

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

AUG 12 2004

SUBJECT: Maquat 1412-10% FCS  
EPA Registration Number: 10324-111  
Application Dated: February 4, 2004  
Receipt Date: February 17, 2004

Dear Ms. Elizabeth Tannehill:

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

- add public health pests
- update use sites
- addition of claim for Drosophila and Phoridae flies

**Efficacy Data**

Acceptable Studies

Data Requirement	Means of Support	Status
<i>Escherichia coli</i> 0157:H7	Submitted study, MRID 461975-01	Acceptable @ 1:512 as a food contact sanitizing rinse in 500 ppm hard water for 30 seconds
<i>Escherichia coli</i> and <i>Staphylococcus aureus</i>	Submitted study, MRID 461975-04	Acceptable @ 1:512 as a food contact sanitizing rinse in 500 ppm hard water for 30 seconds
HIV-1	Submitted study, MRID 461975-03	Acceptable @ 1:128 in 5% soil for 10 minutes
<i>Trichophyton mentagrophytes</i>	Submitted study, MRID 456289-08	Acceptable @ 1:128 as a fungicide on hard non-porous surfaces
<i>Staphylococcus aureus</i> and <i>Klebsiella pneumoniae</i>	Submitted study, MRID 461975-02	Acceptable @ 1:512 as a non-food contact sanitizer in 5% soil for 30 seconds

**CONCURRENCES**

SYMBOL	7510C						
SURNAME	J. Fank						
DATE	8/12/04						

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Conditions

Revise the label as follows:

A. Make the following revisions to page two:

1. Your label does not include directions for use of this product as a "sanitizer" for whirlpools or Ultrasonic Baths. As such revise to state: "This product is a versatile cleaner and broad spectrum disinfectant formulated for use on bath and therapy equipment (Whirlpools)." and "This product is a versatile broad spectrum disinfectant formulated for use in Ultrasonic Baths (Ultrasonic cleaning units)."

2. Delete the site "footbath surfaces". Without specific directions for use in footbaths the term is misleading as to how the product is used at this site.

3. Delete the claim for use as a hatching egg sanitizer. This is an FDA use for which this Agency does not have an approval letter.

4. Revise the section: "Antibacterial. Kills Athlete's Foot fungus..." by deleting "Antibacterial" as a fungus is not a bacteria.

B. Make the following revisions to page three:

1. Delete all four sections which refer to treatment of upholstery and laundry as your label does not include directions for these uses. Specifically, delete the sections beginning:

- "This product eliminates unpleasant odors on washable surfaces..."
- "This product is effective at eliminating odors on porous surfaces..."
- "This product may be used to control odors on porous surfaces..."
- "This product can be used in the laundry..."

2. Revise the two statements on this page beginning "Health clubs, spas, tanning spas/beds..." by deleting "footbaths" and "Patient care rooms & facilities, recovery..." by deleting "footbaths". You have not provided specific directions for the treatment of footbaths.

C. Make the following revisions to page four:

1. Delete the material "sealed and/or polished fiberglass surfaces" from the 9th bullet in the left column. It is unclear what is meant by this descriptor. It is preferable to list specific surfaces made of fiberglass.

2. Delete the statement "This product has been authorized by the USDA as a sanitizer for all food contact surfaces." as this is no longer an accurate statement.

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D. Make the following revisions to page five:

- 1. As per PR Notice 2000-5 which indicates when mandatory language is to be used, revise the "Note" to read exactly as follows: "Prepare a fresh solution at least daily or when use solution becomes visibly dirty...." deleting "A fresh solution should be prepared".
- 2. Revise the directions for use as a General Disinfectant-Non-Medical by adding the appropriate contact time of 10 minutes.
- 3. Revise the directions for "Fungicidal Activity" to include: "...(**a** cause of Ringworm)..."

E. Make the following revisions to page six:

- 1. Delete the reference to urinals in the directions "From Concentrate:" It is not appropriate to treat a urinal with the concentrate as there is no water in the urinal in which to dilute this product.
- 2. Revise the "Disinfecting...Bath and Therapy Equipment" as follows: "...thoroughly disinfected, drain solution from the unit..." deleting the word cleaned.
- 3. Revise the directions for fogging to include the following statement: "...All food contact surfaces must be sanitized with *an EPA approved food contact sanitizer* solution of 200 ppm...prior to use..."

F. Make the following revisions to page seven:

Revise the "Rendering Plant/Dressing Plant Disinfection..." directions to include the following at the end of each section: "Rinse all surfaces which contact food with potable water before reuse."

G. Make the following revision to page eight:

1. You have cited a similar label (Reg. # 1677-43) which includes a claim for the control of flies in the *Drosophila* spp. and Phoridae family. In addition, you have submitted a study for review. These claims are acceptable on this label subject to the following corrections: Revise the headings of these two sections to read exactly as follows: "**For Control of the *Drosophila* spp. and Phoridae family of flies on Non-Food Contact Surfaces**" and "**For Control of the *Drosophila* spp. and Phoridae family of flies in Drains**". as a reference to "Small Flies" is too general. In addition, revise the first section by correcting the following statement: "...To control flies on *non-food* contact surfaces..."

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- 2. Revise the "Glove Dip Sanitizer Directions" as follows:
  - a. since your product is cleared as a food contact sanitizer we will allow the gloves to be sanitized prior to use in packaging and storage areas of food plants.
  - b. specify that only non porous gloves may be treated.
  - c. we are very concerned about personnel exposing their hands to the sanitizing solution, thus place the following statement in bold text: **"Do not let sanitizing solution come into contact with exposed skin."**

3. Revise your directions for "Hand Sanitizing" to be in agreement with the cited "me-too" label 1677-43: "...apply solution containing not more than 150 ppm (1 ounce per 5.2 gallons water)...(150 ppm active)..."

4. Delete the following statement in the "Sanitizing Incubators and Hatchers Using Fogging Devices" sections. Delete: "Do not allow people to contact or breathe this fog and do not enter until the fog has settled (30-60 minutes after fogging is completed.)" as this statement is not in agreement with the "Note" which follows stating a two hour re-entry interval.

H. Make the following revision to page nine:

Revise the third section in the Food Contact directions by deleting the inappropriate "." in the following statement: "A potable water rinse is not allowed following the use of..."

I. Make the following revisions to page ten:

1. Revise the two "Note"(s) to be in agreement with the last stamped label for this product: "...under Section HSS 196.13 of the Wisconsin..."

2. Delete the directions for "Sanitization of Dairy Equipment" including "Sanitizing Bulk Milk Tanks" these directions do not agree with the last stamped label nor have you cited a "me-too" label to support this use.

J. Make the following revision to page eleven:

Delete the section which begins with the heading "Bulk Tank Sanitizing" as these directions do not appear to be appropriate for treatment of Bulk Tanks. For example, the user would not preclean the tank and later cover or remove all food products: Any food residue would be removed during the precleaning.

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General Comments

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

Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) and section 4(a) when the Agency requires all registrants of similar products to submit such data.

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

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

Sincerely,



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

Enclosure: Stamped Label, DER 299675  
7510C:T.Lantz:8/12/04:10324-111a

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

**DANGER.** Corrosive. Causes irreversible eye and/or skin burns. May be fatal if swallowed. Harmful if inhaled. Avoid breathing vapor or spray mist. Do not get into eyes, on skin or on clothing. Harmful if absorbed through skin. Wear goggles or face shield, protective clothing, and rubber gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

**ENVIRONMENTAL HAZARD**

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not mix with soap, anionic detergents or oxidizers.

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

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Open dumping is prohibited. Store only in original container. Do not reuse empty container. 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** (Larger than 1 gal.): Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. In addition, plastic containers may be disposed of by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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

**STORAGE AND DISPOSAL:**

Store in original container in areas inaccessible to small children. Do not store on side. Avoid creasing or impacting of side walls. Do not reuse empty container. Wrap and discard in trash (or recycle).

ACCEPTED  
with COMMENTS  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No. 10324-111  
AUG 12 2004

**MAQUAT® 1412-10% FCS**

Disinfectant – Sanitizer – Food Contact Sanitizer – Deodorizer – Mildewstat – Fungicide – Virucide\* – With Organic Soil Tolerance For Hospitals, Nursing Homes, Whirlpool, Home, Institutional, Industrial, School, Dairy, Equine, Poultry/Turkey, Farm, Veterinary, Restaurant, Food Handling and Process Areas, Wineries, Federally Inspected Meat and Poultry Plants, Bar and Institutional Kitchen Use and for Sanitizing Ice Machines.

