10324-23 07/25/2012 1/11

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

JUL 25 2012

Subject MAQUAT® TC76-16%
EPA Registration No 10324-23
Application Date April 24, 2012
EPA Received Date May 02, 2012

Dear Ms Tannehill,

The following amendments, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), Section 3(c)7(a), as amended is acceptable with comments

Proposed Amendments

- Revised per EPA letter dated 4/11/12, to correct and add the appropriate Storage and Disposal language

Labeling Comments

Revise the "For Use on Refillable Containers with Commercial/Industrial Uses" as follows

Add the following statement to the section beginning "Cleaning the container before final disposal " and ending " is the responsibility of the refiller " Add *When empty return to point of sale for refilling*

Add the following statements to both the Container Handling/Residue Removal Instructions for all refillable containers except fixed tank containers as well as fixed tanks Revise to begin "Refillable container *Refill this container with pesticide only Do not reuse this container for any other purpose* To clean the container "

Add the following statement to both the Container Handling/Residue Removal Instructions for all refillable containers except fixed tank containers as well as fixed tanks Revise to end as follows *Puncture or dispose of in a sanitary landfill or by other procedures approved by State and local authorities "*

CONCURRENCES							
SYMBOL	7510P						
SURNAME							
DATE	7/25/12						

EPA Form 1320-1A (1/90) *Printed on Recycled Paper* OFFICIAL FILE C

Add the following statements to the Container Handling/Residue Removal Instructions for fixed tanks Revise to include " *application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds Drain for 10 seconds after the flow begins to drip* Drain rinsate into application "

General Comments

A stamped copy of the acceptable labeling is enclosed Submit one (1) copy of your final printed labeling before distributing or selling the product bearing the revised labeling Should you have any questions concerning this letter, please contact Lorena Rivas at (703) 305-5027 or Velma Nobel at (703) 308-6233

Sincerely,

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

Stamped label

MASON CHEMICAL COMPANY
"The Quaternary Specialists"
721 W Algonquin Road I Arlington Heights IL 60005 I 847 290 1621or 800 362 1855

E P A Reg No 10324 23
E P A Est No 10324 IL 1

MAQUAT® TC76-16%

Net Contents Batch No

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER **Keep out of Reach of Children** Corrosive Causes irreversible eye damage and skin burns Harmful if swallowed or absorbed through skin Do not get into eyes on skin or on clothing Wear protective eyewear (goggles safety glasses or face shield) protective clothing and rubber gloves Wash thoroughly with soap and water after handling and before eating drinking chewing gum using tobacco or using the toilet Remove contaminated clothing and wash clothing before reuse

(If container is larger than 5 gallons the following statement must appear on the label)

ENVIRONMENTAL HAZARD

This pesticide is toxic to fish aquatic invertebrates oysters and shrimp 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

(For containers up to and including 5 gallons use the following environmental hazard)

ENVIRONMENTAL HAZARD

This product is toxic to fish

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame or in car
Do not mix with soap anionic detergents or oxidizers

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 **NOTE TO PHYSICIAN** Probable mucosal damage may contraindicate gastric lavage

ACCEPTED
with COMMENTS
In EPA Letter Dated
JUL 25 2012
Under the Federal Insecticide Fungicide and Rodenticide Act as amended for the pesticide registered under EPA Reg No 10324-23

For Control of Algae and Algal Slime Growth in Swimming Pools Decorative Fountains and Pools Industrial and/or Commercial Recirculating Cooling Water Towers Auxillary Water and Waste Water Systems Oil Field Water Flood/Salt Water Disposal Systems Retort Water Systems Controls bacteria and fungal slimes in pulp paper mills and paper manufacturing

(The use site Retort Water Systems not for use in California)

(Product of USA) (Made in the USA)

ACTIVE INGREDIENTS	
Alkyl (60%C_{14} 30%C_{16} 5%C_{12} 5%C_{18}) dimethyl benzyl ammonium chloride	15 936%
Dialkyl (60%C_{14} 30%C_{16} 5%C_{12} 5%C_{18}) methyl benzyl ammonium chloride	0 064%
INERT INGREDIENTS	84 000%
TOTAL	**100 000%**

