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. **24-Hour Emergency Phone**: 1-800-424-9300

P.O. Box 1286 • Greeley, CO 80632-1286 **Medical Emergencies:** 1-866-944-8565

U.S. Coast Guard National Response Center: 1-800-424-8802

PRODUCT NAME: SIGNATURE® FERTILIZER WITH 0.2% MERIT® 20-0-0 WITH 50% XCU™

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: New Date of Issue: 04/05/10 Supersedes: New

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 and Urea.

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

Chemical Ingredients:	Percentage by Weight:	CAS No.	TLV (Units)
Imidacloprid	0.20	138261-41-3	None Established
Total Nitrogen (N)	20.00	Mixture	None Established
Fertilizer salts and inert ingredients	79.80		

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.

HANDLING AND STORAGE

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.

Store in a cool, dry, 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.

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

EYE PROTECTION: Chemical goggles or shielded safety glasses.

Wear protective clothing: long-sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-SKIN PROTECTION:

resistant gloves.

OSHA PEL 8 hr TWA ACGIH TLV-TWA Nuisance Particulates 15 mg/m³ none established

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Light yellow to brown-colored granule with slight aromatic odor **SOLUBILITY:** Insoluble SPECIFIC GRAVITY (Water = 1): 0.80 - 0.86 g/ml BULK DENSITY: 50 - 54 lbs/ft3 pH: Not applicable

VAPOR PRESSURE: Not applicable **BOILING POINT:** Not applicable PERCENT VOLATILE (by volume): Not applicable **EVAPORATION RATE:** Not applicable These physical data are typical values based on material tested but may vary from sample to sample. Note:

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: Excessive heat, open flame, other ignition sources.

INCOMPATIBILITY: Caustics, acids, oxidizers, fluorine, metals. HAZARDOUS DECOMPOSITION PRODUCTS: None known.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Dermal LD₅₀ (rabbit): >5000 mg/kg Acute Oral LD₅₀ (rat): >5000 mg/kg Eye Irritation (rabbit): Causes mild irritation Skin Irritation (rabbit): Slight irritant

Inhalation LC₅₀ (rat): >20 mg/l

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

Skin Sensitization (guinea pig): Not a sensitizer

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 DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill the container. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration. Do not burn, unless allowed by State and local ordinances

11	TD	A NIC	SDC	DT	INFC	DM	ΛTI	ON

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

0

Health

Instability

- 0 Least
- Flammability Slight 2 Moderate
 - 3 High Severe
- **HMIS**
- Health 1 0 Flammability
- 0 Reactivity
- Н PPE

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:

Immediate Delayed

Fire Reactive

Sudden Release of Pressure

__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: New

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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

®Merit is a registered trademark of Bayer AG

XCU is a trademark of Agrium Advanced Technologies

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, Inc. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.