Small Fly Ovicidal Treatment.

Formulated for effective Poultry Sanitation.

Formulated for effective Swine Premise Sanitation.

Formulated for effective Potato Farm Sanitation.

**ACTIVE INGREDIENTS**

Alkyl (50% C<sub>14</sub>, 40% C<sub>12</sub>, 10% C<sub>16</sub>) dimethyl benzyl ammonium chloride ..... 10.0%

**INERT INGREDIENTS:** ..... 90.0%

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

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

See left panel for additional precautionary statements.

**First Aid**

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

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**IF INHALED:** Remove victim to fresh air. If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

**MASON CHEMICAL COMPANY**

"THE QUATERNARY SPECIALISTS"



721 W. Algonquin Road  
Arlington Heights, IL 30005  
847-290-1621

Toll Free:  
1-800-362-1855

E.P.A. Reg. No. 10324-111  
E.P.A. Est. No. 10324-IL-1

NET CONTENTS

BATCH NO

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This product contains no phosphorous.

This product is a phosphate-free formulation designed to provide effective cleaning, deodorizing and disinfection in areas where housekeeping is of prime importance in controlling the hazard of cross contamination on treated surfaces.

This product maximizes (improves) labor results by effectively controlling odors.

This product is for use in kitchens, bathrooms, and other household areas.

When used as directed, this product will deodorize surfaces in restroom and toilet areas, behind and under sinks and counters, garbage cans and garbage storage areas, and other places where bacterial growth can cause malodors.

Cross-contamination is of major housekeeping concern. This product has been formulated to aid in the reduction of cross-contamination on treated surfaces not only in hospitals, but also in schools, institutions and industry.

This product delivers non-acid disinfection performance in an economical concentrate.

This product is a concentrated Hospital Use disinfectant that is effective against a broad spectrum of bacteria, is virucidal\*, fungicidal, and eliminates odor causing bacteria when used as directed.

This product is an economical concentrate that can be used with a mop and bucket, trigger sprayers, sponge or by soaking.

This product will not leave a grit or soap scum.

This product is a versatile Disinfectant & Sanitizer for Veterinarian, Veterinary Practice, Animal Care, Animal Laboratory, and Agricultural and Farm Premise applications.

This product is a complete, chemically balanced disinfectant/sanitizer that provides clear use solutions even in the presence of hard water.

This product inhibits bacterial growth on moist surfaces and deodorizes by killing microorganisms that cause offensive odors. *(Statement not for use in California.)*

This product is recommended for use as a sanitizer on dishes, glassware and utensils (at 200 ppm active) and as a disinfectant on hard, non-porous surfaces (at 800 ppm active). A potable water rinse is not allowed when used as a sanitizer on food contact surfaces.

This product is recommended for use as a sanitizer in bottling and beverage dispensing equipment.

This product is recommended for use as a sanitizer in sanitary filling of bottles and cans.

This product is recommended for use in sanitizing bottles or cans in the final rinse application, and for external spraying of filling and closing machines.

This product is recommended for use as a sanitizer in beer fermentation and holding tanks.

This product is recommended for use as a sanitizer in wineries for use on holding tanks, floors and processing equipment.

This product is a versatile [redacted] and broad-spectrum disinfectant formulated for use in Ultrasonic Baths (Ultrasonic cleaning units).

This product is a versatile cleaner [redacted] and broad-spectrum disinfectant formulated for use on bath and therapy equipment (Whirlpools).

Use this product to sanitize and disinfect non-porous salon/barber tools and instruments such as combs, brushes, scissors, trimmers, razors, blades, tweezers and manicure instruments, and [redacted]

This product reduces the surface tension of water, improving its wet ability. Microbes are capable of mass production in sub-visible pore and cracks of surfaces.

This product is a one-step disinfectant that is effective against a broad spectrum of bacteria, is virucidal\* (including HIV-1) and inhibits the growth of mold and mildew and their odors when used as directed.

[redacted]

This product may be applied through automatic washing systems, immersion tanks, foaming apparatus, low-pressure sprayers, and fogging (wet misting) systems.

This product neutralizes musty odors and tough odors from smoke, pet accidents, and spills on contact.

This product is specially formulated to effectively eliminate offensive odors caused by mold and mildew.

This product controls (reduces) (eliminates) (neutralizes) (destroys) odors to make your home (kitchen) (bathroom) sanitary.

This product is effective against household germs and odors caused by animal waste, septic tank or sewage backup, smoke and bathroom and kitchen odors.

Use this product on the multi-touch surfaces responsible for cross-contamination.

This product is effective at controlling mold and mildew odor on shower curtains.

This product may be used in work areas such as tool rooms and garages for odor control and light duty cleaning.

This product provides long lasting freshness against tough (pet) odors such as odors from litter boxes and pet accidents.

This product inhibits the growth of mildew, leaving kitchens, bathrooms, and households clean and smelling fresh.

Contains no abrasives (Non-abrasive).

Cleans without bleaching.

Non-chlorine formula. Will not bleach clothing or colored surfaces.

Contains no bleach.

Non-acid bathroom (Cleaner) (disinfectant).

Non-acid shower room (Cleaner) Disinfectant).

This product is safe for most washable surfaces. Test a small area on surface first.

This product kills harmful germs and helps prevent the spread of food-borne contamination on all treated hard kitchen, bathroom and household surfaces.

Use this product to clean and disinfect kitchen surfaces.

This product removes dirt, grime and food soils in food preparation and processing areas. Its non-abrasive formula will not harm (Scratch) surfaces. It cleans, disinfects and eliminates odors leaving surfaces smelling clean and fresh. Use where odors are a problem.

[redacted] Athlete's Foot fungus on bathroom surfaces.

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The excellent wet ability of this product improves penetratio. . into areas that otherwise might not be reached.

When used as directed, this product mixes with water to form clear, stable use solutions that are non-corrosive and non-staining to most common metals, plastics and tile.

This product maximizes labor results by effectively controlling odor for a long lasting clean.

This product rinses spot free. Its superior rinsing qualities makes it particularly suitable for linoleum, rubber, sealed cork, vinyl and asphalt tile floors, marble and terrazzo.

This product cleans by removing dirt, grime, blood, urine, fecal matter and other common soils found in animal housing facilities, livestock, swine poultry facilities, grooming facilities, farms, kennels, pet stores, veterinary clinics, laboratories or other small animal facilities. It (also) eliminates odors leaving surfaces smelling clean and fresh.

This product can be used to disinfect, clean and deodorize terrarium and small animal cages, hot rock, substrate and cage furniture (plastic terrarium ornaments, driftwood, heat caves and water dishes.

~~This product is effective at eliminating odors on washable surfaces such as [redacted]~~

This product maximizes labor results by effectively controlling and eliminating industrial, institutional, recreational, farm and waste odors.

~~This product is effective at eliminating odors on porous surfaces such as upholster, drapes, carpets, bedding, shower curtains, and mattresses and non-porous surfaces such as walls and floors. [redacted] areas should be saturated with enough product to remain damp for at least [redacted] minutes.~~

This product eliminates odors caused by bacteria, mildew and non-fresh foods on hard non-porous surfaces. It is not a masking agent.

This industrial strength odor destroyer (eliminator) is effective at neutralizing odors caused by mildew, pets, smoke, urine, vomit, garbage, restrooms and organic matter.

Use this product in basements to eliminate odors caused by mold and mildew and to prevent the growth of mold and mildew.

This product eliminates foul back draft odors from sink disposals and floor drains.

~~This product may be used to control odors [redacted] (in [redacted] such as upholstery, mattresses, and other similar surfaces.~~

~~This product may be used in the laundry to control odors [redacted] bedding and linens.~~

This product cleans and deodorizes pet stains.

Maquat<sup>®</sup> 1412-10% FCS for use in:

- Hospitals, nursing homes, medical and dental offices and clinics, physician offices, operating rooms, isolation wards, and medical research facilities.
- Patient care rooms & facilities, recovery, anesthesia, Emergency Rooms, X-ray cat labs, newborn nurseries, orthopedics, whirlpools [redacted] respiratory therapy, surgi-centers, labs, blood collection rooms, central supply, housekeeping & janitorial rooms.
- EMS & fire facilities, emergency vehicles, ambulance(s), police cars.
- Day care centers and nurseries, sick rooms.

