

**IN CASE OF EMERGENCY DUE TO A MAJOR SPILL, FIRE OR POISONING INVOLVING THIS PRODUCT CALL DAY OR NIGHT, 1-800-561-8273 or CHEMTREC 1-800-424-9300**

**1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

**MANUFACTURED FOR:**

LOVELAND PRODUCTS CANADA, INC.  
789 Donnybrook Drive • Dorchester, Ontario N0L 1G5

**24-Hour Emergency Phone:** 1-800-561-8273  
**Additional Emergency Phone (Canutec):** 1-613-996-6666 (Collect)

**CHEMICAL IDENTITY:** Copper (from Copper Sulfate)

**PRODUCT USE:** Fungicide – Group M

**PCP REG. NO.:** 9934

**MSDS Number:** 9934-12-LPI

**MSDS Revisions:** Section 1

**Date of Issue:** 09/12/12

**Supersedes:** 01/31/11

**2. HAZARDS IDENTIFICATION SUMMARY**

**KEEP OUT OF REACH OF CHILDREN – WARNING - POISON** – Hazardous if swallowed, inhaled, or absorbed through skin. Avoid contact with eyes, skin or clothing. May be severely irritating or corrosive to the eyes. May be mildly irritating to the skin and in rare cases may cause skin sensitization. May cause irritation to the respiratory tract. Large dose ingestion of copper salts may cause gastrointestinal disorders. Wash thoroughly with soap and water after handling, and before eating, drinking or smoking. Avoid breathing dust or spray mist. Primary routes of entry are Inhalation, eye contact and skin contact.

This product is a fine, pale green-coloured powder with no appreciable odour.

**3. COMPOSITION, INFORMATION ON INGREDIENTS**

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Basic Copper Sulfate (Metallic Copper equivalent)	53.00	1344-73-6	1 mg/m <sup>3</sup>
Inert Ingredients	47.00		

**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 centre or doctor treatment advice.
- If swallowed:** Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.
- If on skin or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.
- If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**NOTE TO PHYSICIAN:** Elevated urinary copper is an indication of excess copper exposure. If swallowed, perform gastric lavage with water or 0.1% solution of potassium ferrocyanide. Mucosal damage may contraindicate gastric lavage. Many copper salts by skin contact cause itching, eczema and rarely, sensitization reactions.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-561-8273.** Have the product label or container with you when calling a poison control centre or doctor, or going for treatment.

**5. FIRE FIGHTING MEASURES**

- FLASH POINT (°F/Test Method):** Not established
- FLAMMABLE LIMITS (LFL & UFL):** Not established
- EXTINGUISHING MEDIA:** Foam, dry chemical, carbon dioxide, and water spray (fog).
- HAZARDOUS COMBUSTION PRODUCTS:** Thermal decomposition will release Hydrogen chloride, oxides of Hydrogen, and oxides of Copper, and other toxic and/or hazardous gases.
- SPECIAL FIRE FIGHTING PROCEDURES:** Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.
- UNUSUAL FIRE AND EXPLOSION HAZARDS:** If water is used to fight fire or cool containers, dike to prevent runoff and contamination of municipal sewers and waterways.

**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, provincial and national regulations for proper disposal. Check local or provincial regulations for proper disposal. Flush the area with water to remove any residue.

**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 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 the original container in a dry, cool, well-ventilated place. Keep the container tightly closed. Keep away from food, drink and animal feed. When opening, closing or handling open packages, wear goggles to prevent getting dust in eyes. After partial use, fold and roll back bags, clamp and close tightly. Do not contaminate water, food or feed by storage or disposal.

**Personal Protective Equipment: Applicators and other handlers must wear:** long sleeved shirt and long pants, chemical-resistant gloves, such as polyethylene or PVC, shoes plus socks, protective eyewear, chemical-resistant headgear for overhead exposure, and a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C). Follow manufacturer's instructions for cleaning and maintaining PPE. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Local exhaust ventilation is recommended.

**RESPIRATORY PROTECTION:** Wear a MSHA/NIOSH approved dust/mist filtering respirator (approval number prefix TC-21C).

**EYE PROTECTION:** Chemical goggles or shielded safety glasses. Eyewash facility should be available in the work area.

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

	<b>OSHA PEL 8 hr TWA</b>	<b>ACGIH TLV-TWA</b>
Copper*	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE AND ODOUR:</b> Fine, pale green-coloured powder with no appreciable odour.	<b>SOLUBILITY:</b> Dispersible
<b>SPECIFIC GRAVITY (Water = 1):</b> 0.64 g/ml	<b>BULK DENSITY:</b> 640 kg/m <sup>3</sup>
<b>VAPOUR PRESSURE:</b> Not established	<b>BOILING POINT:</b> Decomposes at 120°C (248°F)
<b>PERCENT VOLATILE (by volume):</b> Not established	<b>EVAPORATION RATE:</b> Not established

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:** Temperatures above 51°C (125°F). Avoid exposure to high moisture conditions for prolonged periods.

**INCOMPATIBILITY:** Avoid acidic conditions and ammonia. Copper is corrosive to aluminum and iron, especially when in aqueous forms and at elevated temperatures.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition will release Hydrogen chloride, oxides of Hydrogen, and oxides of Copper, and other toxic and/or hazardous gases.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

<b>Acute Oral LD<sub>50</sub> (rat):</b> 1000 mg/kg	<b>Acute Dermal LD<sub>50</sub> (rat) :</b> > 2000 mg/kg
<b>Eye Irritation (rabbit):</b> Severely irritating	<b>Skin Irritation (rabbit):</b> Slight irritant
<b>Inhalation LC<sub>50</sub> (rabbit):</b> >2.00 mg/L (4 hr)	<b>Skin Sensitization (Guinea Pig):</b> Not a sensitizer
<b>Carcinogenic Potential:</b> None listed.	

**12. ECOLOGICAL INFORMATION**

This product is 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 contaminate water when disposing of equipment wash waters or rinsate.

**13. DISPOSAL CONSIDERATIONS**

Do not reuse containers for any purpose. Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. For disposal, empty container may be returned to the point of purchase (distributor/dealer). Follow provincial instructions for any required additional cleaning of container. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Do not contaminate water, food, or feed by storage or disposal.

**14. TRANSPORT INFORMATION**

**DOT/TDG Shipping Description:** NOT REGULATED FOR SURFACE TRANSPORTATION

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

**IMDG Shipping Description:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER), 9, UN3077, III MARINE POLLUTANT

Consult appropriate ICAO/IATA regulations for shipment requirements in the Air shipping mode.

**15. REGULATORY INFORMATION**

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

**SARA Hazard Notification/Reporting**

<b>SARA Title III Hazard Category:</b>	Immediate	<u>Y</u>	Fire	<u>N</u>	Sudden Release of Pressure	<u>N</u>
	Delayed	<u>N</u>	Reactive	<u>N</u>		

**Reportable Quantity (RQ) under U.S. CERCLA:** Copper (CAS No. 7440-50-8) 5000 pounds  
**SARA, Title III, Section 313:** Copper (CAS No. 7440-50-8) ±50% equivalent by weight in product  
**RCRA Waste Code:** Not listed  
**CA Proposition 65:** Not listed

**16. OTHER INFORMATION**

**MSDS STATUS:** Section 1 revised

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental Health and Safety

\*As copper dusts or mists (CAS No. 7440-50-8)

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