


NFPA HAZARD RATING				U.S. TRANSPORT SUMMARY	
0	Least				
1	Slight	2	Health		Not regulated by the U.S. DOT as a hazardous material in less than 335 gallons. See Section 14 for additional information.
2	Moderate	0	Flammability		
3	High	0	Reactivity		
4	Severe				

SECTION 1: IDENTIFICATION	
Product Name:	Max-In® Copper
EPA Registration #:	Exempt
Product ID/Unity #:	1414830, 1414831, 1414832, 1414835
Common Name:	Copper fertilizer
Chemical Description:	Copper EDTA
Recommended Uses:	Fertilizer product – See product label for full directions for use.
Restrictions for Use:	See product label for any potential restrictions on use.
Manufactured For: WINFIELD SOLUTIONS, LLC P. O. Box 64589 St. Paul, MN 55164-0589	MEDICAL EMERGENCY TELEPHONE NUMBER: 1-877-424-7452 (24hrs) Non-Emergency Business Inquiries: 1-855-494-6343 Mon – Fri 8am – 5pm (Central Standard Time)
FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL: IN THE U.S. - CHEMTREC 1-800-424-9300 (24 hours) IN CANADA – PROSAR 1-877-762-4573 (24 hours)	

SECTION 2: HAZARDS IDENTIFICATION	
EMERGENCY OVERVIEW: Blue liquid with slight ammonia odor. Causes eye and skin irritation. May cause respiratory irritation.	
POTENTIAL HEALTH EFFECTS: Eyes: Causes moderate but temporary eye irritation. Skin: Causes moderate but temporary skin irritation. Prolonged or repeated exposure may lead to reddening of skin, rash, dermatitis, or other skin reactions. Inhalation: May cause irritation of the respiratory system and have potential effects on the central nervous system. Ingestion: Harmful if swallowed. Preexisting Conditions: Pre-existing respiratory and skin conditions may be aggravated by exposure. Chronic Health Effects: None known	
Carcinogenicity	NTP: Not listed IARC: Not listed OSHA: Not listed
OSHA HCS 2012 CLASSIFICATION: Acute Oral Toxicity Category 4; Skin Irritation Category 2; Eye Irritation Category 2B; Specific Target Organ Toxicant – Single Exposure Category 3	
SIGNAL WORD: WARNING	
HAZARD STATEMENTS: Harmful if swallowed. Causes skin irritation. Causes eye irritation. May cause respiratory irritation.	
Percent of product with unknown toxicity: 0.05%	
PRECAUTIONARY STATEMENTS: Prevention: Wash hands thoroughly after handling. Wear protective gloves. Do not eat, drink or smoke when using this product. Avoid breathing mist or vapors. Use only outdoors in a well-ventilated area.	

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Response:	If Swallowed: Immediately call a poison control center (1-877-424-7452) or doctor for treatment advice. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison control center (1-877-424-7452) or doctor for treatment advice if you feel unwell.
Storage:	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal:	Dispose of contents/container in accordance with Federal, state and local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS		
Ingredient	% (wt)	CAS Reg. #
Diammonium salt of Copper EDTA	30.0 – 35.0%	67989-88-2
Free ammonia	<3.0%	7664-41-7
*Ingredients not specifically listed are non-hazardous and are considered to be confidential business information under 29 CFR 1910.1200(j).		
See Section 8 for exposure limits.		

SECTION 4: FIRST AID MEASURES	
Inhalation:	Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
Ingestion:	Seek medical attention or call a poison control center for treatment advice. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Eyes:	Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if irritation persists.
Skin:	Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if irritation persists.

SECTION 5: FIRE FIGHTING MEASURES	
Suitable Extinguishing Media:	Water fog, foam, dry chemical, carbon dioxide (CO ₂), water spray
Unsuitable Extinguishing Media:	Water jet
Special Fire Fighting Procedures:	Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind.
Hazardous Combustion Products:	Thermal decomposition may include carbon dioxide, carbon monoxide and oxides of copper. Airborne copper may also be present (harmful to respiratory system.)
Unusual Fire and Explosion Hazards:	Closed containers may explode from vapor expansion in high heat.

SECTION 6: ACCIDENTAL RELEASE MEASURES	
Personal Precautions:	Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.
Environmental Precautions:	Do not allow spilled product to enter sewers or waterways.
Methods for Containment:	Contain spilled product by diking area with sand or earth.
Methods for Clean-up:	Cover contained spill with an inert absorbent material such as sand, vermiculite or other appropriate material. Vacuum, scoop or sweep up material and place in a container for disposal. Do not place spilled material back in original container.
Other Information:	Spills of this product may require reporting under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as the product contains Ammonia with a reportable quantity (RQ) of 100 lbs. See Section 15 for additional information.

SECTION 7: HANDLING AND STORAGE

Handling: Ensure adequate ventilation during handling and use. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Storage: Store in a secured area, away from children, feed and food products. Store in original container only and in a cool, well-ventilated dry place above the minimum storage temperature.

Minimum Storage Temperature: 40°F

Other Precautions: Consult Federal, state and local laws and regulations pertaining to storage.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component:	OSHA PEL	ACGIH TLV	NIOSH REL
Copper dusts & mists (as Cu)	1 mg/m ³	1 mg/m ³	1 mg/m ³
Ammonia (CAS# 7664-41-7)	35 mg/m ³ or 50 ppm 8 hour TWA	24 mg/m ³ or 35 ppm 15 min. STEL 17 mg/m ³ or 25 ppm 8 hour TWA	27 mg/m ³ or 35 ppm 15 min. STEL 18 mg/m ³ or 25 ppm 8 hour TWA

Respiratory Protection: For most well-ventilated conditions, no respiratory protection should be needed. If airborne concentrations exceed permissible levels or if a pre-existing respiratory condition exists, use a NIOSH approved air-purifying respirator with cartridges/canisters approved for general particulates.

