

10324-142

2/17/2004

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FEB 17 2004

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

Subject: Maquat MQ2525M-14
EPA Registration No. 10324-142

Dear Ms. Tannehill,

This letter is an addendum to the registration notice of 1/5/04 for the product identified above. In that notice we asked you to delete the directions for "Food Processing Plants Using Fogging Devices." We have reconsidered and find this use acceptable. Thus the enclosed label is acceptable subject to the conditions listed below.

Conditions

Make the following revisions to the label.

A. Based on your method of support for the acute toxicity data requirements revise your "Precautionary Statements" to read exactly as follows:

"Corrosive. Causes irreversible eye damage and skin burns. *Harmful if swallowed or absorbed through the skin.* Do not get in eyes, on skin, or on clothing. Wear goggles or face shield, 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 before reuse."

B. Since your label does not include directions for the use of this product as a sanitizer on bath and therapy equipment, revise the following statement on page two by deleting the term "sanitizer": "This product is a versatile cleaner and broad spectrum disinfectant formulated for use on bath and therapy equipment (Whirlpools)."

C. Revise the 12th bullet, left column, on page three by deleting the second reference to the sites "prisons" and "jails."

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SURNAME	J. L. Tannehill						
DATE	2/17/04						

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D. Revise the 20th bullet, left column, on page three by deleting the reference to "footbaths" as you have not supplied specific directions for this site and as such treatment of this surface could be confusing to the user (i.e. using this solution as a soak in the foot bath.)

E. Delete the material "fiberglass" from the 17th bullet in the right column on page three as this is considered a porous surface.

F. You have not provided nor cited data to support claims for non-food contact sanitization for this product, as per DIS/TSS 10 (enclosed.) Thus, delete the claim for this use at the bottom left column of page four and delete all non food contact sanitization directions from this label as follows: (on page eight) "Sanitizer Directions for Non-Food Contact Surfaces," "Shoe Bath Sanitizer Directions," "Shoe Foam Directions," "Glove Dip Sanitizer Directions," and "Salon/Barber Instruments and Tools Sanitizer Directions."

G. Revise your label to be in agreement with the cited label 10324-63 by correcting the directions on page six "To Control the growth of mold and mildew on large, inflatable, non-porous plastic and rubber surfaces" to read "...2.25 ounces per 5 gallons (492 ppm active quat) of water..." and in the same manner revise the directions for "Disinfection of Barber/Salon Tools Directions" to read "...0.55 ounce per 1.25 gallons solution of this product (or equivalent use dilution)(484 ppm active quat)..."

H. The Agency has previously reviewed MRID #454962-01 to support the use of 10324-63 against the animal pathogen: *Avian Reovirus*. The testing provided supports the use of 10324-63 at 625 ppm. Thus your directions for disinfection of Poultry/Turkey Equipment... (page seven) must be revised to be in agreement with this rate. Revise these directions to read "...1 ounce of this product per 1.5 gallons of water (or equivalent use dilution)(733 ppm active quat)..."

I. The treatment of udders, flanks and teats of dairy cows as described in the "Dairy Cow Application Directions" is a claim requiring Food and Drug Administration (FDA) approval, in the form of an approval letter from the FDA. Since such approval has not been submitted to the Agency, delete this claim and these directions from your label at this time.

J. Revise your label to be in agreement with the cited label 10324-63 by correcting the directions on page eight and nine: "Sewer Backup and River Flooding" to read "...dilute 0.7-1.4 ounces of this product per gallon of water..." and in the same manner revise the directions for "Carpets, carpet cushions and other porous materials such as sub floors, drywall..." to read "...dilute 0.7-1.4 ounces of this product per gallon of water (795-1540 ppm active quat)..."

K. Revise your label to be in agreement with PR Notice 2000-5 as follows: correct the sections on page ten and eleven beginning: "Apply a solution of 1 ounce of this product..." to read: "Prepare a fresh solution at least daily or when..." and revise the "Wisconsin

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State Division of Health..." directions on the same page as follows by deleting the phrase: "Fresh sanitizing solution should be prepared" and deleting the parenthesis surrounding "(Prepare fresh sanitizing solution) at..." such that this reads exactly as follows: *"Prepare fresh sanitizing solution at least daily or when visibly soiled or diluted."* Then correct page eleven, the first statement to read *"Prepare fresh sanitizing solution at least daily or when visibly soiled or diluted."* and the "Sanitizing of Food Processing Equipment (Ice Machines)..." to read *"Prepare fresh solution for each cleaning."*

L. Correct the section on page ten beginning: "Dishes, silverware, glasses, cooking utensils, eating utensils..." to read: "...1 ounce per 5.5 gallons solution of this product..."

