

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

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### GUARANTEED BY:

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: ZINK-GRO™ 10  
CHEMICAL NAME: Zinc Ammonium Chloride  
CHEMICAL FAMILY: Inorganic salt  
EPA REG. NO.: not applicable  
SDS Number: 1000177892-14-LPI

SDS Revisions: Section 1

Date of Issue: 04/29/14

Supersedes: 11/03/11

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION** - May be harmful if swallowed, inhaled or absorbed through skin. May cause eye and skin irritation. Avoid contact with eyes, skin and clothing. Avoid contact with open cuts or sores. Avoid breathing vapors. Use with adequate ventilation. Eye protection and gloves are suggested when handling undiluted product. Wash thoroughly after handling and using this product. In case of contact, flush with water. Get medical attention for eyes. This blended liquid nutritional product is derived from Zinc Chloride, Anhydrous Ammonia, and water. 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.

This product is a clear, off-color pink to yellow liquid with 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)	8.00	Mixture 7664-41-7	none established 17 mg/m <sup>3</sup>
Zinc (Zn) (from Zinc Chloride)	10.00	Mixture 7646-85-7	none established 1 mg/m <sup>3</sup>
Fertilizer salts and inert ingredients	72.00		

## 4. FIRST AID MEASURES

**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. Corrosive.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Corrosive.

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15-20 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. Corrosive.

**If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to do so. 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. May be toxic by ingestion. Corrosive.

**Note to physician:** This product contains zinc chloride, a corrosive salt of zinc.

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):** Not established

**EXTINGUISHING MEDIA:** Considered non-combustible, use medium appropriate to surrounding fire. Dry chemical, carbon dioxide (CO<sub>2</sub>), foam, water spray or fog.

**HAZARDOUS COMBUSTION PRODUCTS:** May include but are not limited to oxides of zinc, oxides of nitrogen, and chloride.

**SPECIAL FIRE FIGHTING PROCEDURES:** Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Containers may burst due to pressure build-up of ammonia.

## 6. ACCIDENTAL RELEASE MEASURES

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

Ventilate area. Contain spill, absorb liquid with clay or other absorbent material. Sweep up material and place in container for possible land application according to label use or for proper 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:** Open the container carefully. Contents may be under pressure. Eye protection and gloves are suggested when handling undiluted product. Use with adequate ventilation.

**STORAGE:** Store in a cool, dry, well-ventilated area in tightly closed, compatible, corrosion resistant containers only. 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 shielded safety glasses.

**SKIN PROTECTION:** Wear protective clothing: long-sleeved shirts and pants, shoes plus socks. Wear rubber or chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Zinc Chloride, fume	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>
Ammonia	35 mg/m <sup>3</sup>	17 mg/m <sup>3</sup>

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Clear, off-color pink to yellow liquid with ammonia odor

**SPECIFIC GRAVITY (Water = 1):** 1.13 g/ml @ 68°F

**VAPOR PRESSURE:** Not established

**PERCENT VOLATILE (by volume):** 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.

**BULK DENSITY:** 9.43 lbs/gal.

**BOILING POINT:** 170°F/76.7°C

**EVAPORATION RATE:** Not established

**SOLUBILITY:** Insoluble

**pH:** 10.06 (neat)

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Avoid contact with strong oxidizers, acids, and excessive heat.

**INCOMPATIBILITY:** Oxidizing materials, acids, metals, metal oxides, acids, bases, cyanides, reducing agents, and halogens.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May include but are not limited to oxides of zinc, oxides of nitrogen, and chloride.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral LD<sub>50</sub> (rat):** 350 mg/kg (Zinc chloride)

**Eye Irritation (rabbit):** not established

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

**Carcinogenic Potential:** None listed in OSHA, NTP, IARC or ACGIH. EPA classifies Zinc Chloride as EPA-II: Inadequate information to assess carcinogenic potential.

**Acute Dermal LD<sub>50</sub> (rabbit):** not established

**Skin Irritation (rabbit):** not established

**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. Rinse container thoroughly, adding rinsate to mixing tank. Then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Avoid contaminating water by disposal of equipment wash waters or other product wastes.

**14. TRANSPORT INFORMATION**

**DOT Shipping Description:** LESS THAN 205 GALLONS: NOT REGULATED BY USDOT: IF TRANSPORTED BY MOTOR VEHICLE OR RAILCAR IN PACKAGING THAT WILL NOT REACT DANGEROUSLY OR BE DEGRADED BY THIS MATERIAL, 49CFR 173.154(D)

**DOT Shipping Description:** 205 GALLONS OR MORE: RQ CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (ZINC AMMONIUM CHLORIDE), 8, UN 3266, III, ERG GUIDE 154

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

**15. REGULATORY INFORMATION**

NFPA & HMIS Hazard Ratings:		NFPA		HMIS
3	Health	0	Least	3 Health
0	Flammability	1	Slight	0 Flammability
0	Instability	2	Moderate	0 Reactivity
		3	High	H 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 Chloride (CAS: 7646-85-7) 1,000 lbs.; Ammonia (CAS: 7664-41-7) 100 lbs.

**SARA, Title III, Section 313:** Zinc compounds; 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**

**SDS STATUS:** Section 1 revised

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental Health and Safety

*Zink-Gro is a trademark of Loveland Products, 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.