



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

September 20, 2016

Robert Rosenwasser
Agent for,
Compass Chemical International, LLC
5544 Oakdale Road
Symrna, GA 30082

Subject: Notification per PRN 98-10 – Add container handling language
Product Name: C-Quat 1440
EPA Registration Number: 87262-5
Application Date: July 27, 2016
Decision Number: 519833

Dear Mr. Rosenwasser:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Antimicrobials Division (AD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If you have any questions, you may contact Joe Daniels at (703) 347-8669 or via email at daniels.joseph@epa.gov.

Sincerely,

A handwritten signature in blue ink that reads "E. Miederhoff". The signature is written in a cursive style with a large, stylized initial "E".

Eric Miederhoff
Product Manager 31
Regulatory Management Branch I
Antimicrobials Division (7510P)
Office of Pesticide Programs

{All text in brackets [xxx] is optional and may or may not be intended on a final label.}

{All text in braces {xxx} is administrative and will not appear on a final label.}

C-QUAT 1440

ACTIVE INGREDIENT:

Alkyl (50%C14, 40%C12, 10%C16)

dimethyl benzyl ammonium chloride40.0%

OTHER INGREDIENTS:.....60.0%

TOTAL:100.0%

NOTIFICATION

87262-5

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

09/20/2016

EPA Reg. No. 87262-5

EPA Est. No. 008576-GA-001

KEEP OUT OF REACH OF CHILDREN

DANGER

FIRST AID:

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

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information call the National Pesticides Information Center at 1-800-858-7378, 6:30 AM to 4:30 time (PT), seven days a week. In case of a spill emergency, call Chemtrec at 1-800-424-9300.

See side panel of label for additional precautionary statements and first aid statements.

Manufactured by:
Compass Chemical International, LLC
5544 Oakdale Road
Symrna, GA 30082

NET CONTENTS: _____ GAL (LBS)

LOT# _____

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

DANGER. Keep Out of Reach of Children. Corrosive. Causes irreversible eye damage and skin burns. May be fatal if ingested. Avoid breathing vapor or spray mist. Inhalation of mist or vapors may irritate respiratory tract. High vapor concentrations may cause central nervous system effects. Harmful if swallowed and absorbed through the skin. Do not get into eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses), rubber gloves and protective clothing when handling. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash clothing before reuse.

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

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

Do not mix with oxidizers, soap or anionic detergents or other water treating chemicals.

For Control of Algae and Algae Slime Growth in Swimming Pool, Industrial and/or Commercial Recirculating Cooling Water Towers, Retort Water Systems, Auxiliary Water and Waste Water Systems and Water Cooling Systems, Oil Field Water Flood/Salt Water Disposal Systems, Molluscs in Once Through Water Cooling Systems, and Mold, Mildew and Fungi in Sap Stain and Wood Preservatives. Controls bacterial and fungal slimes in pulp, paper mills and paper manufacturing.

For Control of Algae and Algae Slime Growth in Swimming Pools, (Outside) Spas/Whirlpools/Hot Tub Baths, (Containerized) Decorative Fountains.

{“Containerized”, “Outside” description. and the use sites that include Retort Water Systems, Auxiliary Water and Waste Water Systems and Water Cooling Systems, Oil Field Water Flood/Salt Water Disposal Systems, Molluscs in Once Through Water Cooling Systems. Sap Stain and Wood Preservative, pulp, paper mills and paper manufacturing not for use in California.}

- 40% Concentration
- Kills and prevents all type of Algae

This formulation, **C-QUAT 1440**, is for use in:

Industrial and/or commercial recirculating cooling water towers.

Once through water cooling systems. (Nor for use in CA)

Paper mills and paper mill process water systems. (Not for use in CA)

Oil field water flood or salt water disposal system and fracturing fluids. (Not for use in CA)

Oil field injection and waste water. (Not for use in CA)

Gas production and transmission pipelines and systems. (Not for use in CA)

Gas storage wells and systems. (Not for use in CA)

Pipeline pigging and scraping operations. (Not for use in CA)

Drilling, completion and workover fluids systems. (Not for use in CA)
Packer fluids. (Not for use in CA)
Hydrotesting. (Not for use in CA)

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. (Not for use in CA)

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. (Not for use in CA)

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. (Not for use in CA)

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 clear 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 compliment 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 under 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 residues 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 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.