M. Revise the directions for treatment of "Water Softeners" to include the following statement immediately prior to the backwash directions: *"Tank must be washed with a compatible detergent and rinsed with potable water before sanitizing."*

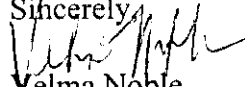
N. Revise the directions for treatment of "Reverse Osmosis (RO) Units" by correcting plastic "gab" to read plastic bag and include the following statement immediately prior to item #2 in the directions: *"Tank must be washed with a compatible detergent and rinsed with potable water before sanitizing."*

O. Revise the directions for treatment of "Ice Machines" to include the following statement immediately prior to item #2 in the directions: *"Unit must be washed with a compatible detergent and rinsed with potable water before sanitizing."*

P. Revise your label to be in agreement with PR Notice 2000-5 as follows: correct the section on page twelve beginning: "For Continuous Treatment of Meat and Poultry...Conveyors" to read: "Conveyor equipment *must be* free of product when applying this coarse spray."

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

A stamped copy of the label is enclosed for your records. Submit one (1) copy of the final printed label prior to the release of the product for shipment. If 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

7510C:T.Lantz:2/13/04:10324-142b

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OFFICIAL FILE COPY

**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 absorbed through the skin. Harmful if swallowed. Harmful if inhaled. Avoid breathing spray mist. Do not get into eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves and protective clothing when handling. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

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

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 oxidizers, anionic soaps and detergents.

(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.)

ACCEPTED
with COMMENTS
in EPA Letter Dated:
STORAGE AND DISPOSAL
Store in original container in areas inaccessible to small children. Do not store on side. Avoid creasing or impacting of sidewalls. Do not reuse empty container. Wrap and discard in trash (or recycle).

FEB 17 2004
Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended for this pesticide,
registered under EPA Reg. No. 10324-142

MAQUAT® MQ2525M-14
Disinfectant-Sanitizer-Deodorizer

Disinfectant - Sanitizer - Deodorizer - Fungicide - Mildewstat - 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, Federally Inspected Meat and Poultry Plants, Bar and Institutional Kitchen Use and for Sanitizing Ice Machines.

Formulated for effective Poultry Sanitation.

Formulated for effective Swine Premise Sanitation.

Formulated for effective Mushroom Farm Sanitation.

ACTIVE INGREDIENTS:

n-Alkyl (C₁₄ 60%, C₁₆ 30%, C₁₂ 5%, C₁₈ 5%)

dimethyl benzyl ammonium chloride.....7.04%

n-Alkyl (C₁₂ 68%, C₁₄ 32%) dimethyl ethylbenzyl ammonium chloride7.04%

INERT INGREDIENTS:85.92%

TOTAL100.00%

KEEP OUT OF REACH OF CHILDREN
DANGER PELIGRO

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 the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

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

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

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

MASON CHEMICAL COMPANY

"THE QUATERNARY SPECIALISTS"

721 W. Algonquin Road
Arlington Heights, IL 60005
847-290-1621

Toll Free:
1-800-362-1855

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

NET CONTENTS

BATCH NO

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8
16

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.

This product is a multi-surface cleaner, deodorizer and disinfectant. Use on windows, mirrors, and other non-food contact glass surfaces.

When used as directed, this product will deodorize surfaces in rest room 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*, (and) 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.

Will not cause swelling of transducer membrane or harm compressor plates.

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.)

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 729 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 in household and commercial humidifiers. Use of this product will control a build-up of slime and unpleasant (malodors) odors.

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

This product is a versatile cleaner, sanitizer 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, clippers, trimmers, razors, blades, tweezers and manicure instruments and footbaths.

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

This product is recommended for use as a Hatching-Egg sanitizer, with best results achieved in water temperatures ranging from 78°-110°F.

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 cause(d) 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 multi-touch surfaces responsible for cross-contamination.

This product is effective at controlling mold and mildew 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 cleans, shines, deodorizes and disinfects all hard non-porous surfaces listed on the label. It inhibits the growth of mold and mildew, leaving bathrooms and kitchens clean and fresh smelling.

