

SAFETY DATA SHEET

9-0-0 9% ZINC CHELATE SOLUTION

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: 9-0-0 9% ZINC CHELATE SOLUTION

CHEMICAL NAME: Inorganic/Organic Chemical Fertilizer Solution

CHEMICAL FAMILY: Zinc Nutritional Solution

MSDS Number: 1000362676-13-LPI

MSDS Revisions: Section 1

Date of Issue: 06/14/13

Supersedes: 09/26/11

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 solution is derived from Anhydrous Ammonia 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 clear liquid with slight ammonia 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 Anhydrous Ammonia)	9.00	7664-41-7	17 mg/m ³
Zinc (Zn) (from Zinc EDTA)	9.00	67859-51-2	not listed
Fertilizer salts and inert ingredients	82.00		

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.

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.

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

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): Does not flash.

FLAMMABLE LIMITS (LFL & UFL): Ammonia gas: LFL: 16%; UFL: 25%.

EXTINGUISHING MEDIA: Use media appropriate for surrounding fire.

HAZARDOUS COMBUSTION PRODUCTS: Ammonia gas may evolve from product at high temperatures.

SPECIAL FIRE FIGHTING PROCEDURES: 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.

UNUSUAL FIRE AND EXPLOSION HAZARDS: 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: Avoid breathing fertilizer mists. Avoid prolonged or repeated skin contact. Avoid eye contact. Wash hands thoroughly after handling this product.

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: 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.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Aqua Ammonia	35 mg/m ³	17 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear liquid with slight ammonia odor. **SOLUBILITY:** Soluble

SPECIFIC GRAVITY (Water = 1): 1.318 g/ml **BULK DENSITY:** 11.00 lbs/gal. **pH:** 8.4 – 9.4

VAPOR PRESSURE: Same as water. **BOILING POINT:** 220°F (104.4°C)

PERCENT VOLATILE (by volume): ±60% (similar to water) **EVAPORATION RATE:** Same as water

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: Not known.

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

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): >5000 mg/kg **Acute Dermal LD₅₀ (rabbit):** >2000 mg/kg

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

Inhalation LC₅₀ (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

DISPOSAL: Do not reuse container. Plastic: Triple rinse (or equivalent), adding rinse water 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, food, or feed by storage or disposal.

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

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 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: Section 1 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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