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
(“Retort/Water Systems” use site not for use 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 alter 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 6.4 to 12.8 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 1.6 to 4.8 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 6.4 to 12.8 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 1.6 to 4.8 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 6.4 to 12.8 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 1.6 to 4.8 ounces per 1000 gallons of water in the system.

c. CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled, apply 6.4 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 1.6 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 (Not for use in CA)

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 alter cleaning systems where efficiency is already impaired.
3. Method of Applications:

a. INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, apply 0.32 to 3.2 fluid ounces (1 to 10 ppm on an active quaternary basis) per 1000 gallons of water based on system flow rates. The minimum treatment must 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 1 ppm product.

Subsequent Dose: When microbial control is evident, add 0.16 to 1.6 fluid ounces (.5 to 5 ppm on an active quaternary basis) per 1000 gallons of water based upon system flow rates on an as needed basis to maintain control.

Frequency of feed must be tied to an in plant monitoring program for macro fowling 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.

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. (OR)

ONCE THROUGH FRESH AND SEA WATER COOLING SYSTEM (Not for use in CA)

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 0.32 to 3.2 fluid ounces (1-10 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 (Not for use in CA)

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. This product must be added where it will disperse rapidly and uniformly to the desired area of treatment.

Additions of this product must be made with the proper type of metering pump equipment, suction (low

pressure) side of pumping equipment or similar device. This product must be 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, separators, ballast, storage and mixing tanks, screens, surface injection equipment, production equipment (such as injection and production piping casing, 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. This product must be added where it will disperse rapidly and uniformly to the desired area of treatment.

Additions of this product must 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 (1.2 - 2.36 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 (1.2 — 4.72 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 at a rate of 5-20ppm active of this product (1.2 — 4.72 gallons of this product 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 (9.6 fluid ounces per 1000 gallons of water) when system is noticeably fouled. When microbial control is evident, add this product at 15 ppm active (4.8 fluid ounces per 1000 gallons of water) to maintain control.
2. BATCH TREATMENT: Add this product at 180 ppm active (57.6 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 (28.8 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 19.2 ounces (60 ppm active 'flg9dIEI'.) 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 9.6 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 19.2 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 9.6 gallons (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 4.8 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 4.8 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 biocidal which eventually comes out the other end of the pipeline. Criteria for success of the treatment will be reduction in bacterial count and/or corrosion rates. To facilitate 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 amount 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 (2.4 to 16 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 as a circulating holding tank and other mixing device locations.

Initial treatment: Add 65 — 1000 ppm (on an active quaternary basis) of this product (0.5 to 7.9 gallons 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 (0.5 to 7.9 gallons 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 0.5 to 7.9 gallons (65 — 1000 ppm active quaternary basis) of this product per 100 barrels of packer fluid. This product is applied to a freshly prepared fluid. Levels for effective control 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 (20.5 to 318.75 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 bacteria, fungi and algae in auxiliary 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 (1.2 - 42.525 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 and as close to the pump as possible to ensure adequate mixing.

PULP AND PAPER MILLS (Not for use in CA)

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 0.25 to 50 gallons 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 0.25 to 25 gallons 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, FUNGIIMOLD 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 dewatered pulp surface via applicator rolls or showers Application can also be made at the size press or water box.

SAP STAIN CONTROL

For the control of mold, mildew and fungus on green or freshly cut lumber. May be used in a dip or spray application. Before use, dilute at the rate of 25 to 100 gallons of water per 1.25 gallons of this product. Seasonal variation in storage and shipping conditions, species and condition of wood must be considered in selection of end use concentrations. For effective inhibition of mold and fungus, lumber and logs must be dipped or sprayed in a manner that insures that all surfaces are uniformly treated

For best results, green wood must be treated immediately, at least within 24 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 must not be used for stickers. Freshly treated lumber must not be allowed to remain unprotected in heavy rains. Dip tanks and drip aprons must be roofed, paved and drained to prevent dilution and loss of the anti-stain solution. Treated lumber must be stored under cover, or indoors, or at least 100 feet from any pond, lake, stream, wetland or river to prevent possible runoff of the product into the waterway. Treated lumber stored outdoors within 100 feet of a pond, lake, stream, wetland, or river must be either covered with plastic or surrounded by berm to prevent surface water runoff into the nearby waterway. If a berm is used around the site, it must consist of impermeable material (clay, asphalt, concrete) and be of sufficient height to prevent runoff during heavy rainfall events.

WOOD PRESERVATIVES

This product is a concentrated biocide for use as a wood preservative. When used as directed this product will protect treated wood articles from the destructive attack of fungi, mold or mildew and both *Reticulitermes* and *Formosanus* species of termites. Treatment can be done by pressure, double vacuum, dip, brush and/or spray, although dip, brush and spray cannot be used for protection against termites. Wood articles that will be protected by these treatments would include millwork, construction timbers, decking, wood applications, wood shingles, posts and other articles to be used in above ground applications. Dilute this product in either water or mineral spirits solution to product a 0.5% to 3.0% active solution. This formulation is to be used for both pressure and double vacuum treatment.

