# **PHYCOMYCIN<sup>®</sup> SCP** ALGAECIDE/CYANOBACTERIOCIDE

- Copper-free formulation
- For Fish Ponds including koi and trout and other sensitive species
- Reduces organic build-up
- Effective against most toxin-producing cyanobacteria
- Destroys algal cell membranes and chlorophyll, providing immediate control of algae

This product is a fast-acting granular algaecide and cyanobacteriocide for use in: Lakes, Reservoirs Water, Farm, Fire, Fish, Golf Course, Industrial, Irrigation, Ornamental, Stormwater Detention, and Wastewater Ponds, Ballast Water, Aquaculture, and Irrigation Conveyance Systems. This product works through a powerful oxidation reaction, killing the algae on contact, without harming fish (including sensitive fish such as trout and koi), plants, or aquatic life, when used at label rates. Waters treated with this product may be used for swimming, fishing, animal consumption, or irrigating turf, ornamental plants or crops.

#### ACTIVE INGREDIENT:

Sodium Carbonate Peroxyhydrate	85.0%
OTHER INGREDIENTS:	
TOTAL:	100.0%

# KEEP OUT OF REACH OF CHILDREN **DANGER**

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.)

Read all Precautionary and First Aid Statements before use.

Sold by: Applied Biochemists 1400 Bluegrass Lakes Pkwy Alpharetta, GA 30004 1-800-558-5106



Maximum Use Level

EPA Reg. No. 8959-60 EPA Est. No. 84663-AL-1 EPA Est No. 82299-GA-001

(MUL) for potable )1 water is 33 MG/L.

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## FIRST AID

**IF IN EYES:** Hold eye open and rinse slowly for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

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

**IF ON SKIN:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have a person drink plenty of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Have the product container or label with you when calling a

poison control center or doctor, or going for treatment. **NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

IN CASE OF EMERGENCY CALL: 1-800-654-6911

# PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER: Corrosive. Causes irreversible eye damage and skin irritation. Harmful if swallowed or inhaled.

• Open in well-ventilated area. • Avoid breathing (dust, vapor or spray mist). • Wear protective eyewear such as goggles, face shield, or safety glasses). • Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. • Remove and wash contaminated clothing before use.

### Personal Protective Equipment (PPE)

Mixers, loaders, applicators, and other handlers must wear the following: • long-sleeve shirt, • long pants, • shoes and socks, • goggles or safety glasses, and • waterproof gloves.

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

#### PHYSICAL AND CHEMICAL HAZARDS

Oxidizing agent. Contact with combustible materials may cause fire. Never use concentrate with other pesticides, cleaners or oxidizing agents.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to birds. This product is highly toxic to bees and other beneficial insects exposed to direct contact on blooming crops or weeds. Do not apply this product or allow to drift to blooming crops or weeds while bees are actively visiting the treatment area. Do not apply this product or allow it to drift to crops where beneficials are part of an integrated pest management strategy. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not use near waterbody margins during amphibian breeding seasons. When applying this product to water bodies, avoid spilling on ground where birds and feed may be present. Undissolved particles of this product may be corrosive to beaks of birds.

Treatment of aquatic weeds and algae can result in oxygen loss from decomposition of dead algae and weeds. To minimize this hazard, do not treat more than  $\frac{1}{2}$  of the water body to avoid depletion of oxygen due to decaying vegetation. Wait 2 to 3 days between treatments.

## DIRECTIONS FOR USE:

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply directly to treated, finished drinking water reservoirs or drinking water receptacles when the water is intended for human consumption.

Do not allow spray to drift from the application site and contact people or structures that people occupy.

- 1. Determine density and/or type of algae growth present.
- 2. Use Table 1 to determine the dosage rate.
- 3. Determine acre-feet within the intended treatment area (area of infestation) by measuring length, width and average depth using the formula [below][{location}]:

Length (ft.) x Width (ft.) x Average Depth (ft.) = Acre-feet 43,560

**Note:** 43,560 sq. ft. = 1 acre-foot

- 4. Multiply acre-feet from step #3 times the dosage rate from step #2 to calculate the total pounds required for the treatment area.
- 5. The following are techniques to apply this product:

**Broadcast Application:** Apply uniformly, using a mechanical spreader or gloved hand directly onto the water surface.

**Liquid Application:** Dissolve the required amount of this product with enough water to ensure even distribution with the type of equipment being used, and agitate constantly. (Typically, 0.5 lb of product is dissolved in 1 gallon of water when using as a spray solution.)

**Injection Application:** Make a solution with this product. Inject this solution into the water via a piping system.

**Subsurface Application:** Subsurface pump equipment may also be used. Calibrate for dry products and follow manufacturer requirements for product compatibility and maintenance.

