Algi-Cure®

Algaecide

- Controls algae and cyanobacteria in potable water reservoirs, ponds & lakes

ACTIVE INGREDIENTS:
- Chelates of copper gluconate (CAS# 527-09-3) ........................................... 12.5%
- Chelates of copper citrate (CAS# 10482-15-0) ........................................... 12.9%
OTHER INGREDIENTS ........................................... 74.6%
TOTAL ........................................... 100.0%
Contains 5% copper, 0.512 lbs. of copper per gallon (62 g/gal)

KEEP OUT OF REACH OF CHILDREN

CAUTION

NET CONTENTS:
ONE GALLON (3.78 Liters)

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

See additional precautions and First Aid in booklet before use. Read Entire Label Before Using This Product

Part No. 5912026

Changing at printer, PMS color will allow reverse copy to print clearer.
PRODUCT INFORMATION

This product is a liquid, water soluble copper formulation designed to effectively control a broad range of algae and cyanobacteria growth in potable water sources including reservoirs, lakes and ponds. Citric and gluconic acids in the formulation provide added chemical stability to the copper when used in alkaline waters. Control of certain forms of algae and cyanobacteria in these water sources can aid in the reduction of taste and odor problems associated with 2-methylisoborneol and geosmin production from these organisms. Dosage rates and frequency of treatment should be based upon the sensitivity of species present, the extent/biomass of the bloom and the depth of growth present in the water column.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read entire label and use strictly in accordance with precautionary statements and directions.

APPLICATION RESTRICTIONS: Do not apply this product in a way that will contact adults, children, or pets, either directly or through drift. Some states may require permits for the application of this product to public waters. Check with your local authorities. Do not enter or allow others to enter until application of product has been completed in the area.

PRE-TREATMENT CONSIDERATIONS:
Consult your proper state authorities such as Dept. of Natural Resources, Fisheries Commission, Health Dept. or Environmental Agency to obtain necessary permits. Initial treatment with this product should be considered at the onset of nuisance bloom conditions as evidenced by initial taste and odor complaints; high cell counts or chlorophyll a concentrations; high MIB or geosmin concentrations; visible surface scum formations; low Secchi disk readings; significant daily fluctuations in dissolved oxygen; and/or sudden increases in pH. Monitoring of several of these parameters on a regular basis will assist in optimizing the timing of treatments and reducing the amounts of this product needed for seasonal control. Identification of primary nuisance species or genera may also be helpful in determining and refining dosage rates.

Identify Target Organism(s): If target species or genera are known, determine dosage genera may also be helpful in determining and refining dosage rates.

Dosage rates and frequency of treatment should be based upon the sensitivity of species present, the extent/biomass of the bloom and the depth of growth present in the water column.

Dosage Rate:
Use the PPM Copper Concentration selected from Table 1 or Table 2 to determine Dosage Rate from Table 3.

METHOD OF APPLICATION:

For Reservoirs, Lakes, Ponds:
If treated water is destined for use as drinking water, the applied metallic copper must not exceed 1 ppm.
• For best results, begin applications early in the season when algae and/or cyanobacteria problems become evident and water temperature above 60°F or 15.6°C.
• Before applying, dilute this product with enough water to ensure even distribution with the type of equipment being used. Break up floating mats of filamentous algae or scum formations before spraying or while application is being made.
• Use rain-sized droplets (0.5 mm or larger) for spraying surface algae mats and cyanobacterial scum formations. Subsurface injection should be used where growth extends into deeper water. This product will disperse within the water column, however, apply as evenly as possible throughout the target area.
• Spray shoreline areas first to avoid trapping fish. In areas of heavy infestation, treat only one-third to one-half of the water volume at one time to avoid fish suffocation caused by oxygen depletion from decaying algae. Allow sufficient time between treatments to allow for oxygen recovery as indicated by D.O. measurements in the water column. In regions where ponds freeze in winter, treatment should be done six (6) to eight (8) weeks before expected freeze time to prevent masses of decaying algae under an ice cover.
• 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 any waters.

GENERAL TREATMENT FACTORS AND CONSIDERATIONS:

The following suggestions apply to the use of this product as an algicide or cyanobactericide in all labeled sites:
• Begin applications early in the day under calm, bright conditions when water temperatures are at least 60°F (15.5°C).

SKU No. 395404A
Part No. 5910620

Manufactured for:
Applied Biochemists
1400 Bluegrass Lakes Pkwy
Alpharetta, GA 30004
1-800-538-5106

EPA Reg. No. 7364-09-b959
EPA Est. No. U2291-0A-1

AlgiCure is a trademark of Lonza or its affiliates.
- Treat when growth first begins to appear and create a nuisance, if possible.
- Apply in a manner that will ensure even distribution of the chemical within the treatment area.
- Re-treat areas if regrowth begins to appear and seasonal control is desired.
- Allow dissolved oxygen levels to recover between consecutive treatments.
- Visible reduction in algae growth should be observed in 24 to 48 hours following application with full effects of treatments sometimes taking 2-10 days depending upon algae forms, weather, degree of infection and water temperatures.
- Before applying, dilute this product with enough water to ensure even distribution with the type of equipment being used. Break up floating mats of filamentous algae or scum formations before spraying or while application is being made.
- Use rain-sized droplets for spraying surface algae mats and cyanobacterial scum formations. Subsurface injection should be used where growth extends into deeper water. This product will disperse within the water column, however, apply as evenly as possible throughout the target area.
- Spray shoreline areas first to avoid trapping fish.
- Allow sufficient time between treatments to allow for oxygen recovery as indicated by D.O. measurements in the water column.
- In regions where ponds freeze in winter, treatment should be done six (6) to eight (8) weeks before expected freeze time to prevent masses of decaying algae under an ice cover.

