STORAGE AND DISPOSAL

Pesticide Storage: Store in a safe place away from PETS AND KEEP OUT OF THE REACH OF CHILDREN. Store between 40° and 120° F, away from excessive heat. **Lake-Life™** will freeze. Always keep container closed. Store **Lake-Life™** in its original container only. Bulk **Lake-Life™** shall be stored and handled in stainless steel, fiberglass, polypropylenes, PVCs or plastic equipment. Keep away from galvanized pipe and any nylon storage or handling equipment.

Pesticide Disposal: Excess **Lake-Life™** must be disposed of through use. Do not contaminate lakes, rivers, or streams as this may cause fish kills. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. In the event of a spill, neutralize with limestone or baking soda before disposal. May deteriorate concrete.

CONTAINER HANDLING:

For Nonrefillable Containers ≤5 gallons: Nonrefillable Container: Do not reuse or refill this container. Triple rinse container (or equivalent) 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 2 more times. Offer for recycling if available. If recycling is not available, puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For Nonrefillable Containers >5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) 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. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling if available. If recycling is not available, puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, buy burning. If burned, stay out of smoke.

Manufactured for: Life Science Group, Inc.
Highland, Michigan, USA – (248) 438-5323

MADE IN THE USA

Lake-Life

Algaecide / Bactericide* Aquatic Herbicide

KEEP OUT OF REACH OF CHILDREN

DANGER / PELIGRO

Si usted no entiende la etiqueta, busque an alguien para que se la explique and usted en detalle.
(If you do not understand this label, find someone to explain it to you in detail.)

ACTIVE INGREDIENT:
*Copper Sulfate Pentahydrate
(CAS #7758-99-8) ……19.8%
OTHER INGREDIENTS:……80.2%
TOTAL: ……100.0%
*5% Metallic Copper Equivalent

FIRST AID

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information, call the National Poison Center at 1-800-222-1222.

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 center or physician immediately for treatment advice.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor immediately for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

EPA Reg. No. 88930-1

☐ EPA Est. No. 18419-OH-6

☐ EPA Est. No. 89146-CA-1

☐ EPA Est. No. 89146-GA-1

Non-Flammable DO NOT FREEZE

NET CONTENTS:

☐ 2.5 Gallons ☐ 55 Gallons ☐ 270 Gallons
9.9 lbs. per Gallon 1.188 Kg/L

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

DANGER

Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Harmful if swallowed, inhaled or absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

For applications in waters destined for use as drinking water, those waters must receive additional and separate potable water treatment. Do not apply more than 1.0 ppm as metallic copper in these waters.

PHYSICAL OR CHEMICAL HAZARDS

Do not use near or in containers composed of iron.

PERSONAL PROTECTIVE EQUIPMENT:

Applicators and other handlers must wear:
· Long Sleeve Shirt
· Long Pants
· Chemical-resistant gloves made of any waterproof material (Chemical resistance category A)
· Protective Eyewear
· Shoes plus socks

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.
Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

USER SAFETY RECOMMENDATIONS

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.
- Wash the outside of gloves before removing.

ENVIRONMENTAL HAZARDS

This pesticide 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 10 to 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), increases the potential acute toxicity.

DIRECTIONS FOR USE:

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirement specific to your State and Tribe, consult the State/Tribal agency responsible for pesticide regulation.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not allow people or pets to enter treated areas until sprays have dried.

PRODUCT INFORMATION:

Lake-Life™ is used to control algae, bacteria*, aquatic weeds in irrigation reservoirs, lakes, ponds, livestock watering systems, irrigation and chemigation systems, ornamental water features or fountains.

Lake-Life™ is used to control Quagga and Zebra mussels in lakes, ponds, lagoons, reservoirs, sedimentation basins, canals and ditches.

Lake-Life™ is used for the suppression of bacterial odors and toxic gases in sewage lagoons, feedlot runoff pits, animal confinement facilities, and organic sludge pits containing organic matter of algae/bacteria*.