OR

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.

OR

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.

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

<u>Percent Active Quit Solution</u>	<u>Ounces of this product per gallon</u>
0.5	1.6
1.0	3.2
1.5	4.8
2.0	6.4
2.5	8.0
3.0	9.6

To find the ounces of this product per gallon for other dilutions, take the percent active desired and divide by 0.3125.

C-QUAT 1440 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) (NW 100-C, EPA Reg. No. 3008-87 or NW 200-C, EPA Reg. No. 10465-33-3008). Refer to the product labels for (ACQ-C and ACQ-C2) (NW 100-C and NW 200-C) for precise mixing instructions. **This product may only be used in combination with copper compounds in pressure treatment applications.**

C-QUAT 1440 AND BORATES

Mix this product and either (Disodium Octaborate Tetrahydrate) Wood Bor, EPA Reg. No. 3008-61, Envirotech Insecticide, EPA No. 65705-1, Timbersaver, EPA Reg. No. 71916-1, Timbersaver PT, EPA Reg. No. 71916-1-10465, Tim-Bor, EPA Reg. No. 1624-39, Cellu-Treat DOT Wood Preservative, EPA Reg. No. 64405-8, Bor-Ram, EPA Reg. No. 72304-10 or Borathor Max PT, EPA Reg. No. 81824-11 in water. Refer to the product labels for precise mixing. **This product may only be used in combination with the above borates in pressure treatment or dip treatment applications.** Mix this product and Lum-Bor, EPA Reg. No. 19713-286 in water. Refer to the product label for precise mixing instructions. This product may only be used in combination with the above borate in brush or spray applications. Mix this product and BORA-CARE, EPA Reg. No. 64405-1 in water. Refer to the product label for precise mixing instructions. **This product may only be used in combination with the above borate in dip treatment applications.**

C-QUAT 1440 AND PROPICONAZOLE

Mix this product with Woodlife P, EPA Reg. No. 1409-65 and dilute with either 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 must be such as to produce a 0.1 to 0.6 lb./cu. Ft. 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 the vessel to -10 in. 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 in. and maintain for 20 minutes. Allow the pressure to return to atmospheric and remove treated wood articles.

Treatment conditions must 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 must 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

must 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 commercial applicators using brush or spray for use on wood shingles or shake roofs and siding on existing homes and on interior construction products and surfaces such as lumber, concrete, sheetrock, wallboard, block and steel. Use low-pressure equipment 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:

<u>PERCENT ACTIVE QUAT SOLUTION</u>	<u>OUNCES OF THE PRODUCT PER GALLON</u>
0.5	1.6
1.0	3.2
1.5	4.8
2.0	6.4
2.5	8.0
3.0	9.6

To find the ounces of this product per gallon for other dilutions take the percent active desired and divide by 0.15625.

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 manufacturer's 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.

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 best when added by itself directly to pool water.

INSTRUCTIONS FOR USE WITH HALOGEN BASED POOL SANITIZERS

This product is formulated to compliment most swimming pool sanitizers. When using other products as outlined in directions for this product, always follow directions on those products. This product is effective against the growth of algae. This product is effective in controlling the growth of the following types of algae: *Chlorella pyrenoidosa* (green algae), *Phormidium inundatum* (blue-green algae) and *Phormidium ritzii*. 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 temperatures increase.

Ensure all pool equipment is working properly. Backwash the filter system following manufacturers' directions. Adjust pH to between 7.2-7.6. Adjust chlorine residual to 1-3ppm. 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 a stain 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. Ensure that water quality conditions are maintained for the successful use of the product.

DOSAGES — For pools which are free of algae or contain algae growth.

Initial Application: Backwash the filter thoroughly. Vacuum algae debris and thoroughly brush pool. For an initial application, pour directly into pool at a rate of 32 oz. of this product per 50,000 gallons of water (2 ppm) or ratio thereof. Add this product directly into pool by pouring around entire outside perimeter of pool. More rapid distribution will be achieved by pouring a portion of the specified amount into several areas of the pool until all of the required quantity has been added. Vacuum pool after 24 hours to remove dead algae. If algae is still visible repeat dose as necessary until pool is free of visible algae. Once algae are under control, clean filter and return to normal operation. 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.