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., water surface sprayer) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

TABLE 1.

<table>
<thead>
<tr>
<th>TABLE 1. COPPER REQUIRED FOR CONTROL OF SOME GENERA OF ALGAE AND CYANOBACTERIA WITH THIS PRODUCT (Use lower range concentrations in soft waters where algae growth is light to moderate. Use higher range concentrations in moderate to hard waters where algae growth is moderate to heavy.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Form</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Anabaena</td>
</tr>
<tr>
<td>Asterocystis</td>
</tr>
<tr>
<td>Euglena</td>
</tr>
<tr>
<td>Microcystis</td>
</tr>
<tr>
<td>Microspora</td>
</tr>
</tbody>
</table>

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 water surface application equipment must be properly maintained and calibrated using appropriate carriers or surrogates. If applied by water surface sprayer: Do not apply with a nozzle height greater than 4 feet above the water surface.

APPLICATION AND HANDLING EQUIPMENT:
Application, handling or storage equipment must consist of either fiberglass, PVC, polypropylene, Teflon, most plastic, aluminum or stainless steel. Never use mild steel, nylon, brass or copper around full strength of this product.

Always rinse equipment free and clean of this product each night with plenty of fresh, clean water. Concentrate will destroy cotton and nylon materials. Seller makes no warranty for the performance of product that has been frozen.

TABLE 2. PPM COPPER REQUIRED FOR CONTROL OF ALGAE GROWTH FORMS/ADENAASS (Abundance) WITH THIS PRODUCT: Use the following concentrations in areas where algae genera have not been identified or positively identified. (Use lower range concentrations in soft waters and higher range concentrations in moderate to hard waters.)

<table>
<thead>
<tr>
<th>Abundance</th>
<th>Growth Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light</td>
<td>0.06 - 0.12</td>
</tr>
<tr>
<td>Moderate</td>
<td>0.12 - 0.25</td>
</tr>
<tr>
<td>Severe</td>
<td>0.50 - 1.00</td>
</tr>
</tbody>
</table>

Total quantity of this product required can be determined by multiplying dosage rates times total volume of water to be treated. Do not exceed 1.0 ppm copper dosage rate.

TABLE 3. Dosage Rate (Gallons of Product)

<table>
<thead>
<tr>
<th>PPM Copper</th>
<th>Per Acre-Foot</th>
<th>Per Million Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.06</td>
<td>0.53</td>
<td>1.22</td>
</tr>
<tr>
<td>0.12</td>
<td>0.64</td>
<td>1.33</td>
</tr>
<tr>
<td>0.20</td>
<td>1.09</td>
<td>2.25</td>
</tr>
<tr>
<td>0.25</td>
<td>1.25</td>
<td>2.66</td>
</tr>
<tr>
<td>0.30</td>
<td>1.50</td>
<td>3.19</td>
</tr>
<tr>
<td>0.40</td>
<td>2.12</td>
<td>4.33</td>
</tr>
<tr>
<td>0.50</td>
<td>3.08</td>
<td>6.15</td>
</tr>
<tr>
<td>0.60</td>
<td>4.06</td>
<td>9.78</td>
</tr>
<tr>
<td>0.70</td>
<td>5.04</td>
<td>14.91</td>
</tr>
<tr>
<td>0.80</td>
<td>6.00</td>
<td>15.32</td>
</tr>
<tr>
<td>0.90</td>
<td>7.08</td>
<td>16.32</td>
</tr>
<tr>
<td>1.00</td>
<td>8.15</td>
<td>17.32</td>
</tr>
</tbody>
</table>
FIRST AID
If Swallowed: Call a poison control center immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or a doctor. Do not give anything by mouth to an unconscious person.
If in eyes: Hold eyelids open and rinse slowly with water for 15 – 20 minutes. Remove contact lenses if present after 5 minutes then continue rinsing eye. Call poison control center or doctor for treatment advice.
If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. Call poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center, doctor, or going for treatment.
IN CASE OF EMERGENCY CALL 1-800-654-6911
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Measure against circulatory shock, respiratory depression and convulsions may be needed.

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals
CAUTION: Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing.
PERSONAL PROTECTIVE EQUIPMENT (PPE)
Wear: goggles, respirator, disposable gloves, long sleeve shirt, long pants, water resistant boots.
USER SAFETY RECOMMENDATIONS
Users should wear gloves, goggles, and non-nitrile face mask when using.

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 1/2 of the water body to avoid depletion of oxygen due to decomposing vegetation. Wait at least 10 to 14 days between treatments.