- Acute care ins. .ions, alternate care institutions, home healthcare institutions.
- Life care retirement communities.
- Restaurants, restaurants and bars, bars, cafeterias, institutional kitchens, fast food operations and food storage areas.
- Supermarkets, convenience stores, retail and wholesale establishments, department stores, shopping malls, gift shops, video stores, bookstores, dressing rooms and laundries, photocopy centers, bicycle shops, auto repair centers.
- Computer manufacturing sites, toy factories.
- Food establishments, coffee shops, donut shops, bagel stores, pizza parlors, liquor stores.
- Crime scenes and funeral homes, mortuaries, burial vaults, mausoleums, autopsy rooms.
- Police stations, courthouses, correctional facilities, municipal government buildings, prisons, jails, penitentiaries, correctional institutions, bus stations, train stations.
- Institutional facilities, laboratories, factories, business and office buildings, restrooms, hotels and motels and transportation terminals.
- Public restrooms, public facilities, waysides, travel rest areas, shower rooms, shower stalls, bathrooms.
- Hotel, motels, dormitories.
- Kitchens, bathrooms and other household areas.
- Homes (households).
- Institutions, schools and colleges, churches, classrooms, community colleges, universities, athletic facilities and locker rooms, exercise rooms, exercise facilities, gyms, gymnasiums.
- Cosmetic manufacturing facilities, medical device manufacturing facilities, biotechnology firms, pharmaceutical manufacturing facilities.
- Heath clubs, spas, tanning spas, tanning beds, [redacted] massage/facial salons, hair/nail/pedicure salons, barber/beauty shops, salons, tattoo parlors.
- Museums, art galleries, post offices, performance/theater centers, banks, libraries, movie houses, bowling alleys.
- Recycling centers.
- Campgrounds, playgrounds, recreational facilities, picnic facilities, sports arenas, sports complexes.
- Food processing plants, USDA inspected food-processing facilities, dairy farms, hog farms, equine farms, poultry and turkey farms and egg processing plants, meat/poultry processing plants, meat/poultry producing establishments, rendering plants.
- Processing facilities for Fish, Milk, Citrus, Fruit, Vegetable, Wine, Ice Cream, and Potatoes, and beverage plants.
- Tobacco plant premise and equipment.
- Veterinary clinics, animal life science laboratories, kennels, dog/cat animal kennels, breeding and grooming establishments, pet animal quarters, zoos, pet shops, tack shops and other animal care facilities.

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- Household and automotive garages, boats, ships, barges, campers, trailers, mobile homes, cars, trucks, buses, trains, taxis and airplanes.
- Cruise lines, airline terminals, shipping terminals, public transportation.
- Basements, cellars, bedrooms, attics, living rooms, and porches.

This product may be used on washable hard, non-porous surfaces such as:

- Food preparation and storage areas.
- Dishes, glassware, silverware, cooking utensils, eating utensils, plastic and other non-porous cutting boards, plastic and other non-porous chopping blocks, coolers, ice chests, refrigerator bins used for meat, vegetables, fruit and eggs, Tupperware®.
- Kitchen equipment such as food processors, blenders, cutlery, trash compactors and other utensils.
- Countertops (counters), Slurpy® machines, stovetops (stoves), sinks (bathroom, kitchen), tub surfaces, appliances, refrigerators, ice machines.
- Microwave ovens, range hoods, burner trays, oven doors, bottom of pots and pans.
- Glass, metal, stainless steel, glazed porcelain, glazed ceramic, sealed and/or polished fiberglass surfaces, granite, marble, plastic (such as polystyrene or polypropylene), sealed limestone, sealed slate, sealed stone, sealed terra cotta, sealed terrazzo, chrome and vinyl, glass-topped furniture.
- Enameled surfaces, painted woodwork (finished), Formica®, vinyl and plastic upholstery.
- Foundations, steps, plumbing fixtures, finished baseboards and windowsills.
- Tables, chairs, desks, bed frames, lifts, washable walls, cabinets, doorknobs and garbage cans, cuspidors and spittoons.
- Tires, tools auto surfaces.
- Exhaust fans, refrigerated storage and display equipment, coils and drain pans of air conditioning and refrigeration equipment and heat pumps.
- Large inflatable, non-porous plastic and rubber structures; animals, promotional items, moonwalk, slides, obstacle course play and exercise equipment.
- Beer fermentation and holding tanks, bottling or pre-mix dispensing equipment.
- Citrus processing equipment and holding tanks.
- Wine processing equipment and holding tanks.
- Picnic tables and outdoor furniture.
- Telephones and telephone booths.
- Highchairs, diaper pails, plastic laundry hampers (baskets), baby furniture (cribs, changing tables).
- Drinking fountains.
- Shower stalls, shower doors and curtains, bathtubs and glazed tiles, chrome plated intakes, toilets, toilet bowls, toilet bowl surfaces, urinals, empty diaper pails, portable and chemical toilets and latrine buckets, porcelain tile and restroom fixtures.
- Ultrasonic baths, whirlpools, whirlpool bathtubs.
- Kennels, kennel runs, cages, kennel/cages floors, conductive flooring.

- Dishes, silverware, glasses, cooking utensils, eating utensils and other similar size food processing equipment can be sanitized by immersion. NO POTABLE WATER RINSE IS ALLOWED.

This product is recommended for Poultry Premise Sanitation (Hatcheries), Egg Receiving Area, Egg Holding Area, Setter Room, Tray Dumping Area, Trays, Buggies, Racks, Egg Flats, Chick Holding Room, Hatchery Room, Chick Processing Area, Chick Loading Area, Poultry Buildings, Ceilings, Side walls and Floors, Drinkers, and all other hard non-porous Poultry House related Equipment, and surfaces in the Hatchery Environment.

This product is recommended for Swine Premise Sanitation, Waterers and Feeders, Hauling Equipment, Dressing Plants, Loading Equipment, Farrowing Barns and Areas, Nursery, Blocks, Creep Area, Chutes.



This product has been cleared by the FDA in 21 CFR Section 178.1010 for use on food processing equipment, utensils, and other food – contact articles at a concentration of 200 ppm active.

This product meets AOAC Use – Dilution Test Standards for hospital disinfectants.

This product meets AOAC Germicidal and Detergent Test Standards for food contact surfaces.

This product meets AOAC efficacy standards for hard surface sanitizers.

This product kills *Trichophyton mentagrophytes*, the fungus that causes Athletes Foot, on hard non-porous environmental surfaces such as shower room floors, bath mats or locker room benches.

This product is effective against the control of small flies on floors, walls, drains, countertops, metal surfaces, painted surfaces, glazed porcelain, glazed tile, glass, chrome, rubber, and plastic in restaurants, kitchens, dishwashing areas, and bar and wait station areas.

This product meets AOAC efficacy standards for hard surface non-food contact sanitizers.

Regular, effective cleaning and sanitizing of equipment utensils and work or dining surfaces which could harbor hazardous microorganisms minimizes the probability of contaminating food during preparation, storage or service. Effective cleaning will remove soil and prevent the accumulation of food residues, which may decompose or support the rapid development of food poisoning organisms or toxins. Application of effective sanitizing procedures reduces the number of those disease organisms that may be present on equipment and utensils after cleaning, and reduces the potential for the transfer, either directly through tableware such as glasses, cups and flatware or indirectly through food.

To prevent cross contamination, kitchenware and food contact surfaces of equipment should be washed, rinsed with potable water and sanitized after each use and following any interruption of operation during which time contamination may have occurred.

Where equipment and utensils are used for preparation of foods on a continuous or production line basis, utensils and the food contact surfaces of equipment shall be washed, rinsed and sanitized at intervals throughout the day on a schedule based on food temperature, type of food and amount of food particle accumulation.

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## DIRECTIONS FOR USE

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

(Note for reviewer: For labels that list medical premises and metal and/or stainless steel surfaces, one of the following statements must be used:)

This product is not to be used as a terminal sterilant/high level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization or high level disinfection.

(Or use the following sentence if not used on medical devices or medical equipment.)

Not for use on medical devices or medical equipment surfaces.

Before use in federally inspected meat and poultry food processing plants and dairies, food products and packaging materials must be removed from room or carefully protected. A potable water rinse is not allowed following use of the product as a sanitizer on previously cleaned hard surfaces provided that the surfaces are adequately drained before contact with food so that little or no residue remains.

Apply this product with a cloth, mop or mechanical spray device. When applied with a mechanical spray device, surfaces must be sprayed until thoroughly wetted. Treated surfaces must remain wet for 10 minutes. For sprayer applications, use a coarse pump or trigger sprayer. Spray 6-8 inches from surface. Rub with brush, sponge or cloth. Do not breathe spray.

**NOTE:** With spray applications, cover or remove all food products. A fresh solution should be prepared at least daily or when use solution becomes visibly dirty. For heavily soiled areas, a preliminary cleaning is required.