Maintenance: Pour directly into pool at a rate of 8 ozs. per 50,000 gallons of water (0.5 ppm) every 5-7 days depending on weather and use factors. After each rain of consequence, add 8 oz. per 50,000 gallons water. Even when the pool may not be in use for periods of time, algaecide additions must be made since a heavy accumulation of algae growth is difficult to remove. The appropriate amount of this product must be added by pouring a portion of the specified amount into several areas of the pool until the required quantity has been added. Recirculation accomplished by running the filter will assure rapid dispersion of product. Swimmers are allowed to re-enter the pool 15minutes after maintenance rate of product is applied.

Booster Application

Add 4 oz. of this product per 25,000 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 6.4 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 compliment 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 this product, always follow directions on those products. 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 temperatures increase. 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.

Initial Application:

1. Backwash the filter thoroughly.
2. Vacuum algae debris and thoroughly brush pool.
3. Add 12.8 ounces of this product per 20,000 gallons of water (2 ppm) or ratio thereof. Add this product directly into pool by pouring around entire outside perimeter of pool.
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. Allow the filter to run for at least six (6) hours after adding algacide. During this period, swimmers must not be allowed into the water.
7. Once algae are under control, clean filter and return to normal operation.

Maintenance Application

Add 4 ozs. per 50,000 gallons of water (.5 ppm) every 3-5 days or as needed to maintain 0.5 ppm active.

Booster Application

Add 4 ozs. of this product in 25,000 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 6.4 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.

FOR WINTERIZING POOLS BEFORE FREEZING (not applicable in CA)

Test the water and adjust to the proper levels.

Alter pool is no longer in use, super-chlorinate, using a recommended winter shock treatment, according to label directions. Allow pump to circulate for several hours or overnight.

Add winterizing algacide directly to pool water, walking around the pool, so that it is evenly distributed. Use at the rate of 32 ounces (6.7 ppm) per 15,000 gallons. Allow to circulate for a few hours.

Clean pool water line, shut down filter, drain pump, and winterize as per manufacturers' instructions. Cover with a solid cover if possible. Pools without a solid cover may need a second treatment later in the non-swimming season.

Swimming Pool Capacity Gallons of Water	Initial Treatment	Maintenance Dose Booster Dose
5,000	3.2 ozs.	0.8 ozs.
10,000	6.4 ozs.	1.6 ozs.
20,000	12.8 ozs.	3.2 ozs.
25,000	16.0 ozs.	4.0 ozs.
30,000	19.2 ozs.	4.8 ozs.
40,000	25.6 ozs.	6.4 ozs.
50,000	32.0 ozs.	8.0 ozs.

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**

Initial Dose: Add 3.2 ounces of this product per 5,000 gallons of water. Initial dose is used upon filling of (outside) spa/whirlpool/hot tub.

Maintenance Dose: Add 0.8 ounces of this product per 5,000 gallons of water. Maintenance dose must 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.

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 1/4 ounce of this product per gallon of water. Allow to air dry and brush off dead algae.

INSTRUCTIONS FOR BIRD BATHS

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

Initial Dose:

1. Drain Bird Bath.
2. Wipe, mop or spray all exposed surfaces using ¼ ounce 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 WALKWAY

For heavy infestations, spray or swab a solution of ¼ ounce of this product per gallon of water. Let stand for an hour or ore then brush and wash away dead algae. Soak area again with the solution. Do not rinse. Allow to (air) dry on the surface and repeat application when algae growth returns. (Not for use in CA)

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 16 ounces of this product to each 25,000 gallons (8 ounces per 12,500 gallons) or ratio thereof.

Weekly Maintenance Dose: Add 8 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.

Decorative Fountains or Pools Capacity in Gallons of Water	Initial Treatment	Maintenance Dose Booster Dose
25,000	16 ounces	4 ounces
12,500	8 ounces	2 ounces
6,250	4 ounces	1 ounce
3,125	2 ounces	½ ounce, (1 tbsp)
1,562	1 ounce	¼ ounce
781	½ ounce (1 tbsp)	0.125 ounces
390	¼ ounce	0.0625 ounces

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. Do not reuse empty container. Wrap and discard in trash.

{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: 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, Auxiliary water and waste water systems and water cooling systems, once through fresh water cooling systems, sap stains, wood preservatives and all containers up to and including 5 gallons.}

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 and 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 HANDLING: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

{Note: For use on containers greater than 5 gallons.}

PESTICIDE STORAGE: Store only in original container. Do not reuse empty container. If a leaky container must be contained within another, mark the outer container to identify the contents. Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. 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 HANDLING: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application or a mix tank. Fill the container $\frac{1}{4}$ 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. Stand the container on its end and tip it back and forth several times. Empty rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

{Note: For use on refillable containers greater than 275 gallons.}

CONTAINER HANDLING: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

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.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.