Weight Approx 8lbs /gallon

KEEP OUT OF REACH OF CHILDREN

DANGER PELIGRO

See left (back) (side) (right) panel (of label) (below) for additional precautionary statements and first aid statements

(Note to Reviewer This information has been verified per DOT regulations It is NOT required to be on the label but is being requested by a customer)

Transportation Information
DOT Hazard Class Non Corrosive
DOT Proper Shipping Name Not applicable

PELIGRO SI NO PUEDE LEER EN INGLES, PREGUNTE A SU SUPERVISOR SOBRE LAS INSTRUCCIONES DE USO APROPIADAS ANTES DE TRABAJAR CON ESTE PRODUCTO

DANGER IF YOU CANNOT READ ENGLISH, ASK YOUR SUPERVISOR TO EXPLAIN THE APPROPRIATE DIRECTIONS FOR USE BEFORE WORKING WITH THIS PRODUCT

(Manufacturing and/or Lot no Date)

3/11

- 16% Concentration
- Kills and prevents all type of Algae

This formulation (Maquat® TC76 16%) is for use in

- Industrial and/or commercial recirculating cooling water towers
- Once through water cooling systems
- Paper mills and paper mill process water systems
- Oil field water flood or salt water disposal system and fracturing fluids
- Oil field injection and waste water
- Gas production and transimission pipelines and systems
- Gas storage wells and systems
- Pipeline pigging and scraping operations
- Drilling completion and workover fluids systems
- Packer fluids
- Hydrotesting

ACCEPTED with COMMENTS In EPA Letter Dated. JUL 25 2012

Under the Federal Insecticide Fungicide and Rodenticide Act as amended for the pesticide registered under EPA Reg No 10324-93

This product has been designed specifically for control of sulfate reducing bacteria (SRB) that contribute to souring the production of sulfide and abiotic corrosion in water cooling systems paper mill process water systems oil field systems gas production and transmission pipelines and systems

A microbiocide for use in controlling sulfate reducing bacteria and slime forming bacteria in oil well drilling oil field processing applications oil field water systems oil and gas productions and transmission pipelines and systems and gas storage fields and equipment such as steam injection water holding tanks flood water injection water holding pond water disposal well water water holding tanks fuel storage tanks and related refinery and oil field closed industrial recirculating water handling systems

A highly effective microbiocide for use in controlling bacteria including slime forming bacteria and sulfate reducing bacteria (SRB) and fungi (yeast and molds) and algae in air washers and industrial scrubbing systems recirculating cooling and process water systems including those that contain reverse osmosis membranes and in service water and auxiliary systems and heat transfer systems and in wastewater systems including wastewater sludge and holding tanks and in paper mills and paper mill process water systems and water based coatings for paper and paperboard

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 blue green 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 must 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 must 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 protects the unattended pool when you re away (refer to Vacation Treatment section in Directions For Use)

DIRECTIONS FOR USE

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

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

***(Note to Reviewer** This paragraph will be used only for Once Through Cooling Systems)* Use of the product in either public/municipal or single or multiple family privat residential potable/drinking water systems is strictly prohibited Use of the product 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

INDUSTRIAL WATER TREATMENT

This product aids in the control of bacterial fungal and algal slimes in evaporative condensers heat exchange water systems industrial and commercial cooling towers influent systems such as flow through filters and lagoons industrial water scrubbing systems and brewery pasteurizers

INDUSTRIAL AND/OR COMMERCIAL RECIRCULATING COOLING WATER TOWERS RETORT WATER SYSTEMS, EVAPORATIVE CONDENSERS, HEAT EXCHANGE WATER SYSTEMS, INFLUENT SYSTEMS

(Note Retort Water Systems use site not applicable in California)

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 must 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

(OR)