Lake-Life™ is used to control algae, bacteria* in waters destined for use as drinking water.

*Non-public health bacteria

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and the method of application (e.g., ground, aerial, chemigation) can influence pesticide drift.
The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size: Apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed: Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition (approximately 3 to 10 mph), and there are no sensitive areas within 250 feet downwind.

Temperature Inversions: If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Other State and Local Requirements: Applicators must follow all state and local pesticide drift requirements regarding application of copper compounds. Where states have more stringent regulations, they must be observed.

Equipment: All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

For Aerial Application: The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind. When there may be drift caused by wingtip or rotor vortices, the minimum practical boom length should be used.

For Ground Boom Application: Do not apply with a nozzle height greater than 4 feet above the crop.

SPECIFIC DIRECTIONS FOR USE

ALGAE AND BACTERIA* CONTROL IN IMPOUNDED WATERS, LAKES, PONDS, LIVESTOCK WATERING SYSTEMS, RESERVOIRS, IRRIGATION AND CHEMIGATION SYSTEMS, ORNAMENTAL WATER FEATURES AND FOUNTAINS:

Apply **Lake-Life**™ through metering pump, subsurface hoses or from a properly equipped moving boat into the body of water. No more than ½ of the body of water may be treated in a single application. For small ponds, apply **Lake-Life**™ by directly pouring 2 fluid ounces per 125 cubic feet (1/4 tsp per 20 gallons) of water for 1 ppm of copper into the water around half of the perimeter of the body of water. When applying from boat, use minimal speed to allow the prop wash to disperse and mix the product into the treated waters. Dispense up to 5.5 gallons per acre-foot of water (see use rate chart below). Apply in late spring or early summer when algae/bacteria* first appear. For best results, disperse **Lake-Life**™ evenly to warm, still water on a sunny day when algae are near the surface. Several application points speed up dispersal.

Use rates vary, depending on algae/bacteria* species, water hardness, water temperature, and amount of algae/bacteria* present; as well as whether water is clear, turbid, flowing or static. Preferably, the water should be clear with temperatures above 60ºF (15.6º C). Higher dosages are required at lower water temperatures, higher algae/bacteria* concentrations, and for hard waters. Static water requires less chemical for algae/bacteria* control than does flowing water. Use higher dosages for chara, nitella, and filamentous algae (pond scum), and lower dosages for planktonic algae. If there is uncertainty about the dosage, begin with a lower dose and increase until control is achieved or until the maximum allowable level has been reached. See the use rate chart below.

USE RATES

Gallons of Product per acre/ft	Equivalent Metallic Copper (ppm)
0.33	0.06
0.50	0.09
3.30	0.60
5.50	1.00

Before treating bodies of water, consult proper state authorities, such as the fisheries commission or conservation department to obtain any necessary permits. Do not apply copper sulfate to water less than 40 ppm alkalinity without first testing for fish toxicity in a separate container. Treatment of algae can result in oxygen loss from the decomposition of dead algae, which may cause fish suffocation. Treat one-third to one-half of the water area in a single operation, and wait 14 days between treatments. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. In regions where ponds freeze in winter, treatment should be done 6 to 8 weeks before expected freeze time to prevent masses of decaying algae under an ice cover.

Useful formulas for calculating water volume and flow rates:

To find the capacity of water storage containment in gallons:
Multiply the water volume in cubic feet times 7.5
Note: 1 Cubic Foot per Second of Flow = 27,000 gallons per hour
1 Acre Foot = 326,000 gallons

Calculate the Acre-Feet of water in the body of water to be treated by calculating the surface area in square feet. Then divide by 43,560 (sq.ft./acre). Then multiply by the average depth in feet.