### DISINFECTION

**Hospitals, Dental Offices, Nursing Homes and other Health Care Institutions, Non-medical (schools, restaurants, food services, dairies, farm, beverage and food processing plants):** For disinfecting floors, walls, countertops, bathing areas, lavatories, bed frames, tables, chairs, garbage pails and other hard non-porous surfaces.

Add 1 ounce of this product per gallon of water (800 ppm active quat) OR mix a 1 ounce packet per gallon of water. Treated surfaces must remain wet for 10 minutes. At this use level, this product is bactericidal according to the AOAC Use Dilution Test method on hard inanimate surfaces modified in the presence of 5% organic serum against:

*Pseudomonas aeruginosa*  
*Salmonella choleraesuis*

*Staphylococcus aureus*

**Virucidal Performance:** At 1 ounce per gallon use level (800 ppm active quat), this product was evaluated in the presence of 5% serum with a 10 minute contact time and found to be effective against the following viruses on hard, non-porous environmental surfaces:

Herpes Simplex Type 1

Herpes Simplex Type 2

**\*KILLS HIV ON PRECLEANED ENVIRONMENTAL SURFACES/OBJECTS PREVIOUSLY SOILED WITH BLOOD/BODY FLUIDS** in health care setting or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with body fluids and in which the surfaces/objects likely to be soiled with blood or body

fluids can be associated with the potential for transmission of human immunodeficiency virus Type 1 (HIV-1) (associated with AIDS).

### "SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV-1 ON SURFACES/OBJECTS SOILED WITH BLOOD/BODY FLUIDS."

**Personal Protection:** Specific barrier protection items to be used when handling items soiled with blood or body fluids are disposable latex gloves, gowns, masks, or eye coverings.

**Cleaning Procedure:** Blood and other body fluids must be thoroughly cleaned from surfaces and objects before application of the disinfectant.

**Disposal of Infectious Materials:** Blood and other body fluids should be autoclaved and disposed of according to federal, state and local regulations for infectious waste disposal.

**Contact Time:** Leave surfaces wet for ten minutes with 1 ounce per gallon (or equivalent use dilution) use solution.

### Dilution Chart for Disinfection, Virucidal and Fungicidal Activity

Ounces of Product	Amount of Water
¼ ounce	1 quart
½ ounce	½ Gallon
1.0 ounce	1 gallon
2½ ounces	2 ½ gallons
5.0 ounces	5 gallons
10.0 ounces	10 gallons

**For Use on Finished Floors:** To limit gloss reduction, use 1 ounce of this product per gallon of water. Apply with a damp mop or auto scrubber. Allow to air dry.

**General Disinfectant-Non-medical (schools, restaurants, food services, dairies, farm, beverage and food processing plants):** Add 1 ounce of this product to 1 gallon of water (800 ppm active quat).

**General Deodorization:** To deodorize, add 1 ounce of this product to a gallon of water (or equivalent use dilution) (800 ppm active quat). Excess material should be wiped up or allowed to air dry.

**For Deodorizing Garbage Cans, Garbage Trucks, Industrial Waste Receptacles and Garbage Handling Equipment:** It is especially important to pre-clean for the product to perform properly. Then, apply a wetting concentration of 2 ounces of this product per gallon of water (or equivalent use dilution) (1.600 ppm quat active).

**For Odors Caused by Dogs, Cats and Other Domestic Animals:** Use on rugs, floors, walls, tile, cages, crates, litter boxes, mats, floor coverings, or any surface soiled by a pet. Test a small inconspicuous area first. Blot problem area. Saturate pre-cleaned area with enough of this product to remain damp for at least 10 minutes, then blot with a clean cloth. Repeat if necessary. Effective on bedding and litter boxes. Allow to dry.

**Fungicidal Activity:** At 1 ounce per gallon use-level, (or equivalent use dilution) (800 ppm active quat) this product is effective against Trichophyton mentagrophytes (athlete's foot fungus) (cause of Ringworm) on inanimate surfaces in the presence of 5% blood serum in locker rooms, dressing rooms, shower and bath areas and exercise facilities. Treated surfaces must remain wet for at least 10 minutes.

**Mold and Mildew Control:** At 1 ounce per gallon, (or equivalent use dilution) (800 ppm active quat) this product will effectively inhibit the growth of mold and mildew and the odors caused by them when applied to hard, non-porous surfaces (bathroom fixtures,

shower area, storage area, boat cushions, lawn furniture and as indicated in general instructions above). Allow to dry on surface and repeat treatment every seven days or when new growth appears.

**RV Holding Tanks/Recreational Vehicles: Toilet Waste Holding Tanks (Black Water):** Cover bottom of holding tank with water and add 2-4 ounces. If odors return before time to empty add 1-2 ounces to the tank. For kitchen waste, add 1-2 ounces to gray water tank as needed to control malodors created by dirty dishwasher.

**Air Freshener/Automotive Uses:** One ounce per gallon of water will effectively neutralize damp musty odors caused by mildew in storage areas, basements, closets, bathrooms and A/C filters. Effective on smoking and cooking odors (garlic, fish, onions, etc.), automobile odors from tobacco, musty carpet smell, and beverage smells will be eliminated. Spray or apply onto seats, carpets, headliner and ashtray or into trunk and all vents to eliminate odors from tobacco, beverage spills and musty carpet. For sprayer applications, use a coarse spray device. Allow to air dry.

**To control the growth of mold and mildew on large inflatable non-porous plastic and rubber structures (animals, promotional items, moonwalk, slides, obstacle course play and exercise equipment):** Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use solution of 1 ounce per gallon (800 ppm active quat) of water (or equivalent dilution) for a period of 10 minutes. Ventilate buildings and other closed spaces. Do not use equipment until treatment has been absorbed, set or dried.

**Disinfection/Fungicide/Virucide for Barber/Salon Tools Directions:** Immerse precleaned barber/salon tools, such as combs, brushes, razors, clippers and trimmer blades, tweezers, manicure/pedicure tools and scissors, in 1 ounce per gallon solution of this product (or equivalent use dilution) (800 ppm active quat). Completely immerse instruments and tools for at least 10 minutes. Rinse thoroughly and dry before use. Prepare a fresh solution at least daily or more often if solution becomes cloudy or soiled.

**NOTE:** Plastics may remain immersed until ready to use. Stainless steel shears and instruments must be removed after 10 minutes, rinsed, dried, and kept in a clean non-contaminated receptacle. Prolonged soaking may cause damage to metal instruments.

#### **NON-ACID TOILET BOWL (AND URINAL) DISINFECTANT DIRECTIONS**

Remove gross filth prior to disinfection.

**From Concentrate:** Add ¼ oz. to the toilet bowl and mix. Brush thoroughly over exposed surfaces and under the rim with a cloth, mop, or sponge. Repeat for disinfection and allow to stand for 10 minutes and flush.

**From Use-solution:** Empty toilet bowl or urinal and apply use solution to exposed surfaces including under the rim with a cloth, mop, sponge or sprayer. Brush or swab thoroughly over exposed surfaces including under the rim and flush. Repeat for disinfection and allow to stand for 10 minutes and flush. For spray application, use a coarse spray device.

**For Use To Clean and Disinfect Shower Rooms, Locker Rooms and Other Large Open Areas with Floor Drains:**

1. Pre-clean heavily soiled areas.
2. Apply Use Solution of 1 ounce per gallon of water (800 ppm quat active) to floors, walls and ceilings making sure not to over spray. To disinfect, all surfaces must remain wet for 10 minutes.

**Special instructions for foam guns:** Pour concentrate into foam gun bottle and attach to spray nozzle and ensure gun is attached to hose. **Note:** See foam gun instructions for more information. Make sure setting is set for 1:128

dilution. Place in place, squeeze the handle to dispense foam solution. To disinfect, all surfaces must remain wet for ten (10) minutes.

3. Scrub using deck brush or other coarse material as necessary.
4. Rinse surfaces thoroughly and let air dry.

**Ultrasonic Bath Disinfectant Directions:** Use this product to disinfect hard, (inanimate) non-porous, non-critical objects compatible with Ultrasonic cleaning units. Pour a fresh solution of 1 ounce per gallon of water (or equivalent use dilution) (800 ppm active quat) directly into bath chamber. Pre-clean soiled objects. Place objects into unit and operate for a minimum of 10 minutes, according to manufacturers' use directions. Remove objects and rinse with sterile water (sterile water for injection), or allow to air dry. Replace solution at least daily or when solution becomes visible dirty or discolored.