INTERMITTENT OR SLUG METHOD

When this treatment is required add this product at the rate of 16 to 32 ounces per 1000 gallons of water already in the system or being added to the system for 4 to 8 hours 1 to 4 times per week or as needed to achieve the desired level of control When control is obtained add this product at the rate of 4 to 12 ounces per 1000 gallons of water in the system

c ***CONTINUOUS FEED METHOD***

Initial Dose When the system is noticeably fouled apply 16 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

ONCE THROUGH FRESH AND SEA 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 must 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 48 to 4 8 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 is 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 24 to 2 4 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 must be tied to an in plant monitoring program for macro cowling 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 24 to 2 4 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 08 to 0 8 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

ACCEPTED with COMMENTS In EPA Letter Dated: MAY 25 2012

Under the Federal Insecticide Fungicide and Rodenticide Act as amended for the pesticide registered under EPA Reg No. 10334-23

DEACTIVATION Use bentonite clay at the minimum ratio of 5 ppm clay to 1 ppm product This product must be deactivated prior to discharge of the NPDES outfall Do not apply this product more than 4 times a year

(OR)

ONCE THROUGH FRESH AND SEA 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 must 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 10 parts of water to 1 part of this product
c Add product directly from drum or add the product at a point where it will be mixed uniformly
d Use 0 48 to 4 8 fluid ounces (0 6 to 6 ppm on an active quaternary basis) per thousand gallons
e 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 5 *ppm of product*
f Do not use product more than 4 times per year
g Treatment time cannot exceed 120 hours/application
h Avoid oxidizers and reducing agents Product is cationic and must not be mixed with soap or anionic surfactants

TO DEACTIVATE Use bentonite clay at the minimum ratio of 5 ppm clay to 1 ppm product Deactivation must occur prior to discharge of the NPDES outfall Do not apply this product more than 4 times a year

OIL FIELD & GAS PRODUCTION TREATMENT

Specific treatment requirements vary among oil and/or gas field sites and subsystem components The primary point of treatment will vary among oil and/or gas field operations depending on the site problems water-flood treatment methods and equipment The product must be added where it will disperse rapidly and uniformly to the desired area to treatment

Additions of the product should be made with the proper type of metering pump equipment suction (low pressure) side of pumping equipment or similar device This product can b added to the system by slug continuous or on an intermittent basis depending on the degree of system fouling

OR

Specific treatment requirements vary among oil and/or gas field sites and subsystem components Oil field fluids and subsystems most commonly requiring microbial contamination control are raw water sources perparators ballast storage and mixing tanks screens surface injection equipment production equipment (such as injection and production piping casting completion and valving) and the formation itself The primary point of treatment will vary among oil and/or gas field operations depending on the site problems water-flood treatment methods and equipment The product must be added where it will disperse rapidly and uniformly to the desired area of treatment

Additions of the product should be made with the proper type of metering pump equipment suction (low pressure) side of pumping equipment or similar device This product can be added to the system by slug continuous or on an intermittent basis depending on the degree of system found

OIL FIELD WATER FLOOD OR SALT WATER DISPOSAL SYSTEMS AND FRACTURING FLUIDS

This product must be added to the water flood or salt water disposal system at a point of uniform mixing

1 For the control of slime forming and sulfate reducing bacteria in oil field water flood or salt water disposal systems add 5 – 10 ppm (active) of this product (2 95 – 5 9 gallons per 3 000 barrels of water) continuously Levels for effective control will vary depending on conditions at the site

2 For intermittent use dose at rate of 5 – 20 ppm (active) of this product (2 95 – 11 8 gallons per 3 000 barrels of water) for 4 to 8 hours per day one to four times a week as needed to maintain control

3 For treatment of flow back return water (Post Hydraulic Fracturing – Dose as rate of 5 – 20 ppm (active) of this product (2 95 – 11 8 gallons per 3 000 barrels of water) for 4 to 8 hours per day one to four times a week as needed to maintain control

OILFIELD INJECTION AND WASTE WATER

This product must be added to the water handling system at a point of uniform mixing such as the area of addition of make up water to the holding tank

