

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEC - 2 2003

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

Subject: Maquat TC76-50%  
EPA Registration No. 10324-19  
Amendment Date: June 26, 2003  
EPA Receipt Date: June 30, 2003

Dear Ms. Tannehill,

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

**Proposed Amendment**

- Response to Agency letter dated June 5, 2003.

**Conditions**

Revise the label as follows:

1. Revise the Precautionary Statements to include: "May be fatal if inhaled, swallowed, or absorbed through the skin." and "Wash thoroughly . . . after handling and before eating, drinking, or using tobacco."
2. In the First Aid section of your label, under "If Swallowed" and "If Inhaled", change "advise" to read "advice."
3. Make the following correction to the directions for treatment of swimming pools (halogen based and non halogen based); ". . . add *stain* and scale inhibitor to prevent staining of pool surface due to metals."
4. Delete the following text on both pages two and three: "to maintain 0.5 ppm active. Quaternary Test Kits are available for this use." The Agency has contacted a number of credible pool stores and these kits do not seem available to pool owners.
5. Your June 26, 2003 letter states that you have now removed the 2.6 ounce packet label. Please remove the references to the 2.6 fluid ounce packet under the following headings on your label as they are no longer relevant:

SYMBOL	75100						
SURNAME	S. Tannehill						
DATE	12/2/03						

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

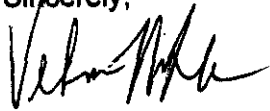
- On page 2, "Initial Application for Swimming Pools" (for both halogen based and non-halogen based pool sanitizers)
- On page 3, "Maintenance Application."

**General Comments**

A stamped label is enclosed for your records. Please submit three (3) copies of your final printed label before distributing or selling the product bearing the revised labeling.

Should you have any questions or comments concerning this letter, please contact Tracy Lantz at (703) 308-6415.

Sincerely,



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

Enclosure: Stamped Label

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

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

**DANGER, Corrosive.** Causes irreversible eye damage and skin burns. May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Do not get into eyes, on skin or on clothing. Do not breathe vapor or spray mist. Wear protective eyewear (goggles, safety glasses or face shield), protective clothing, and rubber gloves. 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.

*(For Swimming Pool Use and Decorative Fountains and Pools 1 gallon or less)*

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in original containers and place in locked storage area. Keep from freezing. Do not contaminate water, food, or feed by storage or disposal.

**SPILL OR LEAK PROCEDURES:** Small spills may be mopped up or flushed away with water or absorbed on some absorbent material and incinerated.

**PESTICIDE DISPOSAL:** Securely wrap original container in several layers of newspaper and discard in trash.

**CONTAINER DISPOSAL:** Do not reuse container (bottle, cans, jars). Triple rinse (or equivalent). Then dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

*(For Industrial Water Treatment Use, Industrial and /or Commercial Recirculating Cooling Water Towers and Recirculating Cooling Water Systems.)*

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in original containers and place in locked storage area. Keep from freezing.

**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.

**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.

**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.

**GENERAL:** Consult Federal, State, or local disposal authorities for approval of alternative procedures such as limited open burning.

**MAQUAT TC76-50%**

For Control of Algae and Algal Slime Growth in Swimming Pools, Outside Spas/Whirlpools/Hot Tub Baths, Decorative Fountains and Pools, Industrial and/or Commercial Recirculating Cooling Water Towers, Retort Water Systems and Molluscs in once through cooling systems

**ACTIVE INGREDIENTS**

Alkyl (60%C<sub>14</sub>, 30%C<sub>16</sub>, 5%C<sub>12</sub>, 5%C<sub>18</sub>) dimethyl benzyl ammonium chloride.....49.8%

Dialkyl (60%C<sub>14</sub>, 30%C<sub>16</sub>, 5%C<sub>12</sub>, 5%C<sub>18</sub>) methyl benzyl ammonium chloride.....0.2%

**INERT INGREDIENTS:**.....50.0%

**TOTAL:**.....100.0%

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.

