

LAKE RESTORATION, INC.

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identity: Mizzen®
EPA Reg. No. 84868-1

Recommended use of the chemical and restrictions on use:

Product Use: For use as algaecide in fresh water lakes, potable water reservoirs, ponds, fish hatcheries, irrigation ditches, and other slow moving bodies of water. Also for use in irrigation systems, fountains, water features and other moving water. Read and understand the entire label before using. Use only according to label directions. It is a violation of Federal law to use this product in a manner inconsistent to label directions.

Uses Advised Against: None known

Manufacturer: Lake Restoration, Inc.
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Rogers, MN 55374

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Emergency Phone: (800) 255-3924 (ChemTel, Inc.)
(800) 222-1222 (National Capital Poison Control Center)

SDS Date of Preparation: 7/6/15

2. HAZARDS IDENTIFICATION

GHS Classification:

Physical:	Health:
Not Classified	Acute Inhalation Toxicity Category 4 Acute Oral Toxicity Category 4

GHS Label Elements:

Warning!



Hazard Statements

H302	Harmful if swallowed.
H332	Harmful if inhaled.

Precautionary Statements

P261	Avoid breathing mist, vapors, or spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER or doctor if you feel unwell.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330	Rinse mouth.
P501	Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Triethanolamine	102-71-6	30-40%
Water	7732-18-5	25-35%
Copper Sulfate Pentahydrate*	82027-59-6	20-30%

* Metallic copper equivalent, 8%

4. FIRST AID MEASURES

Eye: Rinse eyes thoroughly with water, while holding the eyelids apart. Get medical attention if irritation occurs and persists.

Skin: Flush thoroughly with water. Get medical attention if irritation occurs. Remove and launder clothing before re-use.

Inhalation: Remove victim to fresh air. Get medical attention if you feel unwell.

Ingestion: Rinse mouth with a small amount of water. Do not induce vomiting unless directed to do so by a medical professional. Get medical attention if you feel unwell.

Most Important Symptoms: May cause moderate eye irritation. Inhalation of mists or vapors may cause slight respiratory tract irritation. Harmful if swallowed or inhaled. If swallowed may cause cause gastrointestinal disturbances.

Indication of immediate medical attention/special treatment: Immediate medical attention is not required.

5. FIRE-FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use measures appropriate to local circumstances and surrounding environment.

Specific Hazards Arising from the Chemical: This material is not flammable or combustible.

Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water spray. Contain water used in firefighting from entering sewers or natural waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Avoid contact with eyes. Wear suitable protective clothing to prevent prolonged skin contact. Avoid breathing mists or vapors. Ventilate the area.

Methods and Materials for Containment and Cleaning Up: Contain and collect using an inert absorbent material and place in appropriate containers for disposal. Clean spill site with water. Notify authorities of releases as required.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes. Wear suitable protective clothing to prevent prolonged skin contact. Avoid breathing mists or vapors. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Wash clothing before re-use.

Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning, if appropriate.

Empty containers retain product residues which can be hazardous. Follow all SDS precautions when handling empty containers.

Conditions for Safe Storage, Including Any Incompatibilities: Store in a cool, dry place away from children and animals. Keep away from heat, flames and direct sunlight. Avoid extreme temperatures above 200°C (392°F). Keep container tightly closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Triethanolamine	5 mg/m ³ TWA ACGIH TLV
Water	None Established
Copper Sulfate Pentahydrate (as dusts and mists, as Cu)	1 mg/m ³ TWA ACGIH TLV 1 mg/m ³ TWA OSHA PEL

Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Respiratory Protection: None should be needed for normal use. In operations where the occupational exposure limits are exceeded, an approved respirator with applicable cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Skin Protection: For prolonged use, use impervious gloves. Contact your glove supplier for assistance in selecting an appropriate glove.

Eye Protection: Wear chemical safety glasses or tight fitted goggles where splashing is possible.

Other: Impervious coveralls, apron and boots is required to prevent prolonged skin contact and contamination of personal clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Turquoise liquid	Flammable Limits: LEL: Not applicable UEL: Not applicable
Odor: Moderate odor	Vapor Pressure: Not available
Odor Threshold: Not available	Vapor Density: Not available
pH: 6.96 @ 77°F (25°C)	Relative Density: 1.28248 @ 73.4°F (23°C)
Melting/Freezing Point: Not available	Solubility (ies): Soluble in water and alcohols
Initial Boiling Point/Range: 212°F (100°C)	Partition Coefficient Octanol/Water: Not available
Flashpoint: Not flammable	Auto-ignition Temperature: Not available
Evaporation Rate: Not available	Decomposition Temperature: >392°F (>200°C)
Flammability (solid, gas): Not applicable	Viscosity: 15.964 cSt @ 67.1°F (19.5°C), 6.5916 cSt @ 112.1°F (44.5°C)

10. STABILITY AND REACTIVITY

Reactivity: Not reactive

Chemical Stability: Stable under normal storage and handling conditions. Open containers can lose small amounts of water by volatilization.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur. If used in water where the pH is below 6, the copper chelate may dissociate and release copper ions which could subsequently be precipitated as insoluble copper salts. Contact with incompatible materials may form rust, change the color of the product, and may slightly heat up by 47.84°F (8.8°C).

