

10324-46

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, D.C. 20460

FEB 24 2003

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Elizabeth Tannehill
Regulatory Manager
Mason Chemical Company
721 W. Algonquin Road
Arlington Heights, IL 60005

Subject: Maquat MC1412-16%-W
EPA Registration No. 10324-46
Application Date: November 22, 2002
EPA Received Date: November 26, 2002

Dear Ms. Tannehill:

The following amendment, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable with the conditions listed below.

Proposed Amendment

- Update First Aid, Storage and Disposal, and Precautionary Statements
- Update use sites

Conditions

Revise the label as follows:

1. Revise the Precautionary Statements to include the statement "Harmful if swallowed."
2. Change the Continuous Feed Method of application by revising the statement "Initial Dose: When the system is noticeably fouled, apply 32 fluid ounces..." to read "Initial Dose: When the system is noticeably fouled, apply 16 fluid ounces..."
3. Under the "Slimicide Applications" directions, revise the statement "This product can be used as a climicide..." to read "This product can be used as a *slimicide*..."

CONCURRENCES

SYMBOL	SURNAME	DATE					
TS10	TS10						

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4. Change the "Sap Stain" method of application by revising the statement "Before use, dilute at rate of 25-100 gallons of water per 5 gallons of this product." to read "Before use, dilute at rate of 25-100 gallons of water per 3.13 gallons of this product."

General Comments

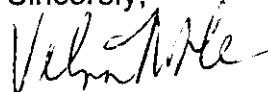
A stamped copy of the labeling accepted with conditions is enclosed. Submit one(1) copy of your final printed labeling before distributing or selling the product bearing the revised labeling.

Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the agency requires all registrants of similar products to submit data.

If the above conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

Should you have any questions or comments concerning this letter, please contact me at 703-308-6233.

Sincerely,



Velma Noble
Product Manager 31
Regulatory Management Branch I
Antimicrobials Division (7510 C)

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

DANGER, Keep out of Reach of Children. Corrosive. Causes irreversible eye damage and skin burns. Do not get into eyes, on skin or on clothing. Wear protective eyewear (goggles, safety glasses or face shield), protective clothing, and rubber gloves when handling. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

ENVIRONMENTAL HAZARD

This pesticide is toxic to fish. 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 into sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL OR CHEMICAL HAZARDS

Do not mix with soap, anionic detergents or oxidizers.

(If the container is greater than one gallon use the following storage and disposal statements)

STORAGE AND DISPOSAL

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

- 1. PESTICIDE STORAGE:** Store in original containers and place in locked storage area. Keep from freezing.
- 2. SPILL OR LEAK PROCEDURES:** Small spills may be mopped up or flushed away with water or absorbed on some absorbent material and incinerated. Large spills should be contained, the material then moved into containers and disposed of by approved methods for hazardous wastes.
- 3. PESTICIDE DISPOSAL:** 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.
- 4. CONTAINER DISPOSAL:** Do not reuse empty container (bottle, cans, jars). Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incinerate or if allowed by state and local authorities, by burning. If burned stay out of smoke.
- 5. GENERAL:** Consult Federal, State, or local disposal authorities for approval of alternative procedures such as limited open burning.

(If container is one gallon or less use the following storage and disposal statements)

STORAGE AND DISPOSAL

Store in original container and place in locked storage area inaccessible to children and persons unfamiliar with its proper use. Do not reuse empty container. Wrap container and discard in trash.

with COMMENTS
in EPA Letter Dated:

FEB 24 2003

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 10324-46

MAQUAT[®] MC1412-16%-W

MAQUAT[®] MC1412-16%-W for Control of Algae and Algal Slime Growth in Industrial and/or Commercial Recirculating Cooling Water Towers, Retort Water Systems and Molluscs in Once Through Fresh Water Cooling Systems and Mold, Mildew and Fungi in Sap Stains and Wood Preservatives. Controls bacteria and fungal slimes in pulp, paper mills and paper manufacturing.

