



CMC 9.0 WP

Wood Preservative and Algaecide/Herbicide

For the control of wood damaging fungi and insects

For use in Slow Moving or Quiescent Bodies of Water Including: Golf Course, Ornamental Fish, Irrigation, Industrial and Fire Ponds; Fresh Water Lakes and Fish Hatcheries; Potable Water Reservoirs and Associated Waters (Rivers, Streams, Bays and Coves); and Crop and Non-crop Irrigation Conveyance Systems, (Ditches, Canals, and Laterals)

Areas treated with CMC 9.0 WP may be used for fishing, swimming, drinking, watering livestock and irrigating crops, turf, putting greens, fairways, and ornamental plants immediately after treatment.

ACTIVE INGREDIENT:

Copper Carbonate*	15.66%
OTHER INGREDIENTS:	84.34%
TOTAL	100.00%

*Metallic Copper Equivalent – 9.00 %
Ethanalamine complex of copper carbonate
Contains 0.924 pounds of elemental copper per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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.)

FIRST AID

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 doctor for treatment advice

IF SWALLOWED:

Call a poison control center or doctor 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 doctor.
Do not give anything by mouth to an unconscious person.

IF INHALED:

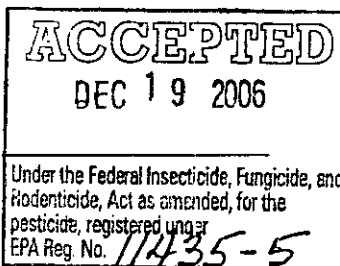
Move person to fresh air.
If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth.
Call a poison control center or doctor for further treatment advice.

Have the container or label with you when calling a poison control center or doctor, or going for treatment.

CP CHEMICALS EPA
Ridgefield Park, NJ 07660

EPA REG. NO. 11435-5

Net Contents:



EST. NOS. 11435-1X 01
35896-SC-01
35096 IL 01

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 11435-5

2 7 8

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION. Harmful if swallowed or inhaled. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with eyes or clothing. Remove contaminated clothing and wash clothes before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

For wood preservative labeling:

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: coveralls worn over a long-sleeved shirt and long pants; chemical-resistant footwear plus socks; goggles or face shield; chemical resistant gloves made of any waterproof material. For cleaning equipment, a chemical-resistant apron must also be worn. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

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

SAFE HANDLING PROCEDURES

Do not attempt to use without implementing the necessary safety equipment. Applicators must wear gloves impervious to wood treatment solutions in all situations where dermal contact is expected (i.e., handling freshly treated wood, manually opening cylinder doors, etc.).

Individuals who enter treatment cylinders and other related equipment contaminated with wood treatment solutions must wear protective clothing (including coveralls, jacket, gloves and boots) impervious to wood treatment solutions. In addition, individuals who enter treatment cylinders must wear properly fitting, well-maintained, high-efficiency respirators that are MSHA/NIOSH-approved for ammonia. If the level of ammonia in the plant is unknown or exceeds 35 ppm (STEL) or 25 ppm (ACGIH) or air averaged over an 8-hour work period, air monitoring programs, procedures, and record retention and submittal must be conducted in accordance with OSHA standards.

Applicators must not eat, drink, or use tobacco products during those parts of the application process that may expose them to the wood treatment concentrate or solutions (i.e., manually opening/closing cylinder doors, shoving trams out of the cylinder, mixing chemicals, handling freshly treated wood, etc.).

Wash thoroughly after skin contact and before eating, drinking, using tobacco products, or using restrooms.

Protective clothing must be replaced when it shows signs of significant contamination. Applicator must leave all protective clothing, work shoes or boots, and equipment at the treatment plant. Worn out or severely contaminated protective clothing must be disposed of in a manner approved for pesticide disposal and in accordance with state and federal regulations.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public 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.

For algaecide labeling:

ENVIRONMENTAL HAZARDS

This product may be toxic to fish. 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 fish. 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.

Do not treat more than one-half of lake or pond at one time to avoid depletion of oxygen levels due to

decaying vegetation.

Potable Water: Do not allow water containing in excess of 1 ppm copper to flow into any water to be used as potable water.

Terrestrial Plants: Do not apply this product in its concentrated form directly to any crop plants, grass, or ornamental plants as injury may result.)

