

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:** POTATO SEED TREATER PS

**CHEMICAL NAME:** Mancozeb; a coordination product of zinc ion and manganese ethylene bisdithiocarbamate\*

**CHEMICAL FAMILY:** Dithiocarbamate Fungicide

**EPA REG. NO.:** 2935-539-34704

**MSDS Number:** 2935539-13-LPI

**MSDS Revisions:** Sec. 1, 2, 3, 4, 7, 8, 12, 13

**Date of Issue:** 08/20/13

**Supersedes:** 10/04/05

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION** – Causes moderate eye irritation. Avoid contact with eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

This product is off-white to light brown powder with virtually no odor.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Mancozeb: A coordination product of zinc ion and manganese ethylene bisdithiocarbamate	8.00	8018-01-7	not listed
Manganese++	(1.60)		
Zinc++	(0.20)		
Ethylene bisdithiocarbamate ion (C <sub>4</sub> H <sub>6</sub> N <sub>2</sub> S <sub>4</sub> )--	(6.20)		
Other Ingredients	92.00		

## 4. FIRST AID MEASURES

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15 to 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 to 20 minutes. Call a poison control center or doctor for treatment advices.

**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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**If inhaled:** 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 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):** 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:** Oxides of sulfur, oxides of nitrogen, hydrogen sulfide, carbon disulfide, and other unknown hazardous material may 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:** 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. Cover with an absorbent such as pet litter and 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**

**HANDLING:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE 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 safe manner. Store in original container only. Store in cool, dry place. Never allow this product to become wet during storage. Moisture may lead to chemical changes that reduce fungicidal activity and create vapors, which may be flammable. Do not contaminate water, food or feed by storage or disposal. Keep away from fire or sparks.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Large scale seed piece treatment facilities that, on any given week in the current year or in the past year, treated  $\geq$  50,000 cwt ( $\geq$  2,500 tons) must use dust collection system during treatment of the seed pieces that prevents dust from contacting handlers or other persons. **Handlers using the dust collection system must wear:** long-sleeved shirt and long pants, chemical-resistant gloves (except pilots, groundboom applicators and airblast applicators), shoes and socks, and must be provided with, have immediately available, and wear in an emergency, such as broken package, spill, or equipment breakdown: a NIOSH-approved respirator with dust/mist filter with MSHA/NIOSH approval number prefix TC 21-C or any N, R, P, or HE filter.

**RESPIRATORY PROTECTION:** NIOSH approved respirator with dust/mist filter with MSHA/NIOSH approval number prefix TC 21-C or any N, R, P, or HE filter.

**EYE PROTECTION:** Safety glasses.

**SKIN PROTECTION:** Long-sleeved shirts and pants, shoes plus socks, and chemical-resistant gloves.

**Personal Protective Equipment: Loaders, applicators, and other handlers must wear:** long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material, shoes and socks, and NIOSH-approved respirator with dust/mist filter with MSHA/NIOSH approval number prefix TC 21-C or any N, R, P, or HE filter. 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. Discard clothing or other absorbent materials that have been drench or heavily contaminated with this product's concentrate. Do not reuse them.

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

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Off-white to light brown powder with virtually no odor

**SPECIFIC GRAVITY (Water = 1):** 0.48-0.64 g/ml

**VAPOR PRESSURE:** Not applicable

**PERCENT VOLATILE (by volume):** 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.

**BULK DENSITY:** 30-40 lbs/ft<sup>3</sup>

**BOILING POINT:** Not applicable

**EVAPORATION RATE:** Not applicable

**SOLUBILITY:** Insoluble

**pH:** Not applicable

**10. STABILITY AND REACTIVITY**

**STABILITY:** Stable

**CONDITIONS TO AVOID:** None known.

**INCOMPATIBILITY:** Acids.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of sulfur, oxides of nitrogen, hydrogen sulfide, carbon disulfide, and other unknown hazardous material may be formed in a fire situation.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral LD<sub>50</sub> (rat):** 4500 mg/kg

**Eye Irritation (rabbit):** Causes substantial but temporary eye injury.

**Inhalation LC<sub>50</sub> (rat):** > 5.14 mg/L

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

**Acute Dermal LD<sub>50</sub> (rabbit):** >5000 mg/kg

**Skin Irritation (rabbit):** Causes mild irritation

**Skin Sensitization (guinea pig):** Not established.

**12. ECOLOGICAL INFORMATION**

This product is toxic to aquatic organisms. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. 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 washwater or rinsate.

**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 HANDLING:** Nonrefillable container. Do not reuse or refill the 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 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		HMIS	
		2	Health	0	Least
		0	Flammability	1	Slight
		0	Instability	2	Moderate
				3	High
				4	Severe
				2	Health
				0	Flammability
				0	Reactivity
				E	PPE

**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:** Manganese Compounds 1.60%; Zinc Compounds 0.20%

**RCRA Waste Code:** Not listed

**CA Proposition 65: WARNING:** This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

**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:** Sections 1, 2, 3, 4, 7, 8, 12, and 13 revised

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental Health and Safety

*This product is not for use in Jefferson County, Idaho*

**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.