

*FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL DAY OR NIGHT 1 800 561-8273 or
CHEMTREC 1 800 424-9300*

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

DISTRIBUTED BY:

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: Ethylenediaminetetraacetic acid, copper diammonium complex
PRODUCT USE: Chelated EDTA micronutrient solution
REG. NO.: 2009035B – Fertilizers Act
MSDS Number: 2009035B-12b-LPI

MSDS Revisions: Section 1

Date of Issue: 09/26/12

Supersedes: 08/14/12

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION - May cause eye irritation. Skin contact is not likely to cause irritation; repeated contact may cause irritation. Exposure to excessive concentration of vapours, mist or aerosol may cause respiratory tract discomfort. Avoid contact with eyes, skin and clothing. Avoid breathing vapours. Use with adequate ventilation. Eye protection and gloves are suggested when handling undiluted product. Wash thoroughly after handling. Contents may be under pressure. Use caution when opening.

This product is a clear blue-colored liquid with slight ammonia odour. Primary routes of entry are eye contact, skin contact, and inhalation.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Copper (Cu)	7,60	Mixture	not listed
Other ingredients, including Copper diammonium EDTA complex	92,40	6989-88-2	not listed
Diammonium EDTA		20824-56-0	not listed
Water		7732-18-5	not listed

4. FIRST AID MEASURES

- If on skin:** Remove all contaminated clothing. Wash skin and hair thoroughly with soap and water. Wash clothing before reuse. If irritation persists, get medical attention.
- If in eyes:** Flush with running water for at least 15 minutes while holding eyelids open to help flush out material. Get medical attention.
- Ingestion:** Drink 1-2 glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person. Keep head lower than chest to avoid aspiration into lungs. Call a physician immediately or contact poison control centre.
- Inhalation:** Remove to fresh air. If breathing is difficult, administer oxygen; if breathing stops, administer artificial respiration. Get medical attention immediately.

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.

NOTE TO PHYSICIAN: No known antidote, treat symptomatically.

5. FIRE FIGHTING MEASURES

- FLASH POINT (°F/Test Method):** Does not flash.
- FLAMMABLE LIMITS (LFL & UFL):** Not established
- EXTINGUISHING MEDIA:** Considered non-combustible, use medium appropriate to surrounding fire. Water fog or spray, foam, or CO₂.
- HAZARDOUS COMBUSTION PRODUCTS:** May include but are not limited to oxides of carbon and oxides of nitrogen.
- 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:** None known.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Ventilate area. Contain spill, absorb liquid with clay or other absorbent material. Sweep up material and place in container for possible land application according to label use or for proper disposal. Check local and provincial regulations for proper disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Open the container carefully. Avoid prolonged or repeated eye and skin contact when handling this product. Eye protection and gloves are suggested when handling undiluted product. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if product 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 original container only. Store in a cool, dry place. Store below 77°F / 25°C. Do not store below 14°F / -10°C. Avoid freezing. If product freezes, allow it to warm and then mix vigorously before use. Store in PVC, PE, stainless steel, or bituminized tanks. Do not use food or drink containers for mixing or storage. Containers should not be opened until ready for use. It is recommended that product be retested if stored more than 2 years. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Work in a well-ventilated area.
RESPIRATORY PROTECTION: Wear a NIOSH / MSHA approved respirator for mists and vapours.
EYE PROTECTION: Chemical goggles, face shield or shielded safety glasses.
SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, coveralls, or impervious apron, footwear. Wear chemical-impervious gloves.

OSHA PEL 8 hr TWA
Not listed

ACGIH TLV-TWA
Not listed

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOUR: Clear blue-colored liquid with slight ammonia odour. **SOLUBILITY:** Miscible
SPECIFIC GRAVITY (Water = 1): 1,25 g/ml **BULK DENSITY:** 1,25 kg/L **pH:** 6,2 – 7,2 (1% solution)
VAPOUR PRESSURE: same as water **BOILING POINT:** 212°F / 100°C
PERCENT VOLATILE (by volume): Not established **EVAPORATION RATE: (Butyl Acetate = 1):** 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: Excessive heat. Keep containers tightly closed. Avoid prolonged storage at elevated temperatures.
INCOMPATIBILITY: Contact with aluminum will evolve hydrogen. Avoid contact with aluminum, copper, copper alloys, and nickel
HAZARDOUS DECOMPOSITION PRODUCTS: May include but are not limited to oxides of carbon, oxides of nitrogen, and water vapour.
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (male rat): > 2000 mg/kg (based on a similar product) **Acute Dermal LD₅₀ (rabbit):** Not established
Eye Irritation (rabbit): Not established **Skin Irritation (rabbit):** Not established
Inhalation LC₅₀ (female rat): Not established. **Skin Sensitization (Guinea Pig):** Not established
Carcinogenic Potential: Not listed in OSHA, NTP, IARC, or ACGIH.
Target Organs: Overexposure may affect skin, eyes, and respiratory tract.

12. ECOLOGICAL INFORMATION

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 by cleaning of equipment or disposal of wastes.

13. DISPOSAL CONSIDERATIONS

Do not reuse containers for any purpose. Container is recyclable, and is to be disposed of at a container collection site. Contact your local dealer/distributor for the location of the nearest collection site. Before taking container to the collection site: Triple or pressure-rinse the empty container, adding the rinsate to the spray tank. Make the empty container unsuitable for further use. If there is no container collection site in your area, 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

U.S. Surface Freight Classification: FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI, LIQUID (NMFC 68140, SUB 6; CLASS 70)

IMDG Shipping Description: NOT REGULATED

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

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:

NFPA

HMIS

1 Health	0 Least	1 Health
0 Flammability	1 Slight	0 Flammability
0 Instability	2 Moderate	0 Reactivity
	3 High	B PPE
	4 Severe	

SARA Hazard Notification/Reporting

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: Copper Compounds (no RQ assigned to category)

SARA, Title III, Section 313: Copper Compounds

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

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