

# SAFETY DATA SHEET

# MICROFINE SULFUR – FOR ORGANIC PRODUCTION

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:** MICROFINE SULFUR  
**CHEMICAL NAME:** Sulfur  
**CHEMICAL FAMILY:** Elemental Sulfur Fungicide  
**EPA REG. NO.:** 6325-13-34704  
**SDS Number:** 632513-13-LPI      **SDS Revisions:** Sections 1, 8, 13 and 15      **Date of Issue:** 09/14/13      **Supersedes:** 08/26/08

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION –** Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

This product is pale yellow powder with sulfur (rotten egg) odor.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Sulfur	90.00	7704-34-9	None Established
Inert Ingredients	10.00		

## 4. FIRST AID MEASURES

**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.  
**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 further treatment advice.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.** Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT (°F/Test Method):** 405°F / 207.2°C  
**FLAMMABLE LIMITS (LFL & UFL):** 35 g/m<sup>3</sup> – 1400 g/m<sup>3</sup> (Explosive limits of dust in air)  
**EXTINGUISHING MEDIA:** Water fog, spray, or regular foam. .  
**HAZARDOUS COMBUSTION PRODUCTS:** Burning sulfur decomposes into oxides of sulfur, such as hydrogen sulfide and sulfur dioxide. Other unknown hazardous material may also be formed in a fire situation.  
**SPECIAL FIRE FIGHTING PROCEDURES:** 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.  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Sulfur dusts ignite easily and may form explosive mixtures with air; avoid using direct and heavy water streams.

## 6. ACCIDENTAL RELEASE MEASURES

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

Avoid breathing dusts. Sweep up spills and transfer to approved chemical containers for disposal or rework. Keep dusting to a minimum. 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 place. After partial use, fold and roll back bags, clamp and close tightly. Do not contaminate water, food or feed by storage or disposal.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**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 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 plus socks. Wear chemical-resistant gloves.

PNOC*	<b>OSHA PEL 8 hr TWA</b> 15 mg/m <sup>3</sup> (total dust)	<b>ACGIH TLV-TWA</b> none established
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**Personal Protective Equipment: Applicators and other handlers other than mixers and loaders must wear:** Long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, shoes plus socks, and protective eyewear. 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.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE AND ODOR:</b> Pale yellow powder with sulfur (rotten egg) odor	<b>BULK DENSITY:</b> 33.0 - 80.0 lbs/ft <sup>3</sup>	<b>SOLUBILITY:</b> Insoluble
<b>SPECIFIC GRAVITY (Water = 1):</b> 0.528 - 1.281 g/ml	<b>BOILING POINT:</b> 832 <sup>o</sup> F / 444.4 <sup>o</sup> C	<b>pH:</b> Not applicable
<b>VAPOR PRESSURE:</b> Not applicable	<b>EVAPORATION RATE:</b> Not applicable	
<b>PERCENT VOLATILE (by volume):</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.

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Extreme heat, sparks, or flame.

**INCOMPATIBILITY:** Oxidizing agents may react violently. Corrosive to copper and copper alloys. Damp sulfur will corrode steel.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of sulfur gases produced by burning sulfur.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

<b>Acute Oral LD<sub>50</sub> (rat):</b> >5050 mg/kg	<b>Acute Dermal LD<sub>50</sub> (rabbit):</b> >2020 mg/kg
<b>Eye Irritation (rabbit):</b> Causes minimal eye irritation.	<b>Skin Irritation (rabbit):</b> Slightly irritating
<b>Inhalation LC<sub>50</sub> (rat):</b> 5.49 mg/L (4 HR)	<b>Skin Sensitization (guinea pig):</b> Not a sensitizer
<b>Carcinogenic Potential:</b> None listed in OSHA, NTP, IARC or ACGIH	

**12. ECOLOGICAL INFORMATION**

This product is toxic to fish. 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 where runoff conditions are likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment wash waters.

**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: Nonrefillable container.** Do not use or refill this container. 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:** INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS; NOI; OTHER THAN POISON (NMFC 102120; CLASS: 60)

**15. REGULATORY INFORMATION**

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

**SARA Hazard Notification/Reporting**

**SARA Title III Hazard Category:** Immediate   N   Fire   N   Sudden Release of Pressure   N    
 Delayed   Y   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

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. Following is the hazard information as required on the pesticide label:

**CAUTION**

Harmful if absorbed through skin.

Causes moderate eye irritation.

Avoid contact with skin, eyes and clothing.

Wash thoroughly with soap and water after handling.

**16. OTHER INFORMATION**

**SDS STATUS:** Sections 1, 8, 13 and 15 revised.

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental Health and Safety

\*Particulates not otherwise classified/regulated

**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.