1 Acre Foot of Water = an area of water measuring 43,560 sq. ft. x 1 foot deep
1 Acre Foot of Water = 43,560 cubic feet = 325,851.6 gallons
1 Cubic Foot of Water = 62.4 pounds
1 Acre Foot of Water = 43,560 x 62.4 = 2,720,000 pounds

DIRECT AQUATIC RATES

Crop	Maximum per Application Rate (lbs. Cu2+/A)	Maximum Annual Rate (lbs. Cu2+/A)	Minimum Retreatment Interval (days)
Algae, Cyano-bacteria, Aquatic Weeds, (Elodea spp., Hydrilla, Potamogeton spp., Irrigation Canal Weed, Annual Naiads) for all aquatic application sites	1 part per million (ppm)	n/a	14

Instructions
No more than ½ of the water body may be treated at one time. If the treated water is to be used as a source of potable water, the metallic copper concentration must not exceed 1 ppm.

TO CONTROL QUAGGA AND ZEBRA MUSSELS IN LAKES, PONDS, LAGOONS, RESERVOIRS, SEDIMENTATION BASINS, CANALS AND DITCHES:

Treat mussels only as a curative measure. Treat one-half of the surface of the body of water at a time. For control of adult and juvenile mussels, apply at the rate of 1 gallon of **Lake-Life**™ per 60,000 gallons of water to yield a rate of 1.0 ppm metallic copper. For the control of veligers in the larval mollusk stage, treat at the rate of 3 gallons of **Lake-Life**™ per 1,000,000 gallons of water to yield a concentration of 0.18 ppm metallic copper.

CONTROLOF ALGAE/BACTERIA* IN RESERVOIRS AND TANKS FOR WATER DESTINED FOR USE AS DRINKING WATER:

Lake-Life™ is for use in waters destined for use as drinking water, these waters must receive additional and separate potable water treatment. DO NOT apply more than 1.0 ppm as metallic copper.

Water intended for human use in municipal water reservoirs and tanks:

Use **Lake-Life**™ to control algae/bacteria* in municipal water supplies before they are purified for drinking. Apply 2 fluid ounces per 125 cubic feet (1/4 tsp per 20 gallons) of water for 1 ppm of copper. Apply by boat or from side of reservoir/ tank at equal intervals.

Reservoirs of water intended for drinking water use:

For the control of algae/bacteria* in water reservoirs destined for use as drinking water, refer to the USE RATES below for the specific application rates. Treated water must receive additional and separate potable water treatment. Applications may be repeated in 14 days. Apply by boat or from side of reservoir at equal intervals.

USE RATES

Gallons of Product per acre/ft	Equivalent Metallic Copper (ppm)
0.33	0.06
0.50	0.09
3.30	0.60
5.50	1.00

CONTROL OF ROOTED AND SUBMERGED PLANTS:

Rooted and submerged plants such as Hydrilla and Potamogeton can be controlled using **Lake-Life**™ at 0.4 – 1.0 ppm which equals 0.22-5.5 gals per acre/ft. Application rates are dependent on the density, stage of growth and the water depth. Only treat one half of the body of water at one time. Start at the edge and spray towards the center of the body of water. Applications may be repeated in 14 days.

CONTROL OF FLOATING AQUATIC PLANTS:

Water hyacinth and other floating aquatic vegetation can be suppressed BUT NOT ERADICATED by using a mixture of 1.03 gallons of **Lake-Life**™ per 7 gallons of water. Apply this solution as a coverage spray to thoroughly wet all exposed vegetation. Only treat one half of the body of water at one time. In areas of heavy infestation, multiple applications may be required. Applications may be repeated in 14 days. Do not exceed 5.46 gallons of product per acre foot of water.

IN NON-SPRINKLER, NON-DRIP IRRIGATION CONVEYANCE SYSTEMS AND CHEMIGATION SYSTEMS, DITCHES, CANALS, AND SIMILAR OPEN IRRIGATION CONVEYANCES:

For continuous addition, add 2 fl. oz. per hour of **Lake-Life**™ for each 1,000 gallons of water per hour. For conveyance systems longer than 30 miles, dispense this rate among injection points every 30 miles. Do not exceed the total dosage of 1 Gallon **Lake-Life**™ in 60,000 gallons of water (1 ppm metallic copper).