Engineering Controls: **Local Exhaust:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

Protective Gloves: Wear chemically protective gloves to prevent exposure to skin.

Eye Protection: Wear chemical goggles or safety glasses and full face shield. Contact lenses are not protective eye devices. An emergency eyewash or water supply should be readily accessible to the work area.

Other Protective Clothing or Equipment: Wear long-sleeve shirt, long pants and shoes plus socks to prevent skin contact.

Work/Hygienic Practices: Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid	Specific Gravity (H₂O=1):	1.19 (typical)
Vapor Pressure (mm Hg):	Not determined	Density (lbs/gallon):	9.93 lbs/gallon (typical)
Vapor Density (Air=1):	Not determined	Melting Point/Freezing Point:	Not determined
Solubility in Water (wt %):	100%	Boiling Point/Range:	Not determined
Viscosity:	Not determined	pH:	7.0 – 7.5
Appearance and odor:	Blue liquid with slight ammonia odor	Flash Point:	Non-combustible

SECTION 10: STABILITY AND REACTIVITY

Reactivity: None known

Chemical Stability: Product is stable at ambient temperature and pressure, under normal storage and handling conditions.

Possibility of Hazardous Reactions: Will not occur

Conditions to Avoid: Excessive heat

Incompatible Materials: Not yet determined

Hazardous Decomposition Products: Thermal decomposition may include carbon dioxide, carbon monoxide and oxides of copper. Airborne copper may also be present (harmful to respiratory system.)

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Eye Effects: Causes moderate but temporary irritation.
Skin Effects: Causes moderate but temporary irritation. Estimated LD50 >5,000 mg/kg
Acute Inhalation Effects: May cause irritation of the respiratory system and effects on the central nervous system.
Acute Oral Effects: Estimated LD50 = 1699 mg/kg
Specific Target Organ Toxicity: Respiratory system

CHRONIC TOXICITY

Chronic Effects: None known
Carcinogenicity: None known
Mutagenicity: None known
Teratogenicity: None known
Reproductive Toxicity: None known

POTENTIAL HEALTH EFFECTS:

Eyes: Causes moderate but temporary eye irritation.
Skin: Causes moderate but temporary skin irritation. Prolonged or repeated exposure may lead to reddening of skin, rash, dermatitis, or other skin reactions.
Inhalation: May cause irritation of the respiratory system and have potential effects on the central nervous system.
Ingestion: Harmful if swallowed.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This product is not anticipated to be acutely toxic to aquatic organisms based upon available component data.

ECOTOXICITY DATA:

Fish Acute and Prolonged Toxicity: Estimated 96hr LC50 = 16 mg/L
Aquatic Invertebrate Acute Toxicity: Estimated 48hr EC50 for *Daphnia magna* = 257 mg/L
Aquatic Plant Toxicity: Estimated 72hr EC50 for algae = 1,817 mg/L
Bird Acute and Prolonged Toxicity: Not determined
Honeybee Toxicity: Not determined

ENVIRONMENTAL EFFECTS:

Soil Absorption/Mobility: Not determined
Persistence and degradability: Not determined
Bioaccumulative Potential: Not determined
Other adverse effects: Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

Waste: Dispose of in accordance with applicable Federal, state and local laws and regulations.
Container: Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations.
RCRA Characteristics: It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

SECTION 14: TRANSPORT INFORMATION

DOT (Ground): This product is not regulated by the U.S. Department of Transportation as a hazardous material for ground shipment in quantities less than 335 gallons. For quantities greater than or equal to 335 gallons: UN3082, Environmentally hazardous substance, liquid, n.o.s. (Ammonia), 9, PG III, RQ
IMDG (Sea): This product is not regulated as a hazardous material under the IMDG code.
IATA (Air): This product is not regulated by IATA as a hazardous material for air shipment in quantities less than 335 gallons. For quantities greater than or equal to 335 gallons: UN3082, Environmentally hazardous substance, liquid, n.o.s. (Ammonia), 9, PG III, RQ
TDG (Canada): This product is not regulated as a hazardous material under TDG for ground shipment within Canada.

SECTION 15: REGULATORY INFORMATION

TSCA Inventory: All components are either listed or exempt from listing on the TSCA inventory.

SARA Title III Information:

Section 302 - Extremely hazardous substances: Ammonia (CAS # 7664-41-7)

Section 311/312 – Hazard Categories: Immediate (Acute)

Section 313 – The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:

Copper compounds (67989-88-2) <35.0%; Ammonia (CAS # 7664-41-7) <3.0%

CERCLA - This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

Ammonia (7664-41-7) has an RQ of 100 lbs reached with 335 gallons of product

California Proposition 65: This product does not contain any chemicals known to the state of California to cause cancer and/or reproductive harm.

U.S. State Worker and Community Right-To-Know (RTK) Information (CT, IL, MA, MN, NH, NJ, PA, RI):

Chemical Name	CAS #	State(s)
Ammonia	7664-41-7	MA, NJ, PA

Canadian Domestic Substances List: All components are listed or exempt from listing on the DSL.

WHMIS Classification: This product is not approved for use in Canada. WHMIS classification is not determined.

SECTION 16: OTHER

Disclaimer: The information presented herein is based on available data from reliable sources and is correct to the best of WinField Solutions' knowledge. WinField Solutions, LLC makes no warranty, express nor implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

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