

# SAFETY DATA SHEET

THIOLUX

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: THIOLUX FUNGICIDE - MITICIDE

CHEMICAL NAME: Sulfur

CHEMICAL FAMILY: Fungicide

EPA REG. NO.: 34704-1079

MSDS Number: 001079-13b-LPI

MSDS Revisions: Section 11

Date Of Issue: 08/12/13

Supersedes: 06/14/13

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION** –Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist.

This product is brown-colored fine granules with sulfurous odor.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Sulfur	80.00	7704-34-9	Not listed
Other Ingredients	20.00		

## 4. FIRST AID MEASURES

<b>If swallowed:</b>	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.
<b>If in inhaled:</b>	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.
<b>If on skin or clothing:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.
<b>If in eyes:</b>	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.

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

<b>FLASH POINT (°F/Test Method):</b>	406.4°F / 208°C
<b>FLAMMABLE LIMITS (LEL &amp; UEL):</b>	Not applicable
<b>EXTINGUISHING MEDIA:</b>	Considered non-combustible, use medium appropriate to surrounding fire. Dry chemical, carbon dioxide, foam, water spray or fog.
<b>HAZARDOUS COMBUSTION PRODUCTS:</b>	Oxides of carbon, oxides of nitrogen and chlorine-containing compounds may be formed in a fire situation.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	If water is used to fight fire or cool containers, contain run-off by diking to prevent contamination of water supplies. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b>	Dusts may form explosive mixtures with air; avoid using heavy water streams.

## 6. ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Avoid breathing dusts. Wear appropriate safety equipment. Sweep up dry spills and transfer to approved chemical containers. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Flush the area with water to remove any residue. 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

<b>HANDLING:</b>	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 after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Sulfur dust suspended in air ignites easily. Keep away from heat, spark, or open flames. Do not smoke while applying this product.
<b>STORAGE:</b>	Store in a cool place. Protect from excessive heat. Store product in original container only away from water, food, or feed. Keep container closed to prevent spills and contamination. Carefully open containers. After partial use, close tightly. Do not contaminate water, food or feed by storage and disposal.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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**ENGINEERING CONTROLS:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**RESPIRATORY PROTECTION:** Not normally required. If vapors or dusts exceed acceptable levels, wear a NIOSH approved pesticide respirator.

**EYE PROTECTION:** Chemical goggles or shielded safety glasses.

**SKIN PROTECTION:** Wear protective clothing: long-sleeved shirts and pants, shoes with socks. Wear chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Particulates (PNOC**) 15 mg/m <sup>3</sup> (total dust)		Not Established

**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 polyvinylchloride, shoes plus socks, and protective eyewear. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>APPEARANCE AND ODOR:</b> Brown-colored fine granules with sulfurous odor	<b>SOLUBILITY:</b> Disperses
<b>SPECIFIC GRAVITY (Water = 1):</b> 0.799 – 0.898 g/ml	<b>pH:</b> Not determined
<b>VAPOR PRESSURE:</b> < 1 @ 184°C	
<b>PERCENT VOLATILE (by volume):</b> Not applicable	
<b>BULK DENSITY:</b> 49.9 – 56.1 lbs/ft <sup>3</sup>	
<b>BOILING POINT:</b> Not applicable	
<b>EVAPORATION RATE:</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.

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**10. STABILITY AND REACTIVITY**

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**STABILITY:** Stable

**CONDITIONS TO AVOID:** Excessive heat; sulfur dust in air can be ignited and explode.

**INCOMPATIBILITY:** Dust conditions in air.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of sulfur, oxides of hydrogen sulfide may be formed in a fire situation.

**HAZARDOUS POLYMERIZATION:** Will not occur.

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**11. TOXICOLOGICAL INFORMATION**

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<b>Acute Oral LD<sub>50</sub> (rat):</b> > 5,000 mg/kg	<b>Acute Dermal LD<sub>50</sub> (rabbit):</b> > 2,000 mg/kg
<b>Eye Irritation (rabbit):</b> Causes slight irritation.	<b>Skin Irritation (rabbit):</b> Causes slight irritation
<b>Inhalation LC<sub>50</sub> (rat):</b> > 2.6 ± 0.35 mg/l	<b>Skin Sensitization (guinea pig):</b> Not a sensitizer
<b>Carcinogenic Potential:</b> OSHA: not listed; NTP: not listed; IARC, ACGIH: Not listed.	

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**12. ECOLOGICAL INFORMATION**

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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 cleaning equipment or disposing of equipment wash waters or rinsate. Do not apply when weather conditions favor drift from treated areas. Do not apply when run-off is likely to occur.

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**13. DISPOSAL CONSIDERATIONS**

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**PESTICIDE DISPOSAL:** Improper disposal of excess pesticide, pesticide spray, or rinsate is a violation of Federal law. Waster resulting from the use of this product that cannot be used according to label instructions or chemically reprocessed may be disposed of on site or at a landfill or waste disposal facility approved for pesticide disposal, or in accordance with all applicable Federal, state, or local regulations.

**CONTAINER HANDLING:** **Non-refillable container.** Do not reuse or refill this 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. If burned, stay out of smoke.

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**14. TRANSPORT INFORMATION**

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**DOT Shipping Description:** NOT REGULATED BY DOT

**U.S. Surface Freight Classification:** INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS; NOI; OTHER THAN POISON (NMFC 102120; CLASS: 60)

**15. REGULATORY INFORMATION****NFPA & HMIS Hazard Ratings:****NFPA**

2 Health  
0 Flammability  
0 Instability

0 Least  
1 Slight  
2 Moderate  
3 High  
4 Severe

**HMIS**

2 Health  
0 Flammability  
0 Reactivity  
B PPE

**SARA Title III Hazard Category:**

Immediate  
Delayed

Y  
N

Fire  
Reactive

N  
N

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 applicable

**CAUTION** – This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

**16. OTHER INFORMATION**

**MSDS STATUS:** Corrected a typographical error in section 11

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental Health and Safety

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