Method of application

1 **Continuous Injection** Add this product at 30 ppm active (24 fluid ounces per 1000 gallons of water) when system is noticeably fouled When microbial control is evident add this product at 15 ppm active (12 fluid ounces per 1000 gallons of water) to maintain control

2 **Batch Treatment** Add this product at 180 ppm active (144 fluid ounces per 1000 gallons of water) over a period of 4 – 6 hours one or more times per week when the system is noticeably fouled When microbial control is evident add this product at 90 ppm active (72 fluid ounces per 1000 gallons of water) over a period of 4 – 6 hours one or more time per week

OR

For use in oil field and/or petrochemical water subsurface injection systems of secondary and/or tertiary oil recovery systems to reduce the number of anaerobic bacteria aerobic bacteria sulfate reducing bacteria

1 **DOSING LOCATION** (site of use) This product is to be applied at a point in the *recovery system where it will be uniformly mixed* such as at the screens storage tanks and other mixing device locations

2 **DOSING CONDITIONS** This product should be applied when the system is in jeopardy of being affected Badly fouled systems must be cleaned before treatment is begun

3 **EQUIPMENT USED** Use the injection pump to apply the product

4 **USE LIMITATIONS** Dependent upon pH temperature and salt content adjust according to conditions found at the site as needed to maintain control

5 **DOSAGE APPLICATIONS**

a **SLUG METHOD**

Initial Dose When the system is noticeably fouled apply 48 ounces (60 ppm *active ingredient) of this product* per 1000 gallons of water in the system Apply for 3 to 8 hours daily until control is achieved

Subsequent Dose When microbial control is evident add 24 ounces (30 ppm active ingredient) of this product per 1000 gallons of water in the system daily or as needed to maintain control

b **INTERMITTENT DOSAGE**

Initial Dose When the system is noticeably fouled apply 48 ounces (60 ppm active ingredient) of this product per 1000 gallons of water in the system Apply for 3 to 8 hours daily until control is achieved

Maintenance Dose When control of microbial growth is evident apply 24 ounces (30 ppm active ingredient) of this product per 1000 gallons of water in the system daily or as needed to maintain control

c **CONTINUOUS FEED METHOD**

Initial Dose When the system is noticeably fouled apply 12 ounces (15 ppm active ingredient) of this product per 1000 gallons of water in the system

Subsequent Dose Maintain this treatment by starting a continuous feed of 12 ounces (15 ppm active ingredient) of this product per 1000 gallons of water daily or as needed to maintain control

OIL AND GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS

For the control of sulfate reducing bacteria and slime forming bacteria this product must be added at a point in the production or transmission pipeline via direct injection where uniform The application must be conducted to ensure maximum distribution of the product through the internal surface of the pipeline by adding an amount of biocide which eventually comes out the other end of the pipeline Criteria for success of th treatment will be reduction in bacterial count and/or corrosion rates To facilita applications it is desirable to dilute the product with an appropriate solvent immediately before use The concentration in the solvent must not fall below an active concentration range of 500 to 5 000 ppm based on the volume of water in the pipeline Injections to the system must be weekly or as needed to maintain control

GAS STORAGE WELLS AND SYSTEMS

Individual injection wells must be treated with a sufficient quantity of this product to produce concentration of 65 1000 ppm (on an active quaternary basis) when diluted by the water present in the formation Injection should take place before gas is injected (during the summer) Injection must be repeated yearly or as needed to maintain control

PIPELINE PIGGING AND SCRAPING OPERATIONS

Add this product to a slug of water immediately following the scraper (ideally this water volume can be kept to a minimum and contained between the scraper and the trailing pig) Sufficient product is added to produce an effective concentration of 75 – 500 ppm on an active quaternary basis (6 to 40 ounces per 100 gallons of water) depending on the length of the pipeline and the severity of the biofouling

DRILLING COMPLETION AND WORKOVER FLUIDS SYSTEMS

This product is to be applied to these fluid systems at a point of uniform mixing such *a circulating holding tank and other mixing device locations*

