

**MATERIAL SAFETY DATA SHEET****SIGNATURE® TALSTAR® 0.073% PLUS 40% XCU™ 18-0-6 FERTILIZER - LC**

**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® TALSTAR® 0.073% PLUS 18-0-6 40% XCU FERTILIZER – LC

**CHEMICAL NAME:** Insecticide (Bifenthrin: Cis isomers 97% minimum, trans isomers 3% maximum) on N-P-K Fertilizer

**CHEMICAL FAMILY:** Pyrethroid Insecticide

**EPA REG. NO.:** 279-3223-34704

**MSDS Number:** 2793223-10-LPI

**MSDS Revisions:** New

**Date of Issue:** 01/19/10

**Supersedes:** New

**2. COMPOSITION, INFORMATION ON INGREDIENTS**

**KEEP OUT OF REACH OF CHILDREN – CAUTION** – Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. This blended dry pesticide-fertilizer is a mixture of Bifenthrin, Polymer Coated Sulfur Coated Urea, Urea, and Muriate of Potash.

This product is a light yellow to brown-colored granule with slight odor. Primary routes of entry are Inhalation, eye contact and skin contact.

**3. HAZARDS IDENTIFICATION SUMMARY**

<b>Chemical Ingredients:</b>	<b>Percentage by Weight:</b>	<b>CAS No.</b>	<b>TLV (Units)</b>
Bifenthrin	0.073	82657-04-3	None Established
Total Nitrogen (N)	18.00	Mixture	not established
Soluble Potash (K <sub>2</sub> O)	6.00		
Fertilizer salts and inert ingredients	75.927		

**4. FIRST AID MEASURES**

**If swallowed:** Call a 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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**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. 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.

**NOTE TO PHYSICIAN:** This product is a pyrethroid. If large amounts have been ingested, milk, cream and other digestible fats and oils may increase absorption and so should be avoided.

**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 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. As soon as possible after use, wash thoroughly and change into clean clothing.

**STORAGE:**

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use close tightly. In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. **To confine spill:** Cover to prevent dispersal. Place damaged package in a holding container. Identify contents. Do not contaminate water, food or feed by storage or disposal.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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<b>ENGINEERING CONTROLS:</b>	Not normally required.	
<b>RESPIRATORY PROTECTION:</b>	Not normally required, if vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved pesticide respirator.	
<b>EYE PROTECTION:</b>	Chemical goggles or shielded safety glasses.	
<b>SKIN PROTECTION:</b>	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> Nuisance particulates	<b>ACGIH TLV-TWA</b> 15 mg/m <sup>3</sup> None established

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>APPEARANCE AND ODOR:</b> Light yellow to brown-colored granules with slight odor	<b>SOLUBILITY:</b> Insoluble
<b>SPECIFIC GRAVITY (Water= 1):</b> 0.80-0.86 g/ml	<b>pH:</b> 6.8 (aqueous solution)
<b>VAPOR PRESSURE:</b> Not applicable	<b>BULK DENSITY:</b> 50-54 lbs/ft <sup>3</sup>
<b>PERCENT VOLATILE (by volume):</b> Not applicable	<b>BOILING POINT:</b> 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.	<b>EVAPORATION RATE:</b> Not applicable

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**10. STABILITY AND REACTIVITY**

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<b>STABILITY:</b> Stable	<b>CONDITIONS TO AVOID:</b> Excessive heat, open flame, other ignition sources.
<b>INCOMPATIBILITY:</b> Caustics, acids, oxidizers, fluorine, metals.	
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b> None known.	
<b>HAZARDOUS POLYMERIZATION:</b> Will not occur.	

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**11. TOXICOLOGICAL INFORMATION**

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<b>Acute Oral LD<sub>50</sub> (rat):</b> >5000 mg/kg	<b>Acute Dermal LD<sub>50</sub> (rabbit):</b> >5000 mg/kg
<b>Eye Irritation (rabbit):</b> Causes moderate irritation	<b>Skin Irritation (rabbit):</b> May cause irritation
<b>Inhalation LC<sub>50</sub> (rat):</b> Not established	<b>Skin Sensitization (guinea pig):</b> Not established
<b>Carcinogenic Potential:</b> None listed in OSHA, NTP, IARC or ACGIH	

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**12. ECOLOGICAL INFORMATION**

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This product is extremely toxic to fish and 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 treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

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**13. DISPOSAL CONSIDERATIONS**

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**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:** **Paper and plastic bags:** 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.

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**14. TRANSPORT INFORMATION**

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**DOT Shipping Description:** NOT REGULATED BY USDOT  
**U.S. Surface Freight Classification:** FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI; DRY (NMFC 68140, SUB 5; CLASS 50)

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**15. REGULATORY INFORMATION**

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NFPA & HMIS Hazard Ratings:		NFPA	HMIS
1	Health	0	Least
0	Flammability	1	Slight
0	Instability	2	Moderate
		3	High
		4	Severe
			H PPE

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:	Immediate Delayed	<u>Y</u> <u>N</u>	Fire Reactive	<u>N</u> <u>N</u>	Sudden Release of Pressure	<u>N</u>
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Reportable Quantity (RQ) under U.S. CERCLA: Not listed  
SARA, Title III, Section 313: Bifenthrin (CAS: 82657-04-3) 0.073%  
RCRA Waste Code: Not listed  
CA Proposition 65: Not listed

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## 16. OTHER INFORMATION

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MSDS STATUS: New

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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

XCU is a trademark of Agrium Advanced Technologies

®Talstar is a registered trademark of FMC Corporation

U.S. Patent No. 4,238,505

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