This product is an effective antimicrobial cleaner, designed for use by wholesale and retail florists, shippers and green houses.

When used as directed, this product will disinfect hard, non-porous surfaces, such as flower buckets, floors and walls of coolers, design and packing benches, and countertops.

This product may be relied on to deodorize coolers, buckets, garbage pails and other areas where obnoxious odors may develop.

Use this product to clean, disinfect and deodorize flower buckets, walls, floors of coolers, shippers, greenhouse packing areas, garbage pails and other areas where obnoxious odors may develop.

This product may be used as a general purpose antimicrobial detergent in florist shops, wholesale florist, shippers, greenhouse packing areas and other commercial floriculture places for efficient cleaning and antimicrobial action against certain bacteria which cause:

1. Plugging of stems with slime, which reduces uptake of water for various flowers including roses, chrysanthemums, gladioli and tulips.

2. Production of ethylene gas, which may injure blooms of the various sensitive flowers including carnations, snapdragons, some orchids, baby's breath, sweet peas, freesia and alstroemeria.

Maquat® MQ2525M-14 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, footbaths, respiratory therapy, surgical 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 institutions, 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, jails, prisons, municipal government buildings, ██████████ 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/beds, footbaths, 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.
- Humidifier water tanks.
- 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, mushroom farms, rendering plants.
- Processing facilities for Fish, Milk, Citrus, Fruit, Vegetable, 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.
- 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.
- Commercial florist and flower shops.
- 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.
- Counters (countertops), Slurpy® machines, stoves (stovetops), sinks (bathroom, kitchen), tub surfaces, appliances, refrigerators, ice machines.
- Interior hard, non-porous surfaces of water softeners, reverse osmosis units, ice machines, water coolers, water holding tanks and pressure tanks.
- Glass, metal, stainless steel, glazed porcelain, glazed ceramic, ██████████ granite, marble, plastic (such as polystyrene or polypropylene), sealed limestone, sealed slate, sealed stone, sealed terra cotta, sealed terrazzo, chrome and vinyl.
- Enameled surfaces, painted woodwork (finished), Formica®, vinyl and plastic upholstery.
- Foundations, steps, plumbing fixtures, finished baseboards and window sills.
- Tables, chairs, desks, bed frames, lifts, washable walls, cabinets, doorknobs and garbage cans, cuspidors and spittoons.
- 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.
- Picnic tables and outdoor furniture.
- Telephones and telephone booths.
- Highchairs.
- 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/cage 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.

Use this product to clean, sanitize and disinfectant non-porous personal protective safety equipment, protective headgear, hard hats, half mask respirators, full face breathing apparatus, gas masks, goggles, spectacles, face shields, hearing protectors and ear muffs. Rinse all equipment that comes in prolonged contact with skin before reuse with clean warm water (about 120°F), and allow to air dry. (Caution: Cleaning at the recommended 120°F temperature will avoid overheating and distortion of the personal safety equipment that would necessitate replacement.)

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 has passed the Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces Utilizing (Duck) Hepatitis B Virus.

This product is an effective disinfectant/sanitizer in the presence of 6% serum contamination.

This product is an effective sanitizer in the presence of soils.

For larger areas, such as operating rooms and patient care facilities, this product is designed to provide both general cleaning and disinfection.

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 which 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.

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

This product is not for use on Medical device 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 (mist) pump or trigger sprayer. Spray 6-8 inches from surface. Rub with brush, sponge or cloth. Do not breathe spray (mist).

NOTE: With spray applications cover or remove all food products. A fresh solution should be prepared (Prepare a fresh solution) 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: For disinfecting floors, walls, countertops, bathing areas, lavatories, bed frames, tables, chairs, garbage pails and other hard non-porous surfaces.