**For Disinfecting Hard Non-porous Bath (Sealed Fiberglass) and Therapy Equipment:** To remove body oils, dead tissue, soil and all other buildups or organic matter on inanimate surfaces after using the whirlpool unit, drain the water and refill with fresh water to just cover the intake valve. Add 1 ounce of this product for each gallon of water (or equivalent use dilution) (800 ppm active quat) in the unit at this point. Briefly start the pump to circulate the solutions. Turn off pump. Wash down the unit sides, seat of the chair lift, and any/all related equipment with a clean swab, brush or sponge. Product to surface contact time must be at least 10 minutes for proper disinfection. After the unit has been thoroughly disinfected, drain solutions from the unit and rinse any/all cleaned surfaces with fresh water. The unit is ready for reuse.

**Disinfection of Hard, Non-Porous Surfaces in Whirlpool Units:** After using the whirlpool unit, drain and refill with fresh water to just cover the intake valve. Add 1 ounce of this product for each gallon of (or equivalent use dilution) (800 ppm active quat) water at this point. Briefly start the pump to circulate the solution. Turn off the pump. Wash down the unit sides, seat of the chair, lift and any/all related equipment with a clean swab, brush or sponge. Treated surfaces must remain wet for 10 minutes. After the unit has been thoroughly disinfected, drain the solution from the unit and rinse any/all cleaned surfaces with fresh water. Repeat for heavy soiled units.

**To Disinfect Food-Processing and Tobacco Premises:** To disinfect previously cleaned floors, walls, storage areas ceiling board, chopping blocks, pallets, rubber conveyor belts in meat poultry and other food processing operations, use 1 ounce of this product to 1 gallon of water (or equivalent use dilution) (800 ppm active quat). Apply solution with a mop, cloth, sponge or hand pump trigger sprayer so as to wet all surfaces thoroughly. For sprayer applications, use a coarse spray. Allow to remain wet for 10 minutes, then remove excess liquid. Before using this product, food products and packaging materials must be removed from area or carefully protected. After use, all surfaces in the area must be thoroughly rinsed with potable water.

**For Use on Non-Food Contact Surfaces as a General Disinfectant in the Brewery Industry:** Use 1 ounce of this product per gallon of water (or equivalent use dilution) (800 ppm active quat). Follow the disinfectant directions above.

**Directions for Fogging:** For use in dairies, beverage and food processing plants. Fogging can be used as an adjunct to acceptable manual cleaning and disinfecting as described above. Prior to fogging, food products and packaging material must be removed from the room or carefully protected. After cleaning, fog desired areas using one quart per 1000 cubic feet of room area with a product solution containing 1.5 ounces product to 1 gallon of water (or equivalent use dilution) (1,200 ppm). Vacate the area of all personnel during fogging and for a minimum of 2 hours after fogging. All food contact surfaces must be sanitized with a product solution of 200 ppm active quaternary

(1 ounce per 4 gallons) prior to reuse. Allow food contact surfaces to drain thoroughly before operations are resumed.

**NOTE:** The fog generated is irritating to the eyes, skin and mucous membranes. Under no circumstances should a room or building be entered by anyone within two hours of the actual fogging. If the building must be entered, then the individuals entering the building must wear a self-contained respirator approved by NIOSH/MSHA, goggles, long sleeves and long pants.

**FOGGING IS TO BE USED AS AN ADJUNCT TO ACCEPTABLE MANUAL CLEANING AND DISINFECTING OF ROOM AND MACHINE SURFACES.**

**Disinfection/Fungicide/Virucide of Poultry/Turkey Equipment, Swine Quarters, Animal Quarters and Kennels Directions:** Remove all animals and feeds from premises vehicles and enclosures such as coops and crates. Remove all litter, droppings and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Use 1 ounce of this product per gallon of water (or equivalent use dilution) (800 ppm active quat). Saturate surfaces with the recommended disinfecting solution for a period of 10 minutes. Immerse all halters, ropes and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure.

After application, ventilate buildings, coops and other closed spaces. Do not house poultry, or other animals or employ equipment until treatment has been absorbed, set or dried.

All treated equipment that will contact feed or drinking water (racks, troughs, automatic feeders, fountains and waterers) must be thoroughly scrubbed with soap or detergent then rinsed with potable water before reuse.

**HATCHERIES:** For disinfection/fungicide/virucide, use 1 ounce of this product per gallon of water. Apply to hatchers, setters, trays, racks, carts, sexing tables, delivery trucks and other hard surfaces. Leave all treated surfaces exposed to solution for 10 minutes or more and allow to air dry.

**VEHICLES:** Clean all vehicles including mats, crates, cabs, and wheels with high-pressure water and this product. For sprayer applications, use a coarse spray. Use 1 ounce of this product per gallon of water for disinfection/fungicide/virucide. Leave all treated surfaces exposed to solution for 10 minutes or more and allow to air dry.

**RENDERING PLANT/DRESSING PLANT DISINFECTANT/FUNGICIDE/VIRUCIDE DIRECTIONS:** Cover or remove all food packaging material before disinfection. Remove gross soils. Apply to equipment, utensils, walls and floors in poultry and animal dressing plants with a solution of 1 ounce of this product per gallon of water (or equivalent use dilution) (800 ppm active quat). Equipment and utensils must remain wet for 10 minutes, then thoroughly rinsed with potable water before operations are resumed. Disinfect all rooms, exterior walls and loading platforms of dressing plants.

**For Use For Treatment of Animal Housing Facilities:**

1. Remove all animals and feed from premises, vehicles and enclosures.
2. Remove all litter and manure from floors, walls and surfaces of barn, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals.
3. Empty all troughs, racks and other feeding and watering appliances.
4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
5. Saturate all surfaces (floors, walls, cages and other washable hard, non-porous environmental surfaces) with the recommended disinfecting and

virucidal solution (1 ounce per gallon of water or equivalent use dilution) (800 ppm active quat) for a period of 10 minutes. For smaller surfaces, use a trigger spray bottle to spray all surfaces with solution until wet.

6. Immerse all halters, ropes and other types of equipment used in handling and restraining animals as well as forks, shovels, scrapers used in removing litter and manure.
7. Ventilate buildings, cars, trucks, boats and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set and dried.
8. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent and rinse with potable water before reuse.

**Terrarium and Small Animal Cage and Cage Furniture Disinfection:** Animals frequently defecate on hot rocks and other cage furniture items inside your terrarium. This can result in high bacteria and ammonia levels that can lead to possible infection/disease in your animals. When used regularly this product can eliminate these high bacteria/ammonia levels in your cage and on your cage furniture items.

1. Remove all animals.
2. Thoroughly clean all surfaces and objects (hot rocks, caves, cage furniture, feeding and watering dishes, and appliances) including the substrate in the terrarium or cage with soap or detergent and rinse with water.
3. Saturate all surfaces (floors, walls, cages and other washable hard, non-porous environmental surfaces) with the recommended disinfecting and virucidal solution (1 ounce per gallon of water or equivalent use dilution) (800 ppm active quat) for a period of 10 minutes. For smaller surfaces, use a trigger spray bottle to spray all surfaces with solution until wet. Then wipe surfaces dry.
4. Saturate gravel as above and let stand for 10 minutes. Place in bucket of clean water and swirl for 15-30 seconds. Thoroughly air dry before returning to terrarium.
5. Do not return animals to the habitat until it is dry and ventilated.
6. Thoroughly scrub all treated surfaces with soap or detergent and rinse with potable water before reuse.
7. Clean terrarium at least once weekly or more as needed.

**Note:** Substrates for desert terrariums (i.e. gravel) must be completely dry before returning to terrarium to avoid high humidity levels. Always replace substrate if a foul odor persists.

**Disinfecting Potato Storage Area and Equipment:** Remove all potatoes prior to disinfection of potato storage area and equipment. Pre-clean hard surfaces by removing heavy soils or gross filth. Follow general disinfecting directions as outlined in that section. All treated surfaces must be thoroughly rinsed with potable water prior to reuse.

**Veterinary Clinics/Animal Life Science Laboratory/Zoos/Pet Shop/Kennels/Breeding and Grooming Establishment/Tack Shops Disinfection**

**Directions:** For cleaning and disinfecting the following hard, non-porous surfaces: equipment, utensils, instruments, cages, kennels, stables, stalls and catteries. Remove all animals and feeds from premises, animal transportation vehicles, crates etc. Remove all litter, droppings and manure from floors, walls and surfaces of facilities occupied or traversed by animals. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use solution of 1 ounce per 1 gallon of water (or equivalent dilution) (800 ppm active quat) for a period of 10 minutes. Ventilate buildings and other closed spaces. Do not house animals or employ equipment until treatment

has been absorbed, set or dried. Thoroughly scrub all treated feed racks, automatic feeders, waterers and other equipment that dispenses food or water with soap or detergent, and rinse with potable water before reuse.