DIRECTIONS FOR USE

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

Directions for use as a wood preservative:

GENERAL INFORMATION

Use CMC 9.0 WP to control all types of fungal decay of wood products -- brown white, and soft rot -- and wood-eating insects including termites. CMC 9.0 WP should be used to treat any wood product that will be exposed to conditions favorable to rot, decay, or insect attack both above ground and in ground, or in water. Types of products include lumber, timbers, landscape ties, fence posts, building and utility poles, land, freshwater and marine piling, sea walls, decking, and wood shingles.

Tank mix CMC 9.0 WP with quaternary ammonium compounds approved for wood treatment. Apply the tank mixed solution by pressure impregnation. Follow the mixing instructions in the appropriate "Solution Mixing Table for CMC 9.0 WP (2 Component)" for obtaining the desired solution concentration. The percent solution to be used should be based on the retention, in pounds per cubic foot (pcf), specified by the purchaser and the treating process used.

A 3% solution can be used to field coat the cut ends of pressure-treated wood by brush-on application.

Directions for use as an algaecide:

GENERAL INFORMATION

CMC 9.0 WP is effective in controlling a broad range of filamentous, planktonic and branched algae which can occur in slow moving or quiescent bodies of water including golf course, ornamental fish, irrigation, industrial and fire ponds; fresh water lakes and fish hatcheries; potable water reservoirs and associated waters (rivers, streams, bays and coves); and crop and non-crop irrigation conveyance systems, (ditches, canals, and laterals) CMC 9.0 WP is most effective when applied at the first signs of algal bloom. CMC 9.0 WP treated water may be used to irrigate crops, turf, fairways, putting greens, and ornamental plants immediately after treatment. CMC 9.0 WP may be applied by aircraft, ground sprayer or spray boat as a surface spray, as a subsurface application through weighted hoses, in an invert emulsion or mixed with a polymer, as appropriate.

USE PRECAUTIONS: In areas heavily infested with algae or aquatic weeds, or if water temperature is high, treatment can result in oxygen loss from decomposition of dead vegetation. This loss can cause fish suffocation. To minimize this hazard, treat 1/3 to 1/2 of the water area in a single operation. Add only enough **CMC 9.0 WP** for the actual area being treated. Wait 10 to 14 days before treating the remaining area. Begin treatment along the shore and proceed outward in bands to allow fish to move into untreated areas. Consult your State Fish and Game Agency before applying this product to public waters.

CMC 9.0 WP may be used in combination with Diquat® or Komeen® for more effective control of Hydrilla verticillata and other vascular weeds. **CMC 9.0 WP** may also be combined with other herbicides to improve weed control by killing algae which cover aquatic weeds and interfere with herbicide uptake.

NOTE: Undiluted **CMC 9.0 WP** or concentrations above 1.0 ppm Cu⁺⁺ may be injurious to crops, grass, ornamentals and other foliage. Do not apply in such a way that the concentrated product comes in contact with crops, ornamentals, grass or desirable plants. Apply only as specified on the label.

ALGAE CONTROL

Free floating algae (planktonic), such as *Anabaena*, *Aphanizomenon*, *Chlorella*, *Dictyosphaerium*, *Euglena*, and *Microcystis* are controlled using 0.2 to 0.5 ppm metallic copper depending upon severity of growth.

Filamentous algae (mat-forming) such as *Cladophora*, *Hydrodictyon*, *Oedogonium* and *Spirogyra* require 0.5 to 1.0 ppm metallic copper depending on growth and intensity. *Chara* and *Phormidium* are difficult to control unless treatment at 0.5 to 1.0 ppm metallic copper is initiated at the first signs of algal bloom.

FOR BEST RESULTS: Apply **CMC 9.0 WP** early in the day when conditions are calm. Water temperature should be at least 60° F. Treat when algae first appear. Even distribution of **CMC 9.0 WP** in the water will improve algae control; therefore apply in a manner that distributes **CMC 9.0 WP** throughout the treated area.

If desired, dilute one volume of **CMC 9.0 WP** with 10 to 20 volumes of water before application. To ensure best results, remove large mats of floating algae manually before treatment. A second application 1 to 2 weeks after the first may be necessary for heavily infested areas.