Add ½ ounce of this product to 96 ounces of water (or equivalent use dilution) (729 ppm active quat) OR mix a 1 ounce packet with 1.5 gallons 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:

Burkholderia cepacia
Campylobacter jejuni
Corynebacterium ammoniagenes
Escherichia coli 0157:H7
Enterococcus faecium (Vancomycin Resistant) (VRE)
Klebsiella pneumoniae
Listeria monocytogenes
Proteus mirabilis

Pseudomonas aeruginosa
Salmonella choleraesuis
Salmonella typhi
Shigella sonnei
Staphylococcus aureus
Staphylococcus aureus (Methicillin resistant)
Yersinia enterocolitica

Virucidal Performance: At ½ ounce per 96 ounces use level (729 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:

Avian influenza /Turkey/Wisconsin
 Avian Reovirus
 Bovine Viral Diarrhea
 Infectious Bronchitis Virus
 Infectious Bovine Rhinotracheitis virus (IBR)
 Canine Distemper
 Equine Arteritis virus
 Herpes Simplex Type 1
 Herpes Simplex Type 2
 Hepatitis B Virus

Infectious Laryngotracheitis
 Influenza A2/Japan
 Newcastle disease virus
 Porcine Respiratory & Reproductive Virus (PRRSV)
 Porcine Rotavirus
 Pseudorabies virus
 Transmissible Gastroenteritis (TGE)
 Vaccinia virus

Hospitals, Dental Offices, Nursing Homes and other Health Care Institutions Disinfection and Virucidal Dilution Chart

Ounces of Product	Amount of Water
0.25 ounces	48 ounces
0.5 ounces	96 ounces
1.0 ounce	1.5 gallons
2.0 ounces	3 gallons
4.0 ounces	6 gallons
8.0 ounces	12 gallons

At ½ ounce per 96 ounces (or equivalent use dilution) (729 ppm active quat) in the presence of 200 ppm hard water (CaCO₃) and 100% serum this product was proven to be effective against (Duck) Hepatitis B Virus with a contact time of 10 minutes.

General Disinfectant-Non-medical (schools, restaurants, food services, dairies, farm, beverage and food processing plants): Add 2.25 ounces of this product to 5 gallons of water (492 ppm active quat).

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 with a 10 minute contact time against:

Campylobacter jejuni

Salmonella choleraesuis

Escherichia coli 0157:H7
Listeria monocytogenes
Proteus mirabilis

Staphylococcus aureus
Staphylococcus aureus (Methicillin resistant)
Yersinia enterocolitica

General Disinfectant-Non-medical Dilution Chart

Ounces of Product	Amount of Water
0.28 ounces	0.625 gallons
0.55 ounces	1.25 gallons
1.125 ounces	2 ½ gallons
2.25 ounces	5 gallons
4.5 ounces	10 gallons
9.0 ounces	20 gallons

***KILLS HIV AND HBV 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 I (HIV-1) (associated with AIDS) and HBV.

"SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV-1 AND HBV 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: For HIV, leave surfaces wet for two minutes with 4.5 ounces per 7 gallons (or equivalent use dilution) (703 ppm active quat) use solution. This contact time will not control other common types of viruses and bacteria. For HBV, leave surfaces wet for 10 minutes with 4 ounces per 6 gallons (or equivalent use dilution) (729 ppm active quat) in the presence of 200 ppm hard water (CaCO₃ and 100% serum).

Efficacy tests have demonstrated that this product is an effective bactericide, virucide and fungicide in the presence of organic soil (5% blood serum).

For Use on Finished Floors: To limit gloss reduction, use 3 ounces of this product per 5 gallons of water. Apply with a damp mop or auto scrubber. Allow to air dry.

General Deodorization: To deodorize, add 2.25 ounces of this product to 5 gallons of water (or equivalent use dilution) (492 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 preclean for the product to perform properly. Then apply a wetting concentration of 2.25 ounces of this product per gallon of water (or equivalent use dilution) (2,500 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. Then follow directions for "General Deodorization".

Fungicidal Activity: At 2 ounces per 3 gallons use-level (or equivalent use dilution) (729 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.

Mold and Mildew Control: At 2 ounces per 3 gallons (or equivalent use dilution) (729 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 (as indicated in general instructions above). Allow to dry on surface and repeat treatment every seven days or when new growth appears.

Cleansing of Body Surfaces and Body Orifices of Human Remains: To cleanse away skin secretions and accompanying malodor, to insure the removal of all soil and bloodstains, and to remove and reduce surface contamination, apply 2.25 ounces of this product to 5 gallon of water (492 ppm active) to the surfaces and body openings, natural or artificial. Allow a 10 minute contact time for optimal results. Bath the entire body using sponge or washcloth. A soft brush may be employed on surfaces other than the face. Prepare a fresh solution for application of each remains.