Initial Treatment Add 65 – 1000 ppm (on an active quaternary basis) of this product (164 to 2520 ounces of this product per 100 barrels) to a freshly prepared fluid Levels for effective control will vary depending on conditions at the site and the severity of the contamination

Maintenance Dosage Add 65 – 1000 ppm (on an active quaternary basis) of this product (164 to 2520 ounces of this product per 100 barrels) to the fluid Levels for effective control will vary depending on conditions at the site and the severity of the contamination

PACKER FLUIDS

This product is to be added to the packer fluid at a point of uniform mixing such as a circulating holding tank and other mixing device locations Add 164 to 2520 ounces (65 – 1000 ppm active quarternary basis) of this product per 100 barrels of packer fluid This

product is applied to a freshly prepared fluid Levels for effective control will vary depending on conditions at the site and the severity of the contamination Seal the treated packer fluid in the wall between the casing and the production tube

HYDROTESTING

Treat water in the hydrotest pipelines or vessels with 65 – 1000 ppm on an active quaternary basis (52 to 800 ounces per 1000 gallons of water) of this product depending on the water quality and length of time the equipment will remain idle

AUXILLARY SERVICE WATER AND WASTE WATER SYSTEM

This product is effective for the control of odor forming and slime forming bacterial fungi and algae in auxillary service water systems such as fire protection systems and pump or screen bays water waste systems such as storage tanks storage piles associated piping setting ponds or lagoons transport spillways or canals and disposed wells

Add 5 – 180 ppm (active) of this product (2 95 – 106 gallons per 3 000 barrels of water) continuously This product must be added to the system at a point of uniform mixing by slug or intermittent feed or by spraying onto a waste pile The frequency of feed or spray and the duration of treatment will depend upon the severity of the contamination Additions to water systems must be made during the pumping operation and as close to the pump as possible to ensure adequate mixing

PULP AND PAPER MILLS

SLIMICIDE APPLICATIONS

This product can be used as a slimicide in the manufacture of paper and paperboard depending on the type of stock quality of ray water complexity of the system and degree of contamination Apply this product intermittently or continuously depending on mill conditions to the paper making system at a point of uniform mixing such as a the beaters thin or thick stock chests broke chest pump save all tank process tank or whitewater tank Do not use to treat paper or paperboard which will contact food

Initial Dose When system is noticeably contaminated add 4 to 800 pounds of this product per 100 000 gallons of whitewater to be treated (1 0 to 200 ppm of product) as a continuous or slug dose Repeat until control is achieved Heavily fouled systems must be boiled out prior to initial treatment

Subsequent Dose When microbial control is evident add 4 to 400 pounds of this product per 100 000 gallons of whitewater to be treated (1 0 to 100 ppm of product) as necessary to maintain control

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 must 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 2 to 400 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 must be applied to the moistened pulp surface via applicator rolls or showers Application can also be made at the size press or water box

ACCEPTED with COMMENTS In EPA Letter Dated. JUL 25 2012 Under the Federal Insecticide Fungicide and Rodenticide Act as amended for the pesticide registered under EPA Reg No. 1022U-72

SWIMMING POOLS

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 Maintain sanitizer residual in accordance with label directions found on your sanitizer of choice When using other products as outlined in directions for this product always follow directions on those products

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 must not be allowed into the water

Initial Application for Swimming Pools

1 Back wash the filter thoroughly
2 Vacuum algae debris and thoroughly brush pool
3 Add 80 fluid ounces of this product to each 50 000 gallons of water (16 ounces per 10 000 gallons) (One 2 fluid ounce packet per 1 250 gallons of pool water) or ratio thereof
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 20 fluid ounces of this product in 50 000 gallons of water (One 2 fluid ounce packet per 5 000 gallons of pool water) every 3 5 days or as needed to maintain 0 5 ppm active Quaternary Test Kits are available for this use

Booster Application

Add 20 fluid 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 must 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 15 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 must not be allowed into the water