ACTIVE INGREDIENTS

n-Alkyl (50%C₁₄, 40%C₁₂, 10%C₁₆)

dimethyl benzyl ammonium chloride..... 16.00%

INERT INGREDIENTS: 84.00%

TOTAL: 100.00%

Weight: Approx. 8lbs./gallon

KEEP OUT OF REACH OF CHILDREN

DANGER

See left panel for additional precautionary statements

First Aid

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

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 for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 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 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.

MASON CHEMICAL COMPANY

"THE QUATERNARY SPECIALISTS"

721 W. Algonquin Road
Arlington Heights, IL 60005

847-290-1621

Toll Free:

1-800-362-1855



E.P.A. Reg. No. 10324-46

E.P.A. Est. No. 10324-IL-1

NET CONTENTS

BATCH NO

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DIRECTIONS FOR USE

INDUSTRIAL WATER TREATMENT

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

Do not use water containing residue from use of this product to irrigate crops for food or feed.

Use of the product in either public/municipal or single or multiple family private/residential potable/drinking water systems is strictly prohibited. Use of the product in any cooling water system that discharges effluent within ¼ mile of either a public/municipal or single or multiple family private/residential potable/drinking water intake is strictly prohibited.

This product aids in the control of bacterial, fungal and algal slimes in evaporative condensers, heat exchange water systems, industrial and commercial cooling towers.

INDUSTRIAL AND/OR COMMERCIAL RECIRCULATING COOLING WATER TOWERS, RETORT WATER SYSTEMS

1. **DOSING LOCATION:** This product is to be applied at a point in the system where it will be uniformly mixed, such as at the sump.
2. **DOSING CONDITIONS:** This product should be applied when the system is in jeopardy of being affected or after cleaning systems where efficiency is already impaired.
3. **METHOD OF APPLICATION:**

a. INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, apply 16 to 32 fluid ounces (20 to 40 ppm on an active quaternary basis) per 1000 gallons of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 4 to 12 fluid ounces (5 to 15 ppm on an active quaternary basis) per 1000 gallons of water in the system twice weekly or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

b. MODIFIED INTERMITTENT METHOD

Initial Dose: When the system is noticeable fouled, apply 16 to 32 fluid ounces (20 to 40 ppm on an active quaternary basis) per 1000 gallons of water in the system. Apply half of this initial dose when half of the water in the system has been lost by blowdown.

Subsequent Dose: When control of microbial growth is evident, apply 4 to 12 fluid ounces (5 to 15 ppm on an active quaternary basis) per 1000 gallons of water in the system. Apply half of this subsequent dose when half of the water in the system has been lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

c. CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled, apply 32 fluid ounces (20 ppm on an active quaternary basis) per 1000 gallons of water in the system.

Subsequent Dose: Maintain this treatment by starting a continuous feed of 4 fluid ounces (5 ppm on an active quaternary basis) per 1000 gallons of water lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

PULP AND PAPER MILLS

Slimicide Applications

This product can be used as a climicide in the manufacture of paper and paperboard that contacts food, depending on the type of stock, quality of raw water, complexity of the system, and degree of contamination. Apply 1.25 to 250 pounds of this product per ton (dry basis) of pulp or paper produced. If this product is used to treat whitewater, alternatively apply 2.5 to 500 pounds of this product per 100,000 gallons of whitewater to be treated (1.0 to 200 ppm product).

Dosing Application: This product is to be applied at a point in the system where it will be uniformly mixed, such as at the suction side of a pump. This product should be fed as early as possible in the system. Additions of this product should be made at a point in the system where mixing action is good. Suitable sites are the hydropulper, suction side of the machine chest or broke system pump. Badly fouled process systems must be cleaned before initial treatment.

Control of Bacterial, Fungi/Mold and Algae on Pulp, Paperboard & Wet Lap

This product is used to inhibit fungal growth, which causes discoloration, odor and degradation of paper, paperboard or wet lap. Application of this product should be made at a point in the system where mixing action is good. Application can also be made at the size press or water box. Apply at a rate of 1.25 to 250 pounds of this product per ton (dry basis) of pulp or paperboard produced.

Dosing Application: This product may be drip fed continuously from the drum, diluted and showered to the wet sheet or fed by suitable pumps.

For inhibition of wet lap or sheet pulp this product should be applied to the dewatered pulp surface via applicator rolls or showers. Application can also be made at the size press or water box.