ACCEPTED with COMMENTS in EPA Letter dated: **MASON CHEMICAL COMPANY**  
"THE QUATERNARY SPECIALISTS"

721 W. Algonquin Road  
Arlington Heights, IL 60005  
847-290-1621  
Toll Free:  
1-800-362-1855

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E.P.A. Reg. No. 10324-19  
E.P.A. Est. No. 10324-IL-1

NET CONTENTS

BATCH NO

This product is efficient and stable in use dilution

This product is compatible with most chemicals used in pool water and will not damage tile, concrete, metal or plastics.

This product keeps pool water free and sparkling, clear of visible green and bluegreen algae, slime and green brown colors.

This product improves filter operation and reduces need for other chemicals.

This product imparts tone and a pleasant "feel" to swimming pool water.

This product is formulated to complement swimming pool water being treated with normal chlorine systems. It is especially effective against growth of algae and being non-volatile, aids in maintaining pool water clarity and sparkle. The residual effectiveness of this algaecide tends to stabilize the total chemical treatment system.

This product is compatible with most chemicals normally used in swimming pool maintenance; however, in its concentrated form, this chemical should not come in contact with high concentrations of chlorine or any other oxidizer. DO NOT MIX THIS PRODUCT AND CHLORINE OR ANY OTHER OXIDIZER TOGETHER before adding to the pool. These chemicals should be handled separately.

This product was formulated to complement most swimming pool sanitizers. This product is not a stand-alone product. It must be used with either halogen based or non-halogen based pool sanitizers. This product supports your overall pool chemical maintenance program, offering a residual effectiveness that protects your pool against algae formation while keeping your pool water sparkling clear. This product is for use in the unattended pool when you're away (refer to Vacation Treatment Directions For Use).

#### DIRECTIONS FOR USE

##### SWIMMING POOLS

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

This product requires no special equipment for treating swimming pool water. The correct use dilution may be added directly to the pool in any spot or added to the water circulation equipment. This product works the best when added by itself directly to pool water.

##### INSTRUCTIONS FOR USE WITH HALOGEN BASED POOL SANITIZERS

This product is formulated to complement most swimming pool sanitizers. When using other products as outlined in Directions For Use on those products, always follow Directions For Use of those products. This product is effective against the growth of algae. This product is efficient and non-staining when used as directed. This product will not evaporate and its algae fighting abilities actually increase as pool water temperature increases.

Ensure all pool equipment is working properly. Backwash the filter system following manufacturers directions. Adjust pH between 7.2-7.6. Adjust chlorine residual to 1-3 ppm. In a chlorine treated pool, add stabilizer to establish a minimum level of 40-50 ppm to reduce the degradative effects of sunlight upon the chlorine residual. Check for metals and if present add satin and scale inhibitor to prevent staining of pool surface due to metals. Check chlorine residual and adjust to 1-3 ppm.

Add this product directly into pool by pouring around entire outside perimeter of pool. Allow the filter to run for at least six (6) hours after adding algaecide. During this period, swimmers should not be allowed into the water.

##### INITIAL APPLICATION FOR SWIMMING POOLS

1. Backwash the filter thoroughly.
2. Vacuum algae debris to waste and thoroughly brush pool.
3. Add 26 ounces of this product to each 50,000 gallons of water (5.2 ounces per 10,000 gallons)
4. Vacuum pool after 24 hours to remove dead algae.
5. If algae is still visible repeat dose (steps 3 & 4) as necessary until pool is free of visible algae.
6. Once algae are under control, clean filter and return to normal operation.

##### MAINTENANCE APPLICATION

Add 6.5 ounces of this product in 50,000 gallons of water (one 2.6 fluid ounce packet per 20,000 gallons of pool water) every 3-5 days or as needed.

##### BOOSTER APPLICATION

Add 6.5 ounces of this product in 50,000 gallons of water after a heavy or prolonged rainfall or when there is a heavy bathing load.

The above directions should be followed even when the pool is not in use.

If algae growth is noticeable, apply initial dose.

##### VACATION TREATMENT

When you are going to be away for one week or more add 4.8 ounces of this product per 10,000 gallons of water for every week unattended. Pour product around the edges of the shallow end of the pool, if shock is also being applied in the deep end of pool.

##### OPTIONAL INSTRUCTIONS FOR USE WITH NON-HALOGEN BASED POOL SANITIZERS

This product is formulated to complement swimming pool water being treated with the BioGuard Softswim System, Bacquacil and other non-halogen systems. When using other products as outlined in Directions For Use for this product, always follow Directions For Use of those products. This product is efficient and non-staining when used as directed. This product will not evaporate and its algae fighting abilities actually increases as the pool water temperature increases. The residual effectiveness of this product tends to stabilize the total chemical treatment system.