COPPER LEVELS REQUIRED FOR CONTROL OF DIFFERENT GENERA OF ALGAE				
Organism	0.2 – 0.5 ppm Copper		0.5 – 1.0 ppm Copper	
Cyanophyceae (Blue-green)	<i>Anabaena</i> <i>Aphanizomenon</i> <i>Cylindrospermum</i> <i>Gloeotrichia</i> <i>Gomphosphaeria</i>	<i>Microcystis</i> <i>Oscillatoria</i> <i>Plectonema</i> <i>Polycystis</i>	<i>Calothrix</i> <i>Nostoc</i>	<i>Phormidium</i> <i>Symploca</i>
Chlorophyceae (Green)	<i>Botryococcus</i> <i>Closterium</i> <i>Coelastrum</i> <i>Draparnaldia</i> <i>Enteromorpha</i> <i>Gloecystis</i>	<i>Hydrodictyon</i> <i>Microspora</i> <i>Spirogyra</i> <i>Tribonema</i> <i>Ulothrix</i> <i>Zygnema</i>	<i>Ankistrodesmus</i> <i>Chara</i> <i>Chlorella</i> <i>Cladophora</i> <i>Crucigenia</i> <i>Desmidium</i> <i>Golenkinia</i>	<i>Nitella</i> <i>Oocystis</i> <i>Palmella</i> <i>Pithophora</i> <i>Scenedesmus</i> <i>Staurastrum</i> <i>Tetraedron</i>
Diatomaceae (Diatoms)	<i>Asterionella</i> <i>Fragilaria</i> <i>Gomphonema</i> <i>Melosira</i> <i>Navicula</i>	<i>Nitzschia</i> <i>Stephanodiscus</i> <i>Synedra</i> <i>Tabellaria</i>	<i>Achnanthes</i> <i>Cymbella</i> <i>Neidium</i>	
Protozoa (Flagellates)	<i>Ceratium</i> <i>Cryptomonas</i> <i>Dinobryon</i> <i>Euglena</i> <i>Glenodinium</i>	<i>Mallomonas</i> <i>Synura</i> <i>Uroglena</i> <i>Volvox</i>	<i>Chlamydomonas</i> <i>Curdorina</i> <i>Haematococcus</i>	<i>Pandorina</i> <i>Peridinium</i>

The genera of algae listed above are commonly found in water of the United States. Use the lower recommended rate in soft water (less than 50 ppm alkalinity) and the higher concentration in hard water (above 50 ppm alkalinity). Always consult your State Fish and Game Agency or other responsible agency before applying this product to public waters.

APPLICATION INSTRUCTIONS

Use the table below to determine the amount of **CMC 9.0 WP** required to achieve the desired copper concentration. For most effective algae control, maintain the desired copper concentration for a minimum of three hours. Rates given below represent concentrations for quiescent or slow moving water. If water flow results in significant dilution of the treated water within three hours of application, it may be necessary to meter **CMC 9.0 WP** into the water. (Refer to instructions for Drip System Application below).

APPLICATION RATES FOR QUIESCENT OR SLOW MOVING WATER			
Amount of CMC 9.0 WP per acre to achieve desired copper content.			
Depth of Water	0.2 ppm Cu	0.5 ppm Cu	1.0 ppm Cu
3 inches	1.18 pints	2.94 pints	5.89 pints
4 inches	1.57 pints	3.92 pints	7.85 pints
5 inches	1.96 pints	4.90 pints	1.23 gallons
6 inches	2.35 pints	5.89 pints	1.47 gallons
7 inches	2.75 pints	6.87 pints	1.72 gallons
8 inches	3.14 pints	7.85 pints	1.96 gallons
12 inches (1 foot)	4.71 pints	1.47 gallons	2.94 gallons
24 inches (2 feet)	1.18 gallons	2.94 gallons	5.89 gallons
36 inches (3 feet)	1.77 gallons	4.41 gallons	8.83 gallons

Summer Application (stratified lakes) – When the average depth exceeds 4 feet and the lake is known to be stratified, it is necessary to treat only the upper 6 feet of water.

Spring/Fall Application (unstratified lake) – Treat the entire body of water remembering to treat 1/3 to 1/2 of the surface area at a time to reduce the possibility of adverse effects on the fish population.

METHODS OF APPLICATION

Surface Application: Spray diluted mixture from shore or boat evenly across the surface of water at rates to achieve a particular copper concentration according to the table above.