ONCE THROUGH FRESH WATER COOLING SYSTEM

1. **DOSING LOCATION:** This product is to be applied at a point in the system where it will be uniformly mixed, such as at the sump.
2. **DOSING CONDITIONS:** This product should be applied when the system is in jeopardy of being affected or after cleaning systems where efficiency is already impaired.
3. **METHOD OF APPLICATIONS:**
 - a. Wear safety glasses, rubber gloves and impervious apron.
 - b. To reduce foaming, mix 6 parts of water to 1 part of this product.
 - c. 0.45 to 4.5 fluid ounces (1-10 ppm on an active quaternary basis) per thousand gallons.
 - d. Do not discharge without performing proper deactivation. To perform deactivation use Bentonite Clay. The minimum ratio to be used is 5 ppm of clay to 3 ppm of product.
 - e. Do not use product more than 4 times per year.
 - f. Treatment time cannot exceed 120 hours/application.
 - g. Avoid oxidizers and reducing agents. Product is cationic and should not be mixed with soap or anionic surfactants.

SAP STAIN

For the control of mold and fungus on green or freshly cut lumber. May be used in a dip or spray application. Before use, dilute at rate of 25-100 gallons of water per 5 gallons of this product. Seasonal variations in storage and shipping conditions, species and condition of wood should be considered in a manner that ensures that all surfaces are uniformly treated.

For best results, green wood should be treated immediately at least within twenty-four hours after cutting or sawing. Mold and fungus growth begins immediately after cutting so delayed treatment is much less effective and requires increased chemical concentration. Green, untreated lumber should not be used for stickers.

Freshly treated lumber should not be allowed to remain untreated in heavy rains. Dip tanks and drip aprons must be roofed, paved and drained to prevent dilution and loss of the anti-stain solution.

WOOD PRESERVATIVES

This product will protect treated wood articles from the destructive attack of fungi, mold or mildew. Treatment can be done by pressure or double vacuum. Wood articles that will be protected by these treatments would include millwork, construction timbers, decking, wood shingles, posts and other articles to be used in above ground applications.

Treatment can be done by brush or spray for wood shingle applications, and by pressure, double vacuum or dip method for other wood products. Wood articles that will be protected by these treatments would include millwork, construction timbers, decking, wood shingles, and posts.

This product can be used in combination with other EPA registered organic and inorganic wood preservatives or it can be used alone.

MAQUAT® MC1412-16%-W

Dilute this product in either water or mineral spirits to produce a 0.5% to 3.0% active quaternary ammonium compound solution.

Percent Active Quat Solution	Ounces of this product per gallon
0.5	4.00
1.0	8.00
1.5	12.00
2.0	16.00
2.5	20.00
3.0	24.00

To find the ounces of this product per gallon for other dilutions take the percent active desired and divide by 0.3906.

MAQUAT® MC1412-16%-W AND COPPER COMPOUNDS

Mix this product with water and either ACQ-C2 EPA Reg. No 10465-36 or ACQ-C EPA Reg. No. 10465-33. Refer to the product labels for ACQ-C and ACQ-C2 for precise mixing instructions.

MAQUAT® MC1412-16%-W AND BORATES

Mix this product and Tim-Bor, EPA Reg. No. 1624-39 in water and stir to give a solution of the desired concentration of components.

MAQUAT® MC1412-16%-W AND PROPICONAZOLE

Mix this product with Woodlife P, EPA Reg. No. 1409-65 and dilute with water, mineral spirits or other light organic solvent to produce a 0.5 to 3.0% quaternary ammonium compound solution. Follow the instructions on the Woodlife P label for the appropriate concentration of propiconazole. PLEASE NOTE THAT THIS FORMULATION CAN ONLY BE USED FOR DIP TREATMENT.

PRESSURE TREATMENT

Place the wood article to be treated into the pressure cylinder and seal unit. Treat the wooden articles using the pressure treatment procedures consistent with the equipment being used and standard treatment practices. Treatment conditions should be such as to produce a 0.1 to 0.6 lb/cu. foot retention in the treatment article. Such treated wood is to be used for above ground uses only.