Ensure all pool equipment is working properly. Backwash the filter system following manufacturers directions. Adjust pH between 7.2-7.6. Check for metals and if present add satin and scale inhibitor to prevent staining of pool surface due to metals

Add this product directly into pool by pouring around entire outside perimeter of pool. Allow the filter to run for at least six (6) hours after adding algaecide. During this period, swimmers should not be allowed into the water.

##### INITIAL APPLICATION FOR SWIMMING POOLS

1. Backwash the filter thoroughly.
2. Vacuum algae debris to waste and thoroughly brush pool.
3. Add 26 ounces of this product to each 50,000 gallons of water (5.2 ounces per 10,000 gallons)
4. Vacuum pool after 24 hours to remove dead algae.
5. If algae is still visible repeat dose (steps 3 & 4) as necessary until pool is free of visible algae.
6. Once algae are under control, clean filter and return to normal operation.

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Under the Federal Insecticide, Fungicide and Rodenticide Act as amended for the purposes of registration of this product.

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### MAINTENANCE APPLICATION

Add 6.5 fluid ounces of this product in 50,000 gallons of water every 3-5 days or as needed.

### BOOSTER APPLICATION

Add 6.5 ounces of this product in 50,000 gallons of water after a heavy or prolonged rainfall or when there is a heavy bathing load.

The above directions should be followed even when the pool is not in use.

If algae growth is noticeable, apply initial dose.

### WINTERIZING TREATMENT

When swimming pool season is over, add 26 ounces of this product per 10,000 gallons (1.6 ounces per 1,000 gallons) (or ratio thereof) of water left in pool. This dose helps provide a measure of control of algae growth during the winter months. This treatment will also help the servicing of the pool before it is returned to use the following season.

For persistent algae or slime producing organisms add 6.5 ounces of this product into the skimmer with the filter pump running. After one minute shut off pump and allow the system to remain off overnight. The following day, restart the filter pump and add 6.5 ounces of this product to the pool. Run filter continuously for 24-48 hours brushing the sides and bottom of the pool frequently.

(Usage chart for quart and one-gallon containers)

Swimming Pool Capacity Gallon of Water	Initial Treatment	Maintenance Dose Booster Dose
5,000	2.6 ounces	0.65 ounces
10,000	5.2 ounces	1.3 ounces
20,000	10.4 ounces	2.6 ounces
25,000	13.0 ounces	3.25 ounces
30,000	15.6 ounces	3.9 ounces
40,000	20.8 ounces	5.2 ounces
50,000	26.0 ounces	6.5 ounces

### ALTERNATE WINTERIZATION METHOD

This product may be used with the following pool chemicals to form a winterization "package".

#### Directions:

1. Add a maintenance dose of chloride or oxygen shock.
2. Top up BioGuard Softswim System, Bacquacil or other non-halogen systems to 50 ppm.
3. Add 16.0 ounces of this product per 10,000 gallons (6.4 ounces per 4,000) (or ratio thereof) of water left in pool. This dose helps provide a measure of control of algae growth during the winter months. This treatment will also help the servicing of the pool before it is returned to use the following season.
4. Allow filter to run for several hours after chemical additions for good mixing.

**Note:** Before using chlorine or oxygen shock, read the Directions for Use and Precautionary Statements specific to that product.

### TO DETERMINE POOL CAPACITY

**Rectangular Pools:** Length (times) width (times) average depth (in feet) (times) 7.5 (equals) gallons.

**Round and Oval Pools:** Long diameter (times) short diameter (times) average depth (in feet) (times) 5.9 (equals) gallons

### DIRECTIONS FOR USE IN OUTSIDE SPAS/WHIRLPOOLS/HOT TUBS

**Initial Dose:** Add 2.6 ounces of this product per 5,000 gallons of water. Initial dose is used upon filling of outside spa/whirlpool/hot tub bath.