Subsurface Application: In deeper water, make a subsurface application of **CMC 9.0 WP** at recommended rates through weighted trailing hoses where the greatest concentration of algae is present. Do not drag hoses on the bottom.

Polymer Application: A polymer may be added to **CMC 9.0 WP** or to a **CMC 9.0 WP** /water premix to improve sinking, deposition and retention of the spray. Consult the manufacturer's recommendations regarding the use of a polymer for improved algae control.

Invert Emulsions: **CMC 9.0 WP** may be subsurface applied alone or in combination with other herbicides, including Diquat (see below) by injecting the products in an invert emulsion carrier. Invert applications should be made through weighted hoses drug below the surface of the water. Observe all precautions and limitations on the labels of all products used with **CMC 9.0 WP**.

Aircraft Application: Apply the recommended rate of **CMC 9.0 WP** in 20 gallons of total spray solution per surface acre. Add the recommended rates of a drift control or sinking agent to the spray solution. Maintain constant agitation during addition of the polymer and continue throughout the application. When treating moving water, apply the spray solution counter to the flow of water.

Drip System Application (For use in Irrigation Conveyance Systems and Other Moving Water): For best results, application should be made in anticipation of algae that may interfere with normal flow or delivery of water (obstruction of lateral headgates, screens, pumps, pumping systems and siphon tubes). Delayed treatment may result in matting or compaction of algae mats. Since low flow rates may result in poor chemical distribution and unsatisfactory algae control, it may be necessary to increase water flow rates during treatment.

Determine the water flow rate prior to treatment of the water system. If available, use weirs, orifices or similar devices which give accurate water flow measurements. If these devices are not available, volume of flow may be estimated by the following formula:

$$\text{Average Width (feet) X Average Depth (feet) X Average Velocity (feet/second) X 0.9 = \text{Cubic Feet per Second (C.F.S.)}$$

To determine velocity, measure the time it takes a floating object in the middle of the canal to travel a given distance. Divide the distance (feet) by the time (seconds) for velocity (feet/second). Repeat this procedure at least three times and then calculate the average velocity. Use the average velocity (feet/second) in the formula above to determine the flow rate (C.F.S.).

Once the water flow rate (C.F.S. or Gallons per Minute) has been calculated, find the corresponding drip rate for **CMC 9.0 WP** in the table below.

APPLICATION RATES FOR MOVING WATER				
WATER FLOW RATE		CMC 9.0 WP DRIP RATE		
C.F.S.	Gal./Min.	Qts./Hr.	ML/Min.	Fl. Oz./Min.
1	449	1.0	18	0.5
2	898	1.9	36	1.0
3	1,346	2.9	54	1.6
4	1,795	3.9	71	2.1
5	2,244	4.9	89	2.6

Determining Amount of CMC 9.0 WP to Use: To calculate the amount of **CMC 9.0 WP** needed to maintain the drip rate for three hours, calculate as follows:

$$\text{QTS./HR X 3; or ML/MIN X 180; or FL OZ/MIN X 180.}$$

Thorough mixing is necessary to uniformly disperse the **CMC 9.0 WP** in the water; therefore, apply **CMC 9.0 WP** in the channel at weirs or other structures that create turbulence or at several points across the flow.

Calibrating for Drip Application (Gravity Feed): Pour the amount of **CMC 9.0 WP** needed to treat for three hours (calculated above) into a drum or tank equipped with a brass needle valve designed to maintain a constant drip rate. Open the needle valve and allow **CMC 9.0 WP** to drip into a graduated container (measuring cup, graduated cylinder, etc.), using a stop watch to measure the time required to reach the desired volume. Adjust the valve so that **CMC 9.0 WP** is dripping at the desired rate. **NOTE:** If the flow rate changes during the 3-hour treatment period, it may be necessary to readjust the needle valve. If power is available, a small pump can be used to meter the **CMC 9.0 WP** into the water more accurately.

Distance of algae control from the application point will vary with severity of infestation. Repeat application at a point 3 hours downstream from the previous treatment station. Repeat as necessary to treat entire infested area. It may be necessary to periodically repeat treatments to maintain seasonal control.

