

**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:** FIRST CHOICE® 8-8-2  
**CHEMICAL NAME:** Mixture of surfactants and nutrients  
**CHEMICAL FAMILY:** Adjuvant - Nutrient  
**CA REG:** 34704-50070  
**MSDS Number:** 0050070-12-LPI **MSDS Revisions:** New

**Date of Issue:** 02/02/12 **Supersedes:** New

**2. HAZARDS IDENTIFICATION SUMMARY**

**KEEP OUT OF REACH OF CHILDREN – CAUTION.** Harmful if swallowed, absorbed through skin or inhaled. Avoid breathing vapor or spray mist. Remove contaminated clothing before reuse. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

This product is an amber liquid with musty odor. Primary routes of entry are inhalation, ingestion and skin contact.

**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)	8.00	Mixture	not listed
(from Monoammonium Phosphate)		7722-76-1	not listed
Available Phosphate (P <sub>2</sub> O <sub>5</sub> )	8.00	Mixture	not listed
(from Monoammonium Phosphate)		7722-76-1	not listed
Soluble Potash (K <sub>2</sub> O)	2.00	Mixture	not listed
(from Muriate of Potash)		7447-40-7	not listed
Iron (Fe)	0.10	Mixture	not listed
(from Ferrous Sulfate)		7720-78-7	not listed
Manganese (Mn)	0.05	Mixture	not listed
(from Manganese Sulfate)		7785-87-7	not listed
Zinc (Zn)	1.00	Mixture	not listed
(from Zinc Sulfate)		7733-02-0	not listed
Nonyl Phenoxy Polyethoxy Ethanol and Polydimethylsiloxane	25.10	Mixture	not listed
Other Ingredients	55.75		

**4. FIRST AID MEASURES**

**If on skin or clothing:** Take of contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes.  
**If in eyes:** Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contacted lenses, if present, after the first 5 minutes, then continue rinsing eye.  
**If swallowed:** Call a Poison Control Center 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 a Poison Control Center or doctor. Do not give anything 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.

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

**5. FIRE FIGHTING MEASURES**

**FLASH POINT (°F/Test Method):** Not flammable.  
**FLAMMABLE LIMITS (LFL & UFL):** Not applicable  
**EXTINGUISHING MEDIA:** 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 carbon.  
**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:** Evacuate citizens downwind from fire.

**6. ACCIDENTAL RELEASE MEASURES**

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

Avoid breathing vapors and contact with liquid. Collect as much liquid as possible in a clean container for reuse or absorb and sweep up immediately and transfer to suitable containers for disposal. Flush spill area with water after clean up. 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:** Follow PPE recommendations in Section 8 and on product label. Use with adequate ventilation.  
**STORAGE:** Store in a cool, dry place. Store in original container. Keep container tightly closed. Do not store 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:** Not normally required, if vapors exceed acceptable levels, wear a NIOSH/ MSHA approved respirator.  
**EYE PROTECTION:** Safety glasses if necessary.  
**SKIN PROTECTION:** Wear long-sleeved shirt and long pants, socks, shoes and chemical resistant-gloves.

	<b>OSHA PEL 8 hr TWA</b>	<b>ACGIH TLV-TWA</b>
For product	none established	none established

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE AND ODOR:</b> Amber liquid with musty odor	<b>BULK DENSITY:</b> 9.86 lbs/gal.	<b>SOLUBILITY:</b> Miscible
<b>SPECIFIC GRAVITY (Water = 1):</b> 1.182 g/ml	<b>BOILING POINT:</b> 210°F	<b>pH:</b> 1.6 (neat)
<b>VAPOR PRESSURE:</b> 12.928 mm Hg @ 25°C	<b>EVAPORATION RATE:</b> Negligible	
<b>PERCENT VOLATILE (by volume):</b> Negligible		

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:** Strong oxidizers and high temperatures.  
**INCOMPATIBILITY:** None known.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of carbon and other unknown hazardous materials may be formed in a fire situation.  
**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

<b>Acute Oral LD<sub>50</sub> (rat):</b> Not established	<b>Acute Dermal LD<sub>50</sub> (rat):</b> Not established
<b>Eye Irritation (rabbit):</b> Severe irritant	<b>Skin Irritation (rabbit):</b> Irritant
<b>Inhalation LC<sub>50</sub> (rat):</b> Not established	<b>Skin Sensitization (guinea pig):</b> not established
<b>Carcinogenic Potential:</b> None listed in OSHA, NTP, IARC or ACGIH	

**12. ECOLOGICAL INFORMATION**

This product is not for aquatic use. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

**13. DISPOSAL CONSIDERATIONS**

Do not reuse containers. Wastes may be disposed of on-site or at an approved waste disposal facility. Triple rinse (or equivalent) and add rinse water to spray tank. Offer container for recycling or dispose of container in a sanitary landfill, or by other procedures by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operate the national recycling program. To contact your state and local ACRC recycler, visit the ACRC web page at [www.acrecycle.org](http://www.acrecycle.org). Do not contaminate water, food or feed storage or disposal.

**14. TRANSPORT INFORMATION**

**DOT Shipping Description:** NOT REGULATED.

**U.S. Surface Freight Classification:** ADHESIVES, ADJUVANTS, SPREADERS OR STICKERS (NMFC 4610; CLASS: 60)

Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

**15. REGULATORY INFORMATION**

**NFPA & HMIS Hazard Ratings:**

NFPA		HMIS	
2	Health	0	Least
0	Flammability	1	Slight
0	Instability	2	Moderate
		3	High
		4	Severe

**SARA Hazard Notification/Reporting**

<b>SARA Title III Hazard Category:</b>	Immediate	<u>Y</u>	Fire	<u>N</u>	Sudden Release of Pressure	<u>N</u>
	Delayed	<u>N</u>	Reactive	<u>N</u>		

**Reportable Quantity (RQ) under U.S. CERCLA:** Zinc Sulfate (CAS: 7733-02-0) 1000 lbs.; Ferrous Sulfate (CAS: 7720-78-7) 1000 lbs.

**SARA, Title III, Section 313:** Zinc Compounds

**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

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