

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: FEATURE® PRO SOLUBLE MICRONUTRIENT

CHEMICAL NAME: Inorganic/Organic Chemical Micronutrient Mixture

CHEMICAL FAMILY: Mixed soluble blended micronutrient

EPA REG. NO.: not applicable

MSDS Number: 6405243-10-LPI

MSDS Revisions: Sections 1 and 2

Date of Issue: 07/26/10

Supersedes: 07/31/06

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN - CAUTION - May be harmful if swallowed, inhaled or absorbed through the skin. May cause eye and skin irritation. Avoid contact with eyes, skin, and clothing. Avoid breathing vapors. Use with adequate ventilation. Eye protection and gloves are suggested when handling undiluted product. Wash thoroughly after handling. This blended soluble micronutrient is a mixture of Magnesium EDTA, Iron EDTA, Manganese EDTA, and Zinc EDTA, chelated with EDTA (Ethylenediaminetetraacetic acid). Complexed with LSA (Lignin Sulfonic Acid). Nausea and vomiting could be expected upon large dose ingestion. The acute ingestive effects are described as nausea, chills, and diarrhea.

This product is a brown microgranular solid with negligible odor. Primary routes of entry are Inhalation, eye contact 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>
Magnesium (Mg)	4.00	Mixture	not established
Iron (Fe)	4.00	Mixture	not established
Manganese (Mn)	2.00	Mixture	not established
Zinc (Zn)	1.00	Mixture	not established
Micro and inert ingredients	89.00		

4. FIRST AID MEASURES

If in eyes: Flush eyes with clean running water for at least 15 minutes. If irritation persists, get medical attention.

If on skin: Remove contaminated clothing. Wash Thoroughly with soap and water. If irritation persists, or if rash develops, get medical attention.

If swallowed: If conscious, drink 1 or 2 glasses of water. Get medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

If Inhaled: Remove to fresh air. If irritation persists, get medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): Not applicable

FLAMMABLE LIMITS (LFL & UFL): Not applicable

EXTINGUISHING MEDIA: Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide, foam, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: May include but are not limited to oxides of carbon, hydrogen chloride, hydrogen fluoride, oxides of nitrogen, ammonia, oxides of phosphorus, oxides of sulfur, hydrogen sulfide.

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: None known.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Avoid breathing dusts or mists. Absorb and sweep up 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 fertilizer dusts or mists. Avoid prolonged or repeated skin contact. Avoid eye contact. Wash hands thoroughly after using this product and before eating, drinking, chewing gum, using tobacco or using the toilet.

STORAGE: Store in a secure, dry location away from sun. 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 dusts, vapors or mists exceed acceptable levels, wear a MSHA/NIOSH approved 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	ACGIH TLV-TWA	
	Nuisance particulates	15 mg/m ³	not listed

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Brown microgranular solid with negligible odor		SOLUBILITY:	Soluble
SPECIFIC GRAVITY (Water = 1):	0.6 g/ml	BULK DENSITY:	37.46 lbs/ft ³	pH: 5.2 (1% solution)
VAPOR PRESSURE:	Not established	BOILING POINT:	Not established	
PERCENT VOLATILE (by volume):	Not applicable	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:	None known.
INCOMPATIBILITY:	None known.		
HAZARDOUS DECOMPOSITION PRODUCTS:	May include but are not limited to oxides of carbon, hydrogen chloride, hydrogen fluoride, oxides of nitrogen, ammonia, oxides of phosphorus, oxides of sulfur, hydrogen sulfide.		
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):	Not established	Skin Irritation (rabbit):	Not established
Inhalation LC₅₀ (rat):	Not established.	Skin Sensitization (guinea pig):	Not established
Carcinogenic Potential:	None listed in OSHA, NTP, IARC or ACGIH		

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 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. Avoid contaminating water by disposal of equipment wash waters or other product wastes.

14. TRANSPORT INFORMATION

DOT Shipping Description: NOT REGULATED BY USDOT.
U.S. Surface Freight Classification: FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI; DRY (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
	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: Not listed

SARA, Title III, Section 313: Not listed

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: Sections 1 and 2 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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