**FOR CONTROL OF [REDACTED] ON NON-FOOD CONTACT SURFACES:** For control of small flies: *Drosophila* spp. and the Phoridae family. To control flies on non-food contact surfaces such as floors, walls, countertops, metal surfaces, painted surfaces, glazed porcelain, glazed tile, glass, chrome, rubber, and plastic in restaurants, kitchens, dishwashing areas, and bar and wait station areas. Remove food and food packaging prior to use. Cover exposed food-handling surfaces. After removing gross filth, apply a solution of 1 ounce of this product per 1 gallon of water (or equivalent use dilution) (800 ppm active quat) to surfaces and locations where flies may breed. Spray surfaces thoroughly or apply by pouring, mopping or sponging onto the surface. Repeat application 1-2 times per week or as needed. Do not contaminate food and food packaging.

**FOR CONTROL OF [REDACTED] IN DRAINS:** For control of small flies: *Drosophila* spp. and the Phoridae family. Spray or pour solution of 1 ounce per 1 gallon of water (or equivalent use dilution) (800 ppm active quat) into drain during time of lowest level of drain use. Add 14 ounces of solution daily to each drain to maintain fly control. Apply around the edge of the drain and coat all sides of inside of drain.

#### SANITIZER DIRECTIONS FOR NON-FOOD CONTACT SURFACES

**Preparation of sanitizer use solution:** For floors, walls, tables, etc. Add 1 ounce of this product to 4 gallons of water (or equivalent use dilution) (200 ppm active) to sanitize hard porous and non-porous environmental surfaces. At this dilution, this product is an effective one-step sanitizer against *Staphylococcus aureus* and *Klebsiella pneumoniae*.

Apply sanitizer use solution to pre-cleaned, hard, non-porous surfaces with a cloth, mop, sponge, sprayer or by immersion.

For sprayer applications, use a coarse pump or trigger sprayer. Spray 6-8 inches from surface. Rub with brush, sponge or cloth. Do not breathe spray.

**NOTE:** With spray applications, cover or remove all food products.

Treated surfaces must remain wet for 5 minutes. Then wipe with sponge, mop or cloth or allow to air dry.

**SHOE BATH SANITIZER DIRECTIONS:** To prevent tracking harmful organisms into animal areas, and the packaging and storage areas of food plants, shoe baths containing one inch of freshly made sanitizing solution should be placed at all entrances to buildings, hatcheries and at all the entrances to the production and packaging rooms. Scrape waterproof shoes and place in a 0.25 oz. of this product per gallon of water (or equivalent use dilution) (200 ppm active) solution for 60 seconds prior to entering area. Change the sanitizing solution in the bath at least daily or when solution appears dirty.

**SHOE FOAM DIRECTIONS:** To prevent tracking harmful organisms into animal areas and the packaging and storage areas of food plants. Apply a foam layer approximately 0.5 to 2 inches thick made from a solution of 1 to 1.5 ounces per gallon of water (or equivalent use dilution) (781 to 1172 ppm active) at all entrances to buildings, hatcheries, production and packaging rooms by using a foam generating machine or aerator to apply foam layer. Follow the foaming directions as specified by the manufacture of the foam generator/aerator. Scrape waterproof shoes. Stand and/or walk through foamed area for 60 seconds prior to entering area. Foam area should be washed and replaced at least daily or when it appears dirty.

(For food processing or other facilities that have installed entryway sanitizing systems.)

**ENTRYWAY SANITIZING SYSTEMS:** To prevent cross contamination of harmful organisms from area to area, set the system to deliver (0.51 – 1.02 oz. per gallon of water) (1.5 – 3 oz. per 2 7/8 oz per gallon of water) (400 – 800 ppm active) of sanitizing solution. The spray should cover the entire path of the doorway. Set the system so that a continuous wet blanket of sanitizer solution is delivered to the floor.

Do not mix other foam additives to the sanitizing solution.

**GLOVE DIP SANITIZER DIRECTIONS:** To prevent the spreading of harmful organisms into animal areas and the packaging and storage areas of food plants, dip pre-washed (plastic, latex or other synthetic rubber) gloved hands into a suitable clean container that contains enough freshly made sanitizing solution to cover the gloved area. Do not let sanitizing solution come into contact with the exposed skin. Make up the sanitizing solution by adding ¼ ounce of this product per gallon of water (or equivalent use dilution) (200 ppm active). Dip (Soak) in solution for 60 seconds. **NO POTABLE WATER RINSE IS ALLOWED.** Change the sanitizing solution in the bath at least daily or when solution appears dirty.

**Hand Sanitizing:** After hands have been washed and rinsed, apply solution containing not more than 200 ppm (¼ oz. per gallons water) (or equivalent use dilution) (200 ppm active) active quaternary. The hands need not be rinsed after use of solution.

**SALON/BARBER INSTRUMENTS AND TOOLS SANITIZER DIRECTIONS:** Pre-clean soiled instruments and tools. Completely immerse water safe non-porous instruments and tools in a solution of ¼ ounce per gallon (or equivalent use dilution) (200 ppm active) of water for at least 60 seconds. Rinse thoroughly and dry before use. Prepare a fresh solution at least daily or more often if solution becomes cloudy or soiled.

**NOTE:** Plastics may remain immersed until ready to use. Stainless steel shears and instruments must be removed after 10 minutes, rinsed, dried, and kept in a clean non-contaminated receptacle. Prolonged soaking may cause damage to metal instruments.

**Dairy Cow Application Directions:** The udders, flanks and teats of dairy cows can be washed with a solution of 1 oz of this product in 4 gallons of warm water. Use a fresh towel for each cow. Avoid contamination of wash solution by dirt and soil. Do not dip used towel back into wash solution. When solution becomes visibly dirty, discard and provide fresh solution.

#### SANITIZING HATCHERY ROOMS USING FOGGING DEVICES

Remove all animals and feed from premises, vehicles and enclosures. Remove all litter and manure from floors, walls and surfaces of the room to be treated. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Close room off so fog is confined to room to be treated. Mix 96 ounces of this product to 320 ounces of water (or equivalent use dilution). Insert the nozzle of the fogger through a suitable opening into the room. With the setting in maximum output, fog for one minute for each 4000 cubic feet of space in the room. When fogging is completed, ventilate buildings and other closed spaces. Do not allow people to contact or breath this fog and do not enter until 2 hours after fogging is complete. Do not house livestock or employ equipment until treatment has been absorbed or dried. Thoroughly clean all surfaces with soap or detergent and rinse with water.

#### SANITIZING INCUBATORS AND HATCHERS USING FOGGING DEVICES

Mix 10 ounces of this product to 125 ounces of water. Fog 3-8 ounces of this into setters and hatchers immediately after transfer. Repeat daily in setters and every 12 hours in hatchers. Discontinue hatcher treatments at least 24 hours prior to pulling the hatch. [REDACTED]

... (30-60 minutes after fogging is complete). It is acceptable to fog setters and hatchers with a 1 ounce per gallon solution of this product (or equivalent use dilution) on an hourly or every other hour basis. If this is done, fog for 30-90 seconds once per hour or once every two hours. When fogging is complete, ventilate buildings and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed or dried. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.

**FOOD PROCESSING PLANTS USING FOGGING DEVICES**

Prior to fogging, food products and packaging material must be removed from the room or carefully protected. After cleaning, fog desired areas using 1 quart per 1000 cubic feet of room area with a solution containing 1½ ounces of product to 1 gallon of water (1,200 ppm). Vacate the area of all personnel for a minimum of 2 hours after fogging. All food contact surfaces must be thoroughly rinsed prior to reuse with potable water.

**NOTE:** The fog generated is irritating to the eyes, skin and mucous membranes. Under no circumstances should a room or building be entered by anyone within two hours of the actual fogging. If the building must be entered, then the individuals entering the building must wear a self-contained respirator approved by NIOSH/MSHA, goggles, long sleeves and long pants.

