

MATERIAL SAFETY DATA SHEET

NORTRACE® EDTA 7.5% COPPER

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: 1-800-301-7976

U.S. Coast Guard National Response Center: 1-800-424-8802

PRODUCT NAME: NORTRACE® EDTA 7.5% COPPER 7.5-0-0

CHEMICAL NAME: Ethylenediaminetetraacetic acid, Copper chelate

CHEMICAL FAMILY: Liquid blended micronutrient solution

EPA REG. NO.: not applicable

MSDS Number: EDTA75CU-04b-LPI **MSDS Revisions:** See section 16

Date Of Issue: 07/09/04

Supersedes: 03/22/04

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – Harmful if swallowed, inhaled or absorbed through skin. May cause eye and skin irritation. Avoid contact with eyes, skin and clothing. Avoid breathing vapors. 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 dark blue-colored solution with slight ammonia odor. Primary routes of entry are eye contact and skin contact.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
EDTA, diammonium copper salt, Derived from Ethylenediaminetetraacetic acid and Cupric (Copper) Oxide	7.50	54453-03-1 60-00-4 1317-38-0	none established
Inert ingredients	92.50		

4. FIRST AID MEASURES

If in eyes: Immediately flush eyes with plenty of water. Continue flushing for at least 15 minutes and call a physician if irritation persists.

If on skin: Flush affected skin with water. Remove all contaminated clothing. Launder clothing before reuse.

If inhaled: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician if indicated.

If swallowed: Drink plenty of water if conscious. Call a physician or poison control center immediately for advice on inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: **1-800-301-7976**.

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. Dry chemical, carbon dioxide (CO₂), foam, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS:

May include but are not limited to oxides of carbon and oxides of copper, ammonia, 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:

Containers may burst due to pressure build-up of ammonia.

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, 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: Open the container carefully. Contents may be under pressure and has a mild odor of ammonia. Eye protection and gloves are suggested when handling undiluted product. Use with adequate ventilation.

STORAGE: Store in original container only. Store in a cool place above 25°F and out of direct sunlight. Avoid freezing. If product freezes, allow it to warm and then mix vigorously before use. Do not use food or drink containers for mixing or storage. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Not normally required. If ammonia odor is too strong use an approved respirator for anhydrous ammonia.

RESPIRATORY PROTECTION: Not normally required, if ammonia vapors are too strong wear a NIOSH approved respirator for anhydrous ammonia.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-resistant gloves.

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Ammonia

OSHA PEL 8 hr TWA
35 mg/m³

ACGIH TLV-TWA
17 mg/m³

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear dark blue-colored solution with slight ammonia odor
SPECIFIC GRAVITY (Water = 1): 1.25 g/ml
VAPOR PRESSURE: Not established
PERCENT VOLATILE (by volume): 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.

BULK DENSITY: 10.43 lbs/gal.
BOILING POINT: 212°F/100°C
EVAPORATION RATE: Not established

SOLUBILITY: Soluble
pH: 7.0

10. STABILITY AND REACTIVITY

STABILITY: Stable
INCOMPATIBILITY: Strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS: May include but are not limited to oxides of carbon and oxides of copper, ammonia, and oxides of nitrogen.
HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Excessive heat. Keep containers tightly closed.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): Ammonia: 350 mg/kg
Eye Irritation (rabbit): Causes slight irritation
Inhalation LC₅₀ (rat): 2000 ppm (4 hr).
Carcinogenic Potential: None listed in OSHA, NTP, IARC or ACGIH

Acute Dermal LD₅₀ (rabbit): not established
Skin Irritation (rabbit): Causes slight irritation
Skin Sensitization (guinea pig): not established.

12. ECOLOGICAL INFORMATION

Material is toxic to fish and other aquatic organisms.
Do not contaminate water supplies.

13. DISPOSAL CONSIDERATIONS

Do not reuse container. Triple rinse (or equivalent), and add rinsate to mixing tank. Then offer for recycling at an ACRC site (go to <http://www.acrecycle.org> for locations) or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Wastes resulting from the use of this product may be disposed of at an approved waste disposal facility. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: NOT REGULATED BY USDOT
Freight Classification: FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI, LIQUID (NMFC 68140, SUB 6; CLASS 70)
Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes

15. REGULATORY INFORMATION

SARA Hazard Notification/Reporting NFPA & HMIS Hazard Ratings:

NFPA		HMIS			
1	Health	0	Least	1	Health
0	Flammability	1	Slight	0	Flammability
1	Instability	2	Moderate	1	Reactivity
		3	High	H	PPE
		4	Severe		

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: Ammonia (CAS: 7664-41-7) 100 pounds; Copper Compounds (no RQ assigned to category)

SARA, Title III, Section 313: Ammonia (CAS: 7664-41-7); Copper Compounds

RCRA Waste Code: Not listed

CA Proposition 65: Not listed

16. OTHER INFORMATION

MSDS STATUS: Format modified to address changes in ANSI Standard Z400.1-2004

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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Information regarding the contents and levels of metals in this product is available on the Internet at <http://www.regulatory-info-uap.com>

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