

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® .375% CRABGRASS PREVENTER PLUS EVADE™  
**CHEMICAL NAME:** Herbicide (Prodiamine: 5-dipropylamino- $\alpha,\alpha,\alpha$ -trifluoro-4,6-dinitro-o-toluidine) on Fertilizer  
**CHEMICAL FAMILY:** Dinitroaniline Herbicide  
**EPA REG. NO.:** 34704-776  
**MSDS Number:** 000776-10-LPI

**MSDS Revisions:** New

**Date of Issue:** 01/04/10

**Supersedes:** New

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION** – Causes moderate eye injury (irritation). Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling. Prolonged or repeated skin contact while handling the material may cause allergic reactions in some individuals. The fertilizer in this product is derived from Polymer Coated Sulfur Coated Urea, Urea, and Muriate of Potash. 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 an orangish-yellow to brown-colored granule with slight aromatic odor.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Prodiamine	0.375	29091-21-2	None Established
Fertilizer salts and inert ingredients	99.625		

## 4. FIRST AID MEASURES

**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.

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

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**If swallowed:** Call 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.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: **1-866-944-8565**. Have the product label or container with you when calling a poison control center or doctor, or going for treatment.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT (°F/Test Method):** Not applicable  
**FLAMMABLE LIMITS (LFL & UFL):** Not applicable  
**EXTINGUISHING MEDIA:** Considered non-combustible, 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. Contain and sweep up material of spill for disposal or use per label instructions. Wash cleanup equipment to prevent contamination elsewhere. Excess quantities above normal application rates could result in damage to plants subject to spill. Water-in remainder, disc under, cover with layer of soil, or leave exposed to sunlight, as deemed appropriate to the situation.

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**7. HANDLING AND STORAGE**

**HANDLING:** Wash hands after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide 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. Keep away from children.

**STORAGE:** Store in original container away from other fertilizer, feed, or foodstuffs and separated from other pesticides. 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 pesticide 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.

	<b>OSHA PEL 8 hr TWA</b>	<b>ACGIH TLV-TWA</b>
Nuisance Particulates	15 mg/m <sup>3</sup> (total dust)	none established

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Orangish-yellow to brown-colored granules with slight aromatic odor

**SPECIFIC GRAVITY (Water = 1):** 1.009 – 1.089 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:** 63 - 68 lbs/ft<sup>3</sup>

**BOILING POINT:** Not applicable

**EVAPORATION RATE:** Not applicable

**SOLUBILITY:** Insoluble

**pH:** Not applicable

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable

**INCOMPATIBILITY:** Caustics, acids, oxidizers, fluorine, metals.

**HAZARDOUS DECOMPOSITION PRODUCTS:** May include but are not limited to oxides of carbon, hydrogen chloride, hydrogen fluoride, oxides of nitrogen, ammonia, oxides of sulfur, and hydrogen sulfide from burning.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Excessive heat, open flame, other ignition sources.

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral LD<sub>50</sub> (rat):** >5000 mg/kg

**Eye Irritation (rabbit):** Moderate irritant

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

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

**Acute Dermal LD<sub>50</sub> (rabbit):** >2000 mg/kg

**Skin Irritation (rabbit):** Not an irritant

**Skin Sensitization (guinea pig):** Not a sensitizer.

**12. ECOLOGICAL INFORMATION**

This product has low solubility in water. At the limits of solubility, this product is not toxic to fish. However, at concentrations above the level of solubility, it may be toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate water when disposing of equipment wash waters.

**13. DISPOSAL CONSIDERATIONS**

Do not reuse product containers. Paper or plastic containers: Completely empty container into application equipment. Then dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**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 Y 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 applicable

**16. OTHER INFORMATION**

**MSDS STATUS:** New

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental/ Regulatory Services

®Signature is a registered trademark and Evade is a trademark of Loveland Products, Inc.

XCU is a trademark of Agrium Advanced Technologies

**Note:** This material safety data sheet applies to all Signature® N-P-K fertilizer analyses containing .375% Evade

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