

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: 1-800-301-7976
U.S. Coast Guard National Response Center: 1-800-424-8802

PRODUCT NAME: SIGNATURE® FERTILIZER WITH 0.2% MERIT®
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: 4321349-07-LPI **MSDS Revisions:** New **Date of Issue:** 01/24/07 **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 with skin, eyes or clothing.

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 (Note: See Product Tag or Label for Specific Ingredients)

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Imidacloprid	0.2	138261-41-3	None Established
Fertilizer: see label for N-P-K analysis	99.8		

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: 1-800-301-7976. 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.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Nuisance Particulates	15 mg/m ³	none established

9. 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/ft ³
VAPOR PRESSURE: Not applicable	BOILING POINT: Not applicable
PERCENT VOLATILE (by volume): Not applicable	EVAPORATION RATE: 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.

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 LD₅₀ (rat): >5000 mg/kg	Acute Dermal LD₅₀ (rabbit): >5000 mg/kg
Eye Irritation (rabbit): Causes mild irritation	Skin Irritation (rabbit): Slight irritant
Inhalation LC₅₀ (rat): >20 mg/l	Skin Sensitization (guinea pig): Not a sensitizer
Carcinogenic Potential: None listed in OSHA, NTP, IARC or ACGIH	

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 apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment wash waters.

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

NFPA & HMIS Hazard Ratings:	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">NFPA</td> <td style="width: 50%;">HMIS</td> </tr> <tr> <td>1 Health</td> <td>0 Least</td> </tr> <tr> <td>0 Flammability</td> <td>1 Slight</td> </tr> <tr> <td>0 Instability</td> <td>2 Moderate</td> </tr> <tr> <td></td> <td>3 High</td> </tr> <tr> <td></td> <td>4 Severe</td> </tr> </table>	NFPA	HMIS	1 Health	0 Least	0 Flammability	1 Slight	0 Instability	2 Moderate		3 High		4 Severe	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">1 Health</td> <td style="width: 50%;">H PPE</td> </tr> <tr> <td>0 Flammability</td> <td></td> </tr> <tr> <td>0 Reactivity</td> <td></td> </tr> </table>	1 Health	H PPE	0 Flammability		0 Reactivity	
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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: New

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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Note: This material safety data sheet applies to all Signature® N-P-K fertilizer analyses containing 0.2% Merit.

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