**FOGGING IS TO BE USED AS AN ADJUNCT TO ACCEPTABLE MANUAL CLEANING AND DISINFECTING OF ROOM AND MACHINE SURFACES.**

**FOOD CONTACT and TOBACCO PROCESSING EQUIPMENT  
SANITIZING DIRECTIONS**

**Sanitizing of Food Processing Equipment and Other Hard Surfaces in Food Processing Locations, Meat Plants, Dairies, Bakeries, Canneries, Beverage Plants, Restaurants and Bars Directions:** For sanitizing food processing equipment, dairy equipment, food utensils, dishes, silverware, eating utensils, glasses, sink tops, countertops, refrigerated storage and display equipment, and other hard, non-porous surfaces. **NO POTABLE WATER RINSE IS ALLOWED.**

Prior to application, remove gross food particles and soil by a pre-flush or pre-scrape and when necessary, presoak. Then thoroughly wash or flush objects with a good detergent or compatible cleaner, followed by a potable water rinse before applications of the sanitizing solution.

Before use as a sanitizer in federally inspected meat and poultry plants and dairies, food products and packaging materials must be removed from the room or carefully protected. A potable water rinse is not allowed. following the use of this product as a sanitizer on previously cleaned hard non-porous surfaces provided that the surfaces are adequately drained before contact with food so that little or no residue remains.

Apply a solution of 1 ounce of this product in 4 gallons of water, (or equivalent use dilution) (200 ppm active) OR mix a 1 ounce packet with 4 gallons of water, to pre-cleaned, hard surfaces thoroughly wetting surfaces with a cloth, mop, sponge, sprayer or by immersion. For spray applications, use a coarse pump or trigger sprayer. Spray 6 to 8 inches from surface. Rub with brush, sponge, or cloth. Do not breathe spray. With spray applications cover or remove all food products. From a Closed Loop Dilution Center, apply 200 ppm active solution to the surface to be sanitized. Surfaces should remain wet for at least 1 minute followed by adequate draining and air drying. A fresh solution should be prepared at least daily or when use solution becomes visibly dirty. For mechanical application use solution may not be reused for sanitizing

applications. **NO POTABLE WATER RINSE IS ALLOWED AFTER APPLICATION OF THE SANITIZING SOLUTION.**

Apply to sink tops, countertops, refrigerated storage and display equipment and other stationary hard surfaces by cloth or brush or mechanical spray device. **NO POTABLE WATER RINSE IS ALLOWED** after use as a sanitizer.

Dishes, silverware, glasses, cooking utensils and other similar size food processing equipment can be sanitized by immersion in a 1 ounce per 4 gallons solution of this product (200 ppm active). **NO POTABLE WATER RINSE IS ALLOWED.**

At 1 ounce per 4 gallons this product (200 ppm active) eliminates 99.999% of the of the following bacteria in 60 seconds in 500 ppm hard water (calculated as CaCO<sub>3</sub>) according to the AOAC Germicidal and Detergent Sanitizing Action of Disinfectants test.

*Campylobacter jejuni*  
*Escherichia coli*  
*Escherichia coli* 0157:H7

*Listeria monocytogenes*  
*Shigella dysenteriae*  
*Staphylococcus aureus*

Ounces of Product	Amount of Water
0.0625 ounces	1 quart
0.125 ounces	½ Gallon
0.25 ounces	1 gallon
0.5 ounces	2 gallons
1.0 ounces	4 gallons
1.25 ounces	5 gallons
2.5 ounces	10 gallons
5.0 ounces	20 gallons

**DIRECTIONS FOR SANITIZING FOOD PROCESSING EQUIPMENT, UTENSILS, AND FOOD CONTACT ARTICLES REGULATED BY 21CFR sec 178.1010: b(22), c(17).**

1. Scrape, flush or presoak articles (whether mobile or stationary) to remove gross food particles and soil.
2. Thoroughly wash articles with an appropriate detergent or cleaner.
3. Rinse articles thoroughly with potable water.
4. Sanitize articles using a solution of 0.25 ounces of this product per gallon of water (200 ppm active). Articles that can be immersed in solution should remain in solution for 60 seconds. Articles too large for immersing should be thoroughly wetted by rinsing, spraying or swabbing.
5. Remove immersed items from solution to drain and then air dry. Non-immersed item should be allowed to air dry also.

**U.S. PUBLIC HEALTH SERVICE  
FOOD SERVICE SANITIZATION RECOMMENDATIONS  
CLEANING AND SANITIZING:**

Equipment and utensils shall be thoroughly preflushed or prescraped, and when necessary, presoaked to remove gross food particles and soil.

1. Thoroughly wash equipment and utensils in a hot detergent solution. Rinse utensils and equipment thoroughly with potable water.
2. Sanitize equipment and utensils by immersion in a 1 ounce of this product per 4 gallons of water solution for at least 60 seconds at a temperature of 75°F. This dilution is equivalent to a solution containing 50 ppm available chlorine.

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- For equipment and utensils too large to sanitize by immersion, apply 0.5 ounces of this product to 2 gallons of water (200 ppm active) by rinsing, spraying or swabbing until thoroughly wetted.
- Allow sanitized surfaces to drain and air dry. No potable water rinse is allowed.

**WISCONSIN STATE DIVISION OF HEALTH  
DIRECTIONS FOR EATING ESTABLISHMENTS**

- Scrape and pre-wash utensils and glasses whenever possible.
- Wash with a good detergent or compatible cleaner.
- Rinse with potable water.
- Sanitize in a solution of 1 ounce of this product per 4 gallons water. (200 ppm active quaternary.) Immerse all utensils for at least two minutes or for contact time specified by governing sanitary code.
- Place sanitized utensils on a rack or drain board to air-dry.
- Prepare a fresh sanitizing solution at least daily or when visibly soiled or diluted.

**NOTE:** A clean potable water rinse following sanitization is not permitted under Section HFS 196.13 of the Wisconsin Administrative Code.

*(Alternative language for clean in place, closed loop dilution centers.)*

**WISCONSIN STATE DIVISION OF HEALTH  
DIRECTIONS FOR EATING ESTABLISHMENTS**

- Scrape and pre-wash utensils and glasses whenever possible.
- Wash with a good detergent or compatible cleaner.
- Rinse with potable water.
- Sanitize in a solution from the Closed Loop Dilution Center (200 ppm active quaternary). Immerse all utensils for at least two minutes or for contact time specified by governing sanitary code.
- Place sanitized utensils on a rack or drain board to air-dry.
- Prepare a fresh sanitizing solution at least daily or when visibly soiled or diluted.

**NOTE:** A clean potable water rinse following sanitization is not permitted under Section HFS 196.13 of the Wisconsin Administrative Code.

**Sanitizing of Food Processing Equipment (Ice Machines) and Other Hard Surfaces In Food Contact Locations:** For sanitizing food processing equipment, dairy equipment, refrigerated storage and display equipment and other hard, non-porous surfaces. Equipment and utensils must be thoroughly pre-flushed or pre-scraped and when necessary presoaked to remove gross food particles. No potable water rinse is allowed.

- Turn off refrigeration
- Wash and rinse all surfaces thoroughly.
- Apply a solution of 1 ounce this product in 4 gallons of water (or equivalent use dilution) (200 ppm active) by mechanical spray, directly pouring or by recirculating through the system. Surfaces must remain wet for at least one minute followed by complete draining and drying. Prepare a fresh solution for each cleaning. No potable water rinse is allowed when product is used as directed.
- Return machine to service.

**DIRECTIONS FOR RESTAURANT AND BAR SANITIZER**

Equipment and utensils should be thoroughly preflushed or prescraped and when necessary presoaked to remove gross food particles and soil. Then thoroughly wash or flush objects with a good detergent or compatible cleaner followed by a potable water rinse before application of the sanitizing solution.

For precleaned dishes, glassware, silverware, eating utensils, and cooking utensils, immerse in a solution containing 1 ounce of this product per 4 gallons of water (or equivalent use dilution) (200 ppm active quaternary). Allow surface to remain wet for at least 60 seconds. Drain thoroughly before reuse. No potable water rinse is allowed.

*(Alternative language for clean in place, closed loop dilution centers.)*

**For use as a sanitizer on dishes, glassware, silverware, eating utensils, cooking utensils:** For heavily soiled areas, remove gross food particles by preflush, prescrape, and presoak when necessary. Wash thoroughly with detergent or compatible cleaner then rinse with potable water prior to application of this product. Then immerse in a sanitizing solution from Closed Loop Dilution Center (200 ppm active quaternary). Allow surface to remain wet for at least 60 seconds. Drain thoroughly and air dry before reuse. No potable water rinse is allowed.

**DIRECTIONS FOR FOOD PROCESSING EQUIPMENT AND DAIRIES**

Equipment and utensils must be thoroughly preflushed or prescraped and, when necessary, presoaked to remove gross food particles. Clean and rinse equipment thoroughly. Then apply sanitizing solution containing 1 ounce of this product per 4 gallons of water (or equivalent use dilution) (200 ppm active quaternary). No potable water rinse is allowed.