**Sprinkler and Drip Irrigation Systems Application:** For application using sprinkler and drip irrigation systems see **'CHEMIGATION SYSTEM APPLICATION'** section.

Table 1. Product Dosage Rate by Density or Type			
Algal Growth and Type	Density (cells/mL)	Amount of Product Required (lbs/acre-ft)	Peroxide Rate (ppm)
Light Planktonic, Cyanobacteria (blue- green algae)	< 5,000	3 – 35	0.30 – 3.57
Medium Planktonic, Cyanobacteria (blue- green algae), sensitive green algae and diatoms	5,000 - 30,000	40 – 75	4.08 – 7.65
Dense Planktonic, Cyanobacteria (blue- green algae), planktonic and filamentous green algae, diatoms	> 30,000 or surface scum or mat-forming	75 - 100	7.65 – 10.2

Table 1. Product Dosage Rate by Density or Type

This specimen label is intended as informational purposes only and not for use as container labeling.

#### PRE-TREATMENT CONSIDERATIONS:

The following suggestions apply to the use of this product as an algaecide in all approved use sites:

- Apply during calm and sunny conditions with 8 to 10 hours of daylight remaining, when water temperature is at least 60°F for best results.
- Treat when growth first begins to appear or create a nuisance, if possible.
- Apply in a manner that will ensure even distribution of the chemical within the treatment area. Effective control of algae requires direct contact with all cells throughout the water column, since these plants do not have vascular systems to transport active ingredient from cell to cell.
- Visible reduction in algae growth should be observed in 24 to 48 hours following application.
- Wait at least 2 days to re-treat areas if re-growth or new growth begins to appear and seasonal control is desired.
- Skim any dead algae and organic matter that rises to the water's surface after treatment. Permitting the dead organics to sink and decay will provide a food source and additional nutrients to re-stimulate algae growth.
- If using in conjunction with other water additives (such as bacteria or enzyme products), always apply this product first and wait several hours before adding any other products to the treated water.
- Do not tank mix with aquatic herbicides or algaecides containing copper or bromides. Apply this product at least one day prior to the application of these products.
- When treating surface mats of algae blooms, the dissolved product may not penetrate the water column below the infested area, and a second application is then required to target any bottom growing algae in treatment area.
- Use this product up to 6 8 weeks before an expected water freeze to prevent masses of decaying algae under the ice cover.
- In bodies of water where an aerator is available, dose this product at the edges, or in the turbulence created while the aerator runs to facilitate rapid and adequate mixing.
- Non-target plants will suffer contact burn if undiluted granules are accidentally spilled on them. Do not apply so that the concentrated product comes in contact with grass, ornamentals and other foliage.
- Clean spray equipment by flushing with clean water after treatment.

#### **GENERAL APPLICATION RESTRICTIONS:**

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 requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

Do not enter or allow others to enter until application of product has been completed in the area.

#### 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,] airblast, chemigation) can influence pesticide drift. The applicator must evaluated 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.

**If applied by groundboom application**: Do not apply with a nozzle height greater than 4 feet above the water surface.

**If applied by air**: 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 water surface 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.

#### **CHEMIGATION SYSTEM APPLICATION**

- Apply this product only through sprinkler and drip irrigation systems including: center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; flood (basin), furrow, border or drip (trickle) systems.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, contact Applied Biochemists, State Extension Service, equipment manufacturer, or other experts.

- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place (refer to the Chemigation Systems Connected to a Public Water Supply section of this label).
- A person knowledgeable of the Chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. The injection system should be inspected, calibrated, and maintained before application of this product begins.
- Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.
- Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other locations affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to event deterioration and maintain legibility for the duration of the posting period.
- All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

# Chemigation Systems Connected to a Public Water Supply

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **Sprinkler Chemigation Requirements**

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

# Floor (Basin), Furrow and Border Chemigation Requirements

 Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.

- Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
  - The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
  - The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
  - The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
  - The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
  - The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
  - Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

#### Drip (Trickle) Chemigation Requirements

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump)

effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

## STORAGE & DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **PESTICIDE STORAGE**: Store in original container in a cool, well-vented area, away from direct sunlight. Do not allow product to become overheated in storage. This may cause increased degradation of the product, which will decrease product effectiveness. Do not store in a manner where crosscontamination with other pesticides could occur.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Open dumping is prohibited. 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. CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment by shaking and tapping sides and bottom to loosen clinging particles. If not emptied in this manner, the bag may be considered an acute hazardous waste and must be disposed in accordance with local, state and federal regulations. When completely empty, offer for recycling if available, or dispose of bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.