Conditions to Avoid: Avoid temperatures above >392°F (>200°C). Should not be used where pH of water is below 6. Product should not be applied when water temperature is below 60°F (15.6°C).

Incompatible Materials: Powdered iron, oxidizing agents, and potassium permanganate.

Hazardous Decomposition Products: None known.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:

Eye: May cause moderate eye irritation.

Skin: May cause skin irritation with prolonged contact. Liquid may be absorbed through the skin.

Inhalation: Harmful if inhaled. Inhalation of mists or vapors may cause irritation of the respiratory tract.

Ingestion: Harmful if swallowed. Swallowing large amounts of liquid may irritate stomach and cause nausea, vomiting, and diarrhea.

Chronic: Prolonged overexposure to copper may cause adverse effects on the blood and discoloration of the skin and hair.

Sensitization: This product is not expected to cause sensitization.

Carcinogenicity: None of the components of this product are listed as a carcinogen or suspected carcinogen by IARC, NTP, and OSHA.

Germ Cell Mutagenicity: Not expected to cause germ cell mutagenicity.

Reproductive Toxicity: Not expected to cause reproductive harm.

Numerical Measures of Toxicity:

Product: Oral rat LD50: 1312 mg/kg, Inhalation rat LC50: >1.11 mg/L/4hr (as mist), Dermal rabbit LD50: 2918 mg/kg

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

Copper Sulfate Pentahydrate (as Copper): 96 hr LC50 Rainbow trout: 190-210 ug/L, 96 hr LC50 Fathead minnow: 390 ug/L, 48 hr EC50 Daphnia magna: 33.8-792 ug/L (M-factor Acute: 1)

This product is classified as toxic to the aquatic environment. Releases to the environment should be avoided.

Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your state water board or regional office of the EPA.

Persistence and Degradability: Biodegradation is not applicable to inorganic substances.

Bioaccumulative Potential: No data available

Mobility in Soil: No data available

Other Adverse Effects: Some species of fish may be killed at application rates on this label – trout and channel catfish are especially sensitive. Immature fish are more susceptible to injury than mature. Generally, fish toxicity is reduced as water hardness increases. Consult State Fish and Game Agency or other responsible agency before applying this product to public waters.

13. DISPOSAL CONSIDERATIONS

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Dispose in accordance with local and national environmental regulations.

14. TRANSPORT INFORMATION**DOT Hazardous Materials Description:**

Proper Shipping Name: Not Regulated

UN Number: None

Hazard Class/Packing Group: None

Labels Required: None

Note: Inhalation data generated using a smaller particle size than is reasonably foreseeable to be encountered by a human during transport. Since a mist is not likely to be generated in a leakage of the transport containment, this material is not regulated as a poison for transport per DOT 49 CFR 173.132 (b)(3), IATA 3.6.3.3, IMO IV / 6.1 / 2.2.3, RID / ADR 2600 / 2.5.

15. REGULATORY INFORMATION**U.S. FEDERAL REGULATIONS:**

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. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

FIFRA Labeling:

Keep Out of Reach of Children

CAUTION

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals

CAUTION: Harmful if swallowed or absorbed through the skin. Avoid breathing vapor or spray mist. Avoid contact with skin, eye or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Environmental Hazards: This product is toxic to fish and aquatic invertebrates. Waters treated with this product may be hazardous to aquatic organisms. Treatment of aquatic weeds and algae can result in oxygen loss from decomposition of dead algae and weeds. This oxygen loss can cause fish and invertebrate suffocation. To minimize this hazard, do not treat more than ½ of the water body to avoid depletion of oxygen due to decaying vegetation. Wait at least 14 days between treatments. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Consult with the State or local agency with primary responsibility for regulating pesticides before applying to public waters, to determine if a permit is required.

Certain water conditions including low pH (≤ 6.5), low dissolved organic carbon (DOC) levels (3.0 mg/L or lower) and “soft” waters (i.e., alkalinity less than 50 mg/L), increase the potential acute toxicity to non-target aquatic organisms.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water when disposing of equipment wash-waters.

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category for Section 311/312: Acute Health

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: Copper Sulfate Pentahydrate (as copper compounds) 20-30%

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on or exempt from the TSCA inventory. This product is an EPA registered pesticide, EPA Registration No. 84868-1.

STATE REGULATIONS:

California Proposition 65: This product does contain a substance known in the State of California to cause cancer and/or reproductive harm.

INTERNATIONAL REGULATIONS:

CANADIAN REGULATIONS

Canadian Environmental Protection Act: Some components of this product are not on the Domestic Substance List (DSL) nor the Non-Domestic Substance List (NDSL).

16. OTHER INFORMATION

NFPA Rating: Health = 1 Flammability = 0 Instability = 0
HMIS Rating: Health = 1 Flammability = 0 Physical Hazard = 0

Date of Current Revision: 7/7/15
Revision Summary: New SDS
Date of Previous Revision: None

NOTICE

The above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Lake Restoration, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.