

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: SIGNATURE® 24-5-10 50% PCSCU, PROSPECT PLUS®

CHEMICAL NAME: Inorganic/Organic Chemical Fertilizer Mixture

CHEMICAL FAMILY: N-P-K Mixed dry blended fertilizer

EPA REG. NO.: not applicable

MSDS Number: 6424942-09-LPI

MSDS Revisions: All sections reviewed

Date of Issue: 04/28/09

Supersedes: 04/09/07

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 dry fertilizer is a mixture of Urea, Polymer Coated Sulfur Coated Urea, Diammonium Phosphate, Ammonium Sulfate, Sulfate of Potash, and Iron Oxysulfate. 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 dusts. 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 multi-colored granule with dusty 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>
Total Nitrogen (N)	24.00	Mixture	not established
Available Phosphate (P ₂ O ₅)	5.00	Mixture	not established
Soluble Potash (K ₂ O)	10.00	Mixture	not established
Sulfur (S)	9.10	Mixture	not established
Iron (Fe)	3.00	Mixture	not established
Fertilizer salts and inert ingredients	48.90		

4. FIRST AID MEASURES

Eyes: Flush eyes with large amount of water for at least 15 minutes. Consult a physician if irritation persists.

Skin: Remove all contaminated clothing. Wash skin, hair, and fingernails thoroughly with soap and water. If irritation persists seek medical attention. Wash clothing before reuse.

Ingestion: If swallowed, give 2 glasses of water to drink. Do not induce vomiting or give anything by mouth to an unconscious person. Call a physician to get medical attention; the emergency telephone number is 1-866-944-8565

Inhalation: Move subject to fresh air. Give artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. Get medical attention immediately.

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: Dusts or vapors can travel to a sources of ignition and flash back.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Avoid breathing dusts. Sweep up dry 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: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if fertilizer gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Store in a cool dry place away from children, feed and food products, and seed. 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 vapors or dusts 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: Multi-colored granules with dusty odor

SPECIFIC GRAVITY (Water = 1): 0.64 - 0.961 g/ml

VAPOR PRESSURE: Not applicable

PERCENT VOLATILE (by volume): Not applicable

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: 40 - 60 lbs/ft³

BOILING POINT: Not applicable

EVAPORATION RATE: Not applicable

SOLUBILITY: Appreciable

pH: Not applicable

10. STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBILITY: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Urea may decompose to release cyanuric acid, ammonia, HCN, NO.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): >5000 mg/kg

Eye Irritation (rabbit): Not established

Inhalation LC₅₀ (rat): Not established.

Carcinogenic Potential: None listed in OSHA, NTP, IARC or ACGIH

Acute Dermal LD₅₀ (rabbit): >2000 mg/kg

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 empty bag. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Do not contaminate water, food, or feed by storage or disposal.

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: Not listed

16. OTHER INFORMATION

MSDS STATUS: All sections reviewed and/or revised
PREPARED BY: Registrations and Regulatory Affairs **REVIEWED BY:** Environmental/ Regulatory Services

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