

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® 21-0-8 FERTILIZER WITH 0.2% MERIT® WITH 50% XCU™ AND PROSPECT PLUS®

**CHEMICAL NAME:** Insecticide (Imidacloprid: 1-((6-chloro-3-pyridinyl) methyl)-N-nitro-2-imidazolidinimine) on N-P-K Fertilizer

**CHEMICAL FAMILY:** Chloronicotinyl Insecticide

**EPA REG. NO.:** 432-1349-34704

**MSDS Number:** 4321349-10-LPI

**MSDS Revisions:** Section 1

**Date of Issue:** 05/18/10

**Supersedes:** 06/30/09

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION - Si usted no puede leer o entender inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente (If you cannot read or understand English, do not use this product until the label has been fully explained to you.)** Harmful if swallowed or absorbed through the skin. Causes eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. This blended dry pesticide-fertilizer is a mixture of Imidacloprid, Polymer Coated Sulfur Coated Urea, Urea, and Muriate of Potash.

This product is a light yellow to brown-colored granule with slight aromatic 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>
Imidacloprid	0.20	138261-41-3	None Established
Total Nitrogen (N)	21.00	Mixture	None Established
Soluble Potash (K <sub>2</sub> O)	8.00	Mixture	None Established
Fertilizer salts and inert ingredients	70.80		

## 4. FIRST AID MEASURES

**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.

**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.

**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.

**NOTE TO PHYSICIAN:** No specific antidote is available. Treat the patient symptomatically.

**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. 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 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.

**STORAGE:** Store in a cool, dry, locked place and in such a manner as to prevent cross-contamination with other pesticides, fertilizers, food and feed. Store in original container and out of reach of children, preferably in a locked storage area. Do not contaminate water, food, or feed by storage or disposal.

**Personal Protective Equipment (PPE): Applicators and other handlers must wear:** long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride and shoes plus socks. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**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>	none established

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Light yellow to brown-colored granule with slight aromatic odor

**SPECIFIC GRAVITY (Water = 1):** 0.80 - 0.86 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:** 50 - 54 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:** None known.

**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):** Causes mild irritation

**Inhalation LC<sub>50</sub> (rat):** >20 mg/l

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

**Acute Dermal LD<sub>50</sub> (rabbit):** >5000 mg/kg

**Skin Irritation (rabbit):** Slight irritant

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

**12. ECOLOGICAL INFORMATION**

This product is highly toxic to aquatic invertebrates. 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 disposing of equipment wash waters. This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**13. DISPOSAL CONSIDERATIONS**

Pesticide wastes are toxic. Improper disposal of excess pesticide, or rinsate is a violation of Federal law. 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**

<b>NFPA &amp; HMIS Hazard Ratings:</b>		NFPA		HMIS
	1	Health	0	Least
	0	Flammability	1	Slight
	0	Instability	2	Moderate
			3	High
			4	Severe
	1	Health	1	Health
	0	Flammability	0	Flammability
	0	Reactivity	0	Reactivity
	H	PPE	H	PPE

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: Section 1 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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