DOUBLE VACUUM

Stack the wooden articles to be treated in the treatment vessel so that the preservative solution will have access to all sides of the articles. Seal the vessel. Reduce the

pressure within vessel to -10 inches for 5 minutes. Cover all the articles with preservative solution. Allow the pressure to return to atmospheric conditions and discharge the preservative solution. Reduce the pressure to -20 inches and maintain for 20 minutes. Allow the pressure to return to atmospheric and remove treated wood articles. Treatment conditions should be used as to produce a 0.1 to 0.6 lbs/cu. ft retention of ADBAC in the treated article. Wood treated to this retention for above ground use only.

DIP TREATMENT

Stack the wood to be treated on a suitable holder and convey the stack into the treating solution making sure the stack is completely immersed. Dip times should range from 30 seconds (individual pieces) up to 30 minutes (bundled wooden articles). Use a concentration of 0.5 to 3.0% active quaternary ammonium compound. The concentration should be customized to the degree of sap stain protection desired, which should be determined by an independent test on the intended species of wood.

PERSONAL PROTECTION EQUIPMENT FOR PRESSURE TREATMENT, DOUBLE VACUUM AND DIP TREATMENT

Applicators must wear gloves, which are chemical-resistant (such as nitrile or butyl) in all situations where dermal contact is expected (i.e. handling freshly treated wood and manually opening cylinder doors). Individuals who enter pressure treatment cylinders and other related equipment that are contaminated with the wood treatment solution (e.g. cylinders that are in operation or are not free of all treatment solution) must wear coveralls over a long sleeved shirt and long pants, socks, chemical-resistant footwear, and protective eyewear. Federal, State and local confined space entry procedures need to be taken.

Applicators must not eat, drink or use tobacco products during those parts of the applications process that may expose them to the wood treatment formulation (e.g. manually opening/closing cylinder doors, moving trams out of cylinders, mixing chemicals, handling freshly treated wood).

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

Protective clothing must be changed when it shows signs of contamination. Applicators must leave protective clothing and work shoes or boots and equipment at the plant. Worn out protective clothing and work shoes or boots must be left at the plant and disposed of in a manner approved for pesticide disposal and in accordance with State and Federal regulations.

BRUSH OR SPRAY

A 0.5% to 3.0% active solution with water may be applied by brush or spray for use on wood shingles or shake roofs and siding on existing homes by commercial applicators. Low pressure equipment is recommended for spray applications. A moderately fine spray, not an aerosol or fog, generally provides the best coverage at practical product concentrations. Apply only to point of runoff. To make a 0.5% to 3.0% active solution, use the following table:

Percent Active Quat Solution	Ounces of this product per gallon
0.5	4.00
1.0	8.00
1.5	12.00
2.0	16.00
2.5	20.00
3.0	24.00

ACCEPTED
with COMMENTS
FEB 24 2007
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 10324-46

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To find the ounces of this product per gallon for other dilution. e the percent active desired and divide by 0.3906.

PERSONAL PROTECTION EQUIPMENT FOR BRUSH AND SPRAY APPLICATIONS

Applicators must wear gloves, which are chemical-resistant (such as nitrile or butyl). Applicators must also wear coveralls over a long sleeved shirt and long pants, socks, chemical-resistant footwear, and protective eyewear. Applicator must not eat, drink, or use tobacco during the application process. Use with adequate ventilation, mist or vapor generated by spraying this product may be harmful if inhaled. Wash thoroughly after skin contact and before eating, drinking, use of tobacco products or using restrooms. Protective clothing must be changed when it shows signs of contamination. Brush/Spray treatment may require frequent changing. Discard clothing and other absorbent materials that have been drenched or heavily contaminated. Do not reuse them.

Follow manufacturers instructions for cleaning/maintaining protective equipment. If no such instructions exist for washables, use detergent and hot water. Keep and wash protective equipment separate from other laundry.

Worn out protective clothing and work shoes or boots must be disposed of in a manner approved for pesticide disposal and in accordance with State and Federal regulations.

ACCEPTED
with **COMMENTS**
in EPA Letter Dated:

FEB 24 2003

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. *10324-46*

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