At 1 oz. per 4 gallons this sanitizer fulfills the criteria of Appendix F of the Grade A Pasteurized Milk, Ordinance 1978 Recommendations of the U.S. Public Health Services in waters up to 500 ppm of hardness calculated as CaCO<sub>3</sub> when evaluated by the AOAC Germicidal and Detergent Sanitizer Method against Escherichia coli and Staphylococcus aureus.

**SANITIZATION OF DAIRY EQUIPMENT**

Clean and rinse thoroughly all cow, milking machines parts and related equipment. Then rinse with sanitizing solution containing 1 ounce of this product with 4 gallons of water (or equivalent use dilution) (200 ppm active quaternary) for at least one (1) minute contact time. Allow to drain thoroughly and air dry.

**Sanitizing Bulk Milk Tanks:** Rinse tank with tepid water before cleaning. Remove gross filth and soil by pre-flush or pre-scrape and when necessary presoak. Remove all detachable equipment. Then wash surfaces with a compatible. Rinse with an acid rinse solution prior to sanitizing to remove milkstone. Follow manufacturers' directions when using acid rinse product. Reassemble and thoroughly rinse with potable water prior to sanitizing. Before reuse, sanitize with a solution of 1 ounce per 4 gallons of water (or equivalent use dilution) (200 ppm active) for a minimum 60 second contact time. Apply with a cloth, brush, mechanical spray device or by immersion. For spray applications, use a coarse spray pump trigger sprayer. Spray 6 to 8 inches from surface. Rub with brush, sponge, or cloth. Do not breathe spray. With spray applications cover or remove all food products. Drain the use solution from the equipment and allow to air dry. Prepare a fresh solution at least daily or when use solution becomes visibly dirty. **NO POTABLE WATER RINSE IS ALLOWED AFTER SANITIZATION.**

**BEVERAGE DISPENSING EQUIPMENT SANITIZER DIRECTIONS**

For sanitizing of bottling or pre-mix dispensing equipment, after cleaning thoroughly rinse equipment with a potable water rinse. Fill equipment with a solution of 1 ounce of this product per 4 gallons of water (or equivalent use dilution) (200 ppm active). Allow solution to remain in equipment for at least 60 seconds, or until operations resume at which time the sanitizing solution should be drained from the system. To insure the removal of flavors, it is suggested that during changeover between products the system should be cleaned, rinsed and flushed with the sanitizing solution for at least 1 minute. Drain thoroughly and allow to air dry before reuse. No potable water rinse is allowed.

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### SANITARY FILLING EQUIPMENT SANITIZER DIRECTIONS

Recommended for use in sanitizing bottles or cans in the final rinse application. The product is to be proportioned into the final rinse water line of the container washer or rinser in the concentration of 200 ppm active quat. Prepare a solution of 1 ounce of this product per 4 gallons of water (or equivalent use dilution) (200 ppm active) for the exterior application for the filler and closing machine. Allow surfaces to remain wet for at least 60 seconds. Drain thoroughly and allow to air dry before reuse. No potable water rinse is allowed.

### STORAGE TANK SANITIZER DIRECTIONS

Recommended for sanitizing beer fermentation and holding tanks, beverage processing, storage and holding tanks, citrus and food processing storage and holding tanks. Remove gross filth and soil by preflush or pre-scrape and when necessary presoak. Then wash surfaces with a compatible detergent and rinse with potable water prior to sanitizing. Prepare a solution of 1 ounce of this product per 4 gallons of water (or equivalent use dilution) (200 ppm active) for mechanical or automated systems. Allow surfaces to remain wet for at least 60 seconds. Drain thoroughly before reuse. No potable water rinse is allowed.

For mechanical operations or automated systems, the used sanitizing solution may not be used for sanitizing, but may be reused for other purposes such as cleaning.

**Bulk Tank Sanitizing:** To sanitize hard, non-porous food contact surfaces, preflush, presoak, or pre-scrape, then clean with a good detergent and rinse with potable water. Dilute 1 ounce of this product in 4 gallons of water (or equivalent use solution) (200 ppm active) and apply with a cloth, brush, mechanical spray device or by immersion. For spray applications, use a coarse spray pump or trigger sprayer. Spray 6 to 8 inches from surface. Rub with brush, sponge, or cloth. Do not breathe spray. With spray applications cover or remove all food products. Surfaces should remain wet for at least 1 minute followed by adequate draining and air-drying. Prepare a fresh solution at least daily or when the solution becomes visibly dirty. For mechanical application use solution may not be reused for sanitizing applications. No potable water rinse is allowed after application of the sanitizing solution.

### SANITIZING EGG SHELLS INTENDED FOR FOOD DIRECTIONS

To sanitize previously cleaned food-grade eggs in shell egg and egg product processing plants, spray with a solution of 1 ounce of this product per 4 gallons of warm water (or equivalent use dilution) (200 ppm active). The solution should be warmer than the eggs, but not to exceed 130°F. Wet eggs thoroughly and allow to drain. Eggs sanitized with this product shall be subjected to a potable water rinse only if they are to be broken immediately for use in the manufacture of egg products. Eggs should be reasonably dry before casing or breaking. The solution should not be re-used for sanitizing eggs.

**NOTE:** Only clean, whole eggs can be sanitized. Dirty, cracked or punctured eggs cannot be sanitized.

### FOR CONTINUOUS TREATMENT OF MEAT AND POULTRY OR FRUIT AND VEGETABLE CONVEYORS:

Remove gross food particles and excess soil by a pre-flush or pre-scrape, wash with a good detergent or compatible cleaner, rinse equipment thoroughly with potable water, then rinse equipment with a sanitizing solution. To sanitize the belt apply this product at a 200 ppm quat level (1 ounce per 4 gallons) (or equivalent use dilution) to conveyors with suitable feeding equipment. Controlled volumes of sanitizer are applied to return portion of conveyor through nozzles so located as to permit maximum drainage of sanitizer from equipment and to prevent puddles on top of belt. During interruptions in operation, coarse spray equipment, peelers, collators, slicers and saws with this product at a dilution of 200 ppm active

quat. Conveyor equipment must be free of product when applying this coarse spray. Do not allow this solution to be sprayed directly on food.

**FOR SANITIZING IN FISHERIES, MILK, WINE, CITRUS, POTATO & ICE CREAM PROCESSING PLANTS:** For use as a sanitizer on conveyor belts and equipment to reduce or eliminate odors in the processing area. Also, for use on filling equipment to reduce bacteria associated with condensation on equipment and pipes. Follow directions for sanitizing food contact surfaces.

*(Alternative language for bag in the box dispensing equipment.)*

### DIRECTIONS FOR BAG-IN BOX CONTAINERS

**How to use this package:** This package is designed to be used with dilution control systems only. Open package and connect to dispense according to directions on the box.

**Trigger sprayers:** Fill bottle from dispenser. Apply to surfaces according to directions above.

**Mop Buckets:** Fill bucket from dispenser. Set up "Wet Floor" signs. Mop floor surfaces as specified in directions above.

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ONE OUNCE PACKET LABEL TO BE USED WITH MASTER CONTAINER LABEL FOR DISINFECTION

FOR DISINFECTION

MIX EACH PACKET WITH 1 GALLON OF WATER

MAQUAT® 1412-10% FCS

E.P.A. Reg. No. 10324-111 E.P.A. Est. No. 10324-IL-1

NET CONTENTS: 1.0 FLUID OZ.

ACTIVE INGREDIENTS:

Alkyl (50% C<sub>14</sub>, 40% C<sub>12</sub>, 10% C<sub>16</sub>) dimethyl benzyl ammonium chloride..... 10.0%

INERT INGREDIENTS: ..... 90.0%

TOTAL: ..... 100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER

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



ONE OUNCE PACKET LABEL TO BE USED WITH MASTER CONTAINER LABEL FOR FOOD CONTACT SANITIZER

FOR FOOD CONTACT SANITIZER

MIX EACH PACKET WITH 4 GALLONS OF WATER

MAQUAT® 1412-10% FCS

E.P.A. Reg. No. 10324-111 E.P.A. Est. No. 10324-IL-1

NET CONTENTS: 1.0 FLUID OZ.

ACTIVE INGREDIENTS:

Alkyl (50% C<sub>14</sub>, 40% C<sub>12</sub>, 10% C<sub>16</sub>) dimethyl benzyl ammonium chloride..... 10.0%

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