Initial Application for Swimming Pools

1 Back wash the filter thoroughly
2 Vacuum algae debris and thoroughly brush pool
3 Add 80 fluid ounces of this product to each 50 000 gallons of water (16 ounces per 10 000 gallons) (One 2 fluid ounce packet per 1 250 gallons of pool water) or ratio thereof
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 20 fluid ounces of this product in 50 000 gallons of water (One 2 fluid ounce packet per 5 000 gallons of pool water) every 3 5 days or as needed to maintain 0 5 ppm active

Booster Application

Add 20 fluid 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 must 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 15 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

WINTERIZING TREATMENT *(not applicable in California)*

When swimming pool season is over add 80 ounces of this product per 16 000 gallons (5 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 20 ounces of this product in to 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 1 quart 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 one gallon containers)

Swimming Pool Capacity Gallon of Water	Initial Treatment	Maintenance Dose Booster Dose
5 000	8 0 ounces	2 0 ounces
10 000	16 0 ounces	4 0 ounces
20 000	32 0 ounces	8 0 ounces
25 000	40 0ounces	10 0 ounces
30 000	48 0ounces	12 0 ounces
40 000	64 0 ounces	16 0 ounces
50 000	80 0 ounces	20 0 ounces

(OR)

(Usage chart for one quart containers)

Swimming Pool Capacity Gallon of Water	Initial Treatment	Maintenance Dose Booster Dose
5 000	8 0 ounces	2 0 ounces
10 000	16 0 ounces	4 0 ounces
20 000	32 0 ounces	8 0 ounces

ALTERNATE WINTERIZATION METHOD *(not applicable in California)*

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 50 ounces of this product per 10 000 gallons (20 ounces per 4 000) (or rat there of) 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

OTHER

DIRECTIONS FOR USE IN OUTSIDE SPAS/WHIRLPOOLS/HOT TUBS

(Outside description not for use in California)

Initial Dose Add 8 0 ounces of this product per 5 000 gallons of water Initial dose is used upon filling of spa/whirlpool/hot tub bath

Maintenance Dose Add 2 0 ounces of this product per 5 000 gallons of wat Maintenance dose must be added at 3 5 day intervals If high temperatures prevail or 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

CONTROLLING ALGAE GROWTH

Bird Baths Do not use with fish Clean to remove algae growth prior to filling birdbath Thoroughly wet all exposed surfaces with a solution of 0 63 ounces of this product per gallon of water Allow to air dry and brush off dead algae

(Or)

INSTRUCTIONS FOR BIRD BATHS

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

ACCEPTED
with COMMENTS
In EPA Letter Dated:
JUL 25 2012
Under the Federal Insecticide
Fungicide and Rodenticide Act as
Amended, for the pesticide,
Registered under EPA Reg No 10324-33

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Initial Dose

1 Drain Bird Bath
2 Wipe mop or spray all exposed surfaces using 0 63 ounces of this product per gallon of water Spray device must be a mechanical coarse spray device When applied with spray device surfaces must be sprayed until thoroughly wetted Do not rinse
3 Allow to air dry and brush off dead algae Repeat if necessary until no algae is visible
4 Refill Bird Bath with fresh water

Maintenance Dose Repeat initial treatment when algae growth returns

ALGAE CONTROL ON WALKWAYS For heavy infestations spray or swab a solution of 0 63 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 CONTAINERIZED DECORATIVE FOUNTAINS AND POOLS

(Note to Reviewer Containerized description must be used in California)

This product is not to be used in open water ways connected to larger watersheds or in waters that serve as natural habitats for aquatic and amphibious organisms **DO NOT** use when fish or other wildlife (for example amphibians) are present 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 80 ounces of this product to each 50 000 gallons (32 ounces per 20 000 gallons) or ratio thereof

Weekly Maintenance Dose Add 20 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	80 ounces	20 ounces
25 000	40 ounces	10 ounces
12 500	20 ounces	5 ounces
6 250	10 ounces	2½ ounces
3 125	5 ounces	1¼ ounces
1 562	2½ ounces	0 625 ounces
781	1¼ ounces	0 3125 ounces
390	0 625 ounces)	0 15625 ounce
195	0 3125 ounces	0 078 ounces