HYDRILLA VERTICILLATA CONTROL

Tank mix **CMC 9.0 WP** with Diquat to kill algae that cover Hydrilla verticillate and interfere with herbicide uptake. Observe all precautions and limitations on the Komeen and Diquat labels.

APPLICATION INSTRUCTIONS

CMC 9.0 WP + Komeen Tank Mix: Apply 1.4 to 2.9 gallons of **CMC 9.0 WP** plus 3.34 gallons of Komeen per acre-foot of water when water temperature is above 60° F. Use the low rate of **CMC 9.0 WP** for light algae infestations or easy-to-control species. Use the high rate of **CMC 9.0 WP** for heavy infestations or difficult-to-control species. Apply using an application method which provides uniform coverage of the treated area and delivers the spray solution to the plant surface.

CMC 9.0 WP + Diquat Tank Mix: Apply 3.2 to 3.5 gallons of **CMC 9.0 WP** plus 2 gallons of Diquat per surface acre in bright sunlight when water is above 60° F.

Surface Application: Apply by handgun, spray boat, aircraft or other method of application which provides uniform coverage of the treated area. Combine **CMC 9.0 WP** and Diquat with water in a mix tank or use an injection system to make approximately 100 gallons for each surface acre treated. When using a spray boat, apply the mixture through hoses which are dragged as close to the bottom as possible. For best results, do not drag hoses on the bottom. Complete effect of the treatment will be observed in 8 to 12 weeks. In heavily infested areas, a second application may be necessary.

Subsurface Application: Use a boom with trailing hoses fitted with Delavan or Spraying System 80-degree nozzle tips with 06 orifices, or a similar nozzle. Hoses 18 to 24 inches long will apply the material 3 to 6 inches below the water surface. Apply from bow or stern of the boat in strips no more than 20 feet apart.

Bottom Placement: In firm, sandy-bottomed lakes where water is quiescent or slowly moving and Hydrilla has reached the surface, apply in a water carrier, injecting the diluted **CMC 9.0 WP** plus Diquat mixture 1 to 2 feet above the bottom using weighted, trailing hoses. Where water is slowly moving through submersed growth, or if suspended silt or muddy water is present, apply in an invert emulsion carrier. Inject the **CMC 9.0 WP** plus Diquat mixture in an invert emulsion carrier 1 to 2 feet above the bottom using weighted trailing hoses.

CMC 9.0 WP + Sonar Tank Mix: Apply 1.6 to 4.0 gallons of **CMC 9.0 WP** plus the recommended rate of Sonar A.S. per surface acre. Refer to the Sonar label for appropriate rate recommendations. This combination may be applied as a tank mix or via the use of appropriate metering equipment.

SWIMMING POOLS

Dilute **CMC 9.0 WP** with at least nine parts water and sprinkle around the edge of pool. Add additional **CMC 9.0 WP** every two weeks according to directions on chart.

For best results, begin pool maintenance with **CMC 9.0 WP** when pool is first filled with water. Add **CMC 9.0 WP** according to the size of pool as given in the chart below.

DILUTION CHART FOR SWIMMING POOLS		
Swimming Pool Capacity* (Gallons of Water)	Initial Treatment with CMC 9.0 WP (ounces)	Treatment Once Every Two Weeks with CMC 9.0 WP
5,000	2 to 5	1.0 to 2.5
10,000	4 to 10	2 to 5
20,000	8 to 20	4 to 10
30,000	12 to 30	6 to 15
40,000	16 to 40	8 to 20
50,000	20 to 50	10 to 20

* How to estimate gallon capacity of your pool: Measure length (L), Width (W), and Average Depth (D) in feet. For square or rectangular pools: L X W X D X 7.5 = Gallons. For circular or elliptical pools: L X W X D X 5.9 = Gallons.

NOTE: This product is an algestatic rather than an algaecide to some Black Algae. Recommended rates will prevent formation of Black Algae. If Black Algae are already established, triple the initial dose.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Keep from freezing (above 40°F) in a tightly closed container. Store in a cool dry area.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide 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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY STATEMENT

CP CHEMICALS warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth on the label when used according to directions under normal use conditions. THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. This warranty does not extend to the handling or use of this product contrary to label instructions or under abnormal conditions or under conditions not reasonably foreseeable to seller and buyer assumes all risk of any such use.

CP CHEMICALS
Ridgefield Park, NJ 07660