TO CONTROL ALGAE OR BACTERIA* IN SPRINKLER, DRIP OR OTHER TYPES OF CLOSED IRRIGATION EQUIPMENT:

Use 1 pint **Lake-Life**™ per 7,500 to 300,000 gallons of water. Agitation is not required. Do not mix with basic substances. **Lake-Life**™ must be applied continuously for the duration of the water application.

EXAMPLE CALCULATION
CHEMIGATION AND IRRIGATION FLOW RATES
(0.06 ppm Cu)

Water Flow Rate gallons per minute per acre/ft. (gpm)	Water Flow Rate cubic feet per minute (cfm)	Dosage Rate ppm Metallic Cu	Lake-Life™ fl oz/min	Feeder Pump Setting Lake-Life™mL/min
3,000	400	0.06	0.4	11.3
6,000	800	0.06	0.8	22.6
9,000	1,200	0.06	1.1	34.0
12,000	1,600	0.06	1.5	45.3

CHEMIGATION AND IRRIGATION FLOW RATES
(1.0 ppm Cu)

Water Flow Rate gallons per minute per acre/ft. (gpm)	Water Flow Rate cubic feet per minute (cfm)	Dosage Rate ppm Metallic Cu	Lake-Life™ fl oz/min	Feeder Pump Setting Lake-Life™mL/min
3,000	400	1.0	6.4	188.7
6,000	800	1.0	12.8	377.5
9,000	1,200	1.0	19.1	566.2
12,000	1,600	1.0	25.5	755.0

CONTROL OF BACTERIAL ODOR AND TOXIC GAS PRODUCED BY BACTERIAL ACTION:

Apply up to 1 Gallon of **Lake-Life**™ per 60,000 gallons (8,000 cubic feet) of organic matter (sewage). Application rates may vary depending on amounts of sewage in lagoons and pits. Apply by pouring **Lake-Life**™ into the pit or lagoon. Several application points speed up dispersal. For faster results, disperse **Lake-Life**™ evenly throughout sewage. Bacterial odors should be noticeably reduced in 1-2 weeks. Repeat application when odors recur. Minimum retreatment interval is 14 days.

Feedlot Runoff Lagoons: Add a portion of the required dosage of **Lake-Life**™ at several locations around the lagoon to speed dispersal of the product. A minimum of two applications per year (spring and fall) is recommended. Additional applications may be required as needed or when the lagoon is pumped.

Animal Confinement Pits: If pits are located under the confinement buildings, add **Lake-Life**™ directly to these pits. If the pits are outside, add **Lake-Life**™ to transfer line to the pit.

Organic Sludge Pits: Apply 1 Gallon **Lake-Life**™ in 60,000 gallons of sludge, mixing thoroughly.

APPLICATION AND HANDLING EQUIPMENT

Application, handling or storage equipment MUST consist of either fiberglass, PVCs, polypropylenes, viton, most plastics, aluminum or stainless steel. Never use mild steel, nylon, brass or copper around full strength **Lake-Life**™. Always rinse equipment free and clean of **Lake-Life**™ each night with plenty of fresh, clean water. Always store **Lake-Life**™ above 32ºF. Freezing may cause product separation. Seller makes no warranty for the performance of product which has been frozen.

LIMITED WARRANTY AND LIMITATION OF REMEDIES

To the extent consistent with applicable law, seller warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of FITNESS OR MERCHANTABILITY, expressed or implied, or any other warranty if the product is used contrary to the label instructions, or under abnormal conditions or under conditions not foreseeable to the seller. To the extent consistent with applicable law, in no case shall the seller be liable for more than the cost of this product to the buyer, and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. To the extent consistent with appliable law, this product is offered and the buyer or user accepts it subject to the foregoing terms which may not be varied.

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