ACCEPTED with COMMENTS In EPA Letter Dated: JUL 25 2012 Under FIFRA, as amended, for the pesticide registered under EPA Reg No 10324-23

(Note to reviewer The title and first statement of this section must appear on every label followed by the appropriate Storage and Disposal section Brackets [ ] indicate that one option within the brackets MUST be used in the final label text Each option within the brackets is enclosed in a set of parenthesis ( ) All Notes are only for reviewers and will not be included on label)

STORAGE AND DISPOSAL

Do not contaminate water food or feed by storage and disposal

(For Swimming Pool Use and Decorative Fountains and Pools in nonrefillable containers up to and including 5 gallons)

Nonrefillable container Store in original container in areas inaccessible to small children Keep from freezing Offer for recycling if available or wrap and discard in trash (or recycle)

(For Swimming Pool Use and Decorative Fountains and Pools in containers over 5 gallons)

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 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 the label instructions contact your State Pesticide or Environmental Control agency or the Hazardous Waste representative at the nears EPA Regional Office for guidance

CONTAINER DISPOSAL Non refillable container Do not reuse container (bottle cans jars) Triple rinse (or equivalent) Offer for recycling if available or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities

(FOR USE ON NON REFILLABLE CONTAINERS WITH COMMERCIAL/INDUSTRIAL USES)

***(Note** For use on containers of 5 gallons or less)*

PESTICIDE STORAGE Store only in original container Keep from freezing If a leaky container must be contained within another mark the outer container to identify the contents Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use

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/RESIDUE REMOVAL Non refillable container Do not reuse empty container Triple rinse as follows Fill container ¼ full with water and recap Shake for 10 seconds Follow Pesticide Disposal instructions for rinsate disposal Drain for 10 seconds after the flow begins to drip Repeat procedure two more times Wrap container and put in trash or offer for recycling or reconditioning If not available puncture and dispose of in a sanitary landfill

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 and the material then moved into containers and disposed of by approved methods for hazardous wastes

(FOR USE ON NON REFILLABLE CONTAINERS WITH COMMERCIAL/INDUSTRIAL USES)

(Note For use on containers greater than 5 gallons)

PESTICIDE STORAGE Open dumping is prohibited Store only in original container Keep from freezing If a leaky container must be contained within another mark the outer container to identify the contents Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use

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 dispo of by use according to label instructions contact your State Pesticide or Environmental Con Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance

CONTAINER DISPOSAL *(Note Only one of the following Container Disposal paragraphs will be used depending on packaging type)*

Non refillable container Do not reuse this container to hold materials other than pesticides or diluted pesticides (rinsate) Offer for recycling if available or puncture and dispose in a sanitary landfill or by other procedures approved by state and local authorities If rinsate cannot be used follow pesticide disposal instructions

*(Note Several of our customers packaging options are sealed containers or bottles designed to reduce worker exposure to the concentrate None of these can be triple rinsed because they are closed sealed containers The following text will be used on these **non refillable sealed container** types only)*

Nonrefillable container Do not reuse or refill this container Wrap empty container and put in trash

RESIDUE REMOVAL INSTRUCTIONS To clean the container before final disposal empty the remaining contents from this container into [(application equipment) (a mix tank)] Fill the container ¼ full with water Replace and tighten closures [(Tip container on its side and roll it back and forth ensuring at least one complete revolution for 30 seconds then stand the container on its end and tip it back and forth several times Turn the container over onto its other end and tip it back and forth several times) (Agitate vigorously or recirculate water for 30 seconds)] Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal Follow Pesticide Disposal instructions for rinsate disposal Repeat this procedure two more times

(FOR USE ON REFILLABLE CONTAINERS WITH COMMERCIAL/INDUSTRIAL USES)

*(**Note** For use on all refillable containers)*

Cleaning the container before final disposal is the responsibility of the person disposing of the container Cleaning before refilling is the responsibility of the refiller

