION:**

Wear a NIOSH approved air-purifying respirator for pesticide handling if necessary.

**EYE PROTECTION:**

Chemical goggles or face-shield.

**SKIN PROTECTION:**

Wear long sleeved shirt, long pants, shoes and socks.

	<b>OSHA PEL 8 hr TWA</b>	<b>ACGIH TLV-TWA</b>
For product	not listed	not listed

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Thick green suspension with slight odor.

**SOLUBILITY:** Soluble  
**pH:** 5.5 (10% solution)

**SPECIFIC GRAVITY (Water = 1):** 1.473 g/ml

**BULK DENSITY:** 12.30 lbs/gal.

**VAPOR PRESSURE:** Not established

**BOILING POINT:** Not established

**PERCENT VOLATILE (by volume):** Not established

**EVAPORATION RATE:** Not established

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:** Avoid excessive heat under confinement.

**INCOMPATIBILITY:** Avoid mixing with oxidizing materials. Do not mix with combustible materials, wood chips, organic materials, flammable liquids, chlorides, perchlorates, or sulfur. Avoid contact with alkalis. Incompatible with aluminum + formamide; dimethylformamide

**HAZARDOUS DECOMPOSITION PRODUCTS:** May release toxic fumes of ammonia, oxides of carbon, oxides of nitrogen, hydrogen chloride, ammonium chloride, and chlorine in a high temperature or fire situation.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral LD<sub>50</sub> (rat):** >5000 mg/kg

**Acute Dermal LD<sub>50</sub> (rabbit):** >2000 mg/kg

**Eye Irritation (rabbit):** May irritate eyes

**Skin Irritation (rabbit):** May irritate skin

**Inhalation LC<sub>50</sub> (rat):** Not established.

**Skin Sensitization:** Not a sensitizer.

**Carcinogenic Potential:** Not listed by OSHA, NTP, IARC, and ACGIH as a known human carcinogen

**12. ECOLOGICAL INFORMATION**

Do not contaminate water supplies.

**13. DISPOSAL CONSIDERATIONS**

Do not reuse product containers. Triple rinse (or equivalent), and add rinsate to spray tank, then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water sources by runoff from cleaning of equipment, disposal of equipment wash waters or spray waste.

**14. TRANSPORT INFORMATION**

**DOT Shipping Description:** NOT REGULATED BY USDOT.

**Freight Classification:** FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI; LIQUID (NMFC 68140, SUB 6; CLASS 70)

**15. REGULATORY INFORMATION**

<b>NFPA &amp; HMIS Hazard Ratings:</b>	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 N

**Reportable Quantity (RQ) under U.S. CERCLA:** Zinc (CAS: 7440-66-6) 1,000 lbs.; Ammonia (CAS: 7664-41-7) 1,000 lbs.

**SARA, Title III, Section 313:** Zinc (CAS: 7440-66-6); Ammonia (CAS: 7664-41-7)

**RCRA Waste Code:** Not listed

**CA Proposition 65: WARNING:** This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

**16. OTHER INFORMATION**

**MSDS STATUS:** New

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental/Regulatory Services

*®Cal-Source is a registered trademark of Crop Production Services, Inc.*

**Disclaimer and Limitation of Liability:** This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.