**Maintenance Dose:** Add 0.65 ounces of this product per 5,000 gallons of water. Maintenance dose should be added at 3-5 day intervals. If high temperatures prevail or outside spa/whirlpool/hot tub bath has unusually heavy use, add maintenance dose more frequently. Drain and clean outside spa/whirlpool/hot tub bath at least once a month or as needed depending upon bather load.

### 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 residues 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 5.25 to 10.25 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 1.33 to 3.85 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 5.25 to 10.25 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 1.33 to 3.85 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

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with COMMENTS  
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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 5.25 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 1.33 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.

**ONCE THROUGH WATER COOLING 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 efficacy is already impaired.
- 3. METHOD OF APPLICATIONS:**

**a. INTERMITTENT OR SLUG METHOD**

**Initial Dose:** When the system is noticeably fouled, apply 0.15 to 1.5 fluid ounces (0.6 to 6 ppm on an active quaternary basis) per 1,000 gallons of water based on system flow rates. The minimum treatment should be 6 to 24 hours. Repeat until control is achieved. Deactivation must be conducted prior to discharge from the system by using bentonite clay at a minimum ratio of 5 ppm clay to 1ppm product.

**Subsequent Dose:** When microbial control is evident, add 0.075 to 0.75 fluid ounces (0.3 to 3 ppm on an active quaternary basis) per 1,000 gallons of water based upon system flow rates on a as needed basis to maintain control. Frequency of feed should be tied to an in-plant monitoring program for macro cowing growth. Deactivation must be conducted prior to discharge from the system by using bentonite clay at a minimum ratio of 5 ppm clay to 1 ppm product.

**b. CONTINUOUS FEED METHOD**

**Initial Dose:** When the system is noticeably fouled, apply 0.075 to 0.75 fluid ounces (0.3 to 3 ppm on an active quaternary basis) per 1,000 gallons of water based on system flow rates. Continue to feed until needed control is achieved. Deactivation must be conducted prior to discharge from the system by using bentonite clay at a minimum ratio of 5 ppm to 1ppm product.

**Subsequent Dose:** Maintain this treatment by starting a continuous feed of 0.03 to 0.3 fluid ounces (0.1 to 1 ppm on an active quaternary basis) per 1,000 gallons of water based upon system flow rates. Deactivation must be conducted prior to discharge from the system by using bentonite clay at a minimum ratio of 5 ppm clay to 1 ppm product.

**DIRECTIONS FOR USE**

**CONTROLLING ALGAE GROWTH**

**Bird Baths:** Do not use with fish. Clean to remove algae growth prior to filling birdbath. Then spray all exposed surfaces with a solution of 0.2 ounces of this product per gallon of water. Allow to air dry and brush off dead algae.

**Algae Control on walkways:** For heavy infestations, spray or swab a solution of 0.2 ounces of this product per gallon of water. Let stand for an hour or more then brush and wash away dead algae. Soak area again with the solution. Do not rinse. Allow to dry on the surface and repeat application when algae growth returns.

**Instructions For Decorative Fountains And Pools**

This product is toxic to fish. **DO NOT** use this product when fish are present.

**Initial Dose:**

1. Remove floating algae by raking, dragging with cable or chain or any other suitable method. It is more economical to remove floating type algae (if possible) before the water is treated.
2. Add this product at any point that is convenient, such as the bowl, pool, or sump.
3. Add 25.6 ounces of this product to each 50,000 gallons (6.4 ounces per 12,500 gallons) or ratio thereof.

**Weekly Maintenance Dose:** Add 6.4 ounces of this product to each 50,000 gallons of water every 3-5 days or as to maintain 0.5 ppm active.

Each month drain and clean bowl. Refill with fresh water and repeat initial treatment. Draining removes airborne dirt, dust, contamination and alkali buildup.

Decorative Fountain or Pools Capacity in gallons of water	Initial Treatment	Maintenance Dose Booster Dose
50,000	25.6 ounces	6.4 ounces
25,000	12.8 ounces	3.2 ounces
12,500	6.4 ounces	1.6 ounces
6,250	3.2 ounces	0.8 ounce
3,125	1.6 ounces	0.4 ounce
1,562	0.8 ounce	0.2 ounce
781	0.4 ounce	0.1 ounce
390	0.2 ounce	0.05 ounce
195	0.1 ounce	0.025 ounce

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

**DEC 2 2003**

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered by EPA # 10324-19

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