PESTICIDE STORAGE Open dumping is prohibited Store only in original container If a leaky container must be contained within another mark the outer container to identify the contents Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use

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

(For use on all refillable containers except fixed tank containers)

CONTAINER HANDLING/RESIDUE REMOVAL INSTRUCTIONS Refillable container To clean the container before final disposal empty the remaining contents from this container into [(application equipment) (a mix tank)] Fill the container ¼ full with water Replace and tighten closures [(Tip container on its side and roll it back and forth ensuring at least one complete revolution for 30 seconds then stand the container on its end and tip it back and forth several times Turn the container over onto its other end and tip it back and forth several times) (Agitate vigorously or recirculate water for 30 seconds)] Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal Repeat this procedure two more times Follow Pesticide Disposal instructions for rinsate disposal

(Note To be used on fixed tanks only)

CONTAINER HANDLING/RESIDUE REMOVAL INSTRUCTIONS Refillable container To clean the container before final disposal empty the remaining contents from this container into application equipment or a mix tank Drain rinsate into application equipment and dispose of according to Pesticide Disposal instructions Triple rinse container (or equivalent) promptly after emptying Continue to drain for 10 seconds after the flow ends Repeat this procedure two more times

Made in USA

[Optional – for use on residential use swimming pool and spa products]

ACCEPTED
with COMMENTS
In EPA Letter Dated.
JUL 25 2012

Under the Federal Insecticide Fungicide and Rodenticide Act as amended for the pesticide registered under EPA Reg No 10324-23

2 0 OUNCE PACKET LABEL TO BE USED WITH MASTER CONTAINER LABEL

FOR INITIAL TREATMENT

MIX EACH PACKET WITH 1 250 GALLONS OF POOL WATER

MAQUAT TC76-16%

E P A Reg No 10324 23 E P A Est No 10324 IL 1

NET CONTENTS 2 0 FLUID OZ

ACTIVE INGREDIENTS	
Alkyl (60%C_{14} 30%C_{16} 5%C_{12} 5%C_{18}) dimethyl benzyl ammonium chloride	15 936%
Dialkyl (60%C_{14} 30%C_{16} 5%C_{12} 5%C_{18}) methyl benzyl ammonium chloride	0 064%
INERT INGREDIENTS	84 000%
TOTAL	**100 000%**

KEEP OUT OF REACH OF CHILDREN

DANGER PELIGRO

SEE OUTER CONTAINER FOR PRECAUTIONARY STATEMENTS AND USE DIRECTIONS

DISPOSAL Do not reuse container Wrap and put in trash collection

MASON CHEMICAL COMPANY
"THE QUATERNARY SPECIALISTS"
721 W Algonquin Road
Arlington Heights IL 60005
847-290-1621
Toll Free
1-800-362-1855

PELIGRO SI NO PUEDE LEER EN INGLES, PREGUNTE A SU SUPERVISOR SOBRE LAS INSTRUCCIONES DE USO APROPIADAS ANTES DE TRABAJAR CON ESTE PRODUCTO

2 0 OUNCE PACKET LABEL TO BE USED WITH MASTER CONTAINER LABEL

FOR MAINTENANCE TREATMENT

MIX EACH PACKET WITH 5 000 GALLONS OF POOL WATER

MAQUAT TC76-16%

E P A Reg No 10324 23 E P A Est No 10324 IL 1

NET CONTENTS 2 0 FLUID OZ

ACTIVE INGREDIENTS	
Alkyl (60%C_{14} 30%C_{16} 5%C_{12} 5%C_{18}) dimethyl benzyl ammonium chloride	15 936%
Dialkyl (60%C_{14} 30%C_{16} 5%C_{12} 5%C_{18}) methyl benzyl ammonium chloride	0 064%
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ACCEPTED
with COMMENTS
In EPA Letter Dated.
JUL 25 2012

Under the Federal Insecticide
Fungicide [illegible] cide Act as
amended [illegible] ic de
registe [illegible] Reg No.