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 2 ounces per 3 gallons (729 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 of Barber/Salon Tools Directions: Pre-cleaned barber/salon tools, such as combs, brushes, razors, clipper and trimmer blades, tweezers, manicure/pedicure tools and scissors, can be disinfected by immersing in ½ ounce per 1.5 gallons solution of this product (or equivalent use dilution) (492 ppm active quat). Completely immerse instruments and tools for at least 10 minutes. Rinse thoroughly and dry before use. Fresh solution should be prepared at least daily or more often if solution becomes cloudy or soiled.

Disinfection/Fungicide/Virucide for Barber/Salon Tools Directions: Immerse pre-cleaned barber/salon tools, such as combs, brushes, razors, clipper and trimmer blades, tweezers, manicure/pedicure tools and scissors, in a ½ ounce per 96 ounces solution of the product (or equivalent use dilution) (729 ppm active quat). Completely immerse instruments and tools for at least 10 minutes. Rinse thoroughly and dry before use. Fresh solution should be prepared 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 ½ oz. to the toilet bowl or urinal and mix. Brush thoroughly over exposed surfaces and under the rim with a cloth, mop, or sponge. Repeat and allow to stand for 10 minutes and flush.

From Use-solution: Empty toilet bowl or urinal and apply a ½ oz per 96 ounces use solution to exposed surfaces including under the rim with a cloth, mop, sponge or sprayer. Brush or swab thoroughly and allow to stand for 10 minutes and flush. For spray application, use a coarse spray device.

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 ½ ounce per 96 ounces of water (or equivalent use dilution) (729 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 visibly dirty or discolored.

For Disinfecting Hard, Non-porous Bath (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 2 ounces of this product for each 3 gallons of water (½ ounces per 96 ounces) (729 ppm active quat) in the unit at this point. Briefly start the pump to circulate the solution. 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 solution 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 2 ounces of this product for each 3 gallons of (½ ounces to 96 ounces) (729 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: (For) floors, walls and storage areas, add 2.25 ounces of this product to 5 gallons of water (or equivalent use dilution) (492 ppm active quat). For heavily soiled areas, a pre-cleaning step is required. 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 device. Allow to remain wet for 10 minutes. Then remove excess liquid. For sprayer applications, use a coarse (mist or) spray. 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.

To Disinfect Food Service Establishment Food Contact Surfaces: (For) countertops, appliances, (and) tables, add 2.25 ounces of this product to 5 gallons of water (or equivalent use dilution) (492 ppm active quat). Before using this product, food products and packaging materials must be removed from area or carefully protected. For heavily soiled areas, a pre-cleaning step is required. 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 device. Allow to remain wet for 10 minutes. Then remove excess liquid and rinse the surface with potable water.

For Use on Non-Food Contact Surfaces as a General Disinfectant in the Brewery Industry: Use 2.25 ounces of this product per 5 gallons of water (or equivalent use dilution) (492 ppm active quat). Follow the general disinfectant directions above.

Directions for Fogging: For use in dairies, beverage and food processing plants. To sanitize hard, non-porous room surfaces 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 1.375 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 5.5 gallons) prior to use. 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 of Poultry/Turkey Equipment, Swine Quarters, Animal Quarters and Kennels: Prior to disinfection, remove all poultry, other animals and their feed from premises, trucks, 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 2.25 ounces of this product per 5 gallons of water (or equivalent use dilution) (492 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 disinfection, 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.

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 2 ounces of this product per 3 gallons of water (or equivalent use dilution) (729 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 general disinfection, use 2.25 ounces of this product per 5 gallons of water. For disinfection/fungicide/virucide, use 2 ounces of this product per 3 gallons

of water. Apply to halters, 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 (mist) spray. Use 2.25 ounces of this product per 5 gallons of water for general disinfection. Use 2 ounces of this product per 3 gallons 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 DIRECTIONS (DRESSING PLANT AND RENDERING PLANT DISINFECTANT DIRECTIONS): Cover or remove all food and packaging material before disinfection. Remove gross soils. Disinfect equipment, utensils, walls and floors in poultry and animal dressing plants with a solution of 2.25 ounces of this product per 5 gallons of water (or equivalent use dilution) (492 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.

RENDERING PLANT/DRESSING PLANT DISINFECTANT/FUNGICIDE/VIRUCIDE DIRECTIONS (DRESSING PLANT AND RENDERING 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 2 ounces of this product per 3 gallons of water (or equivalent use dilution) (729 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.

FARM PREMISE DISINFECTION DIRECTIONS

For Use in Equine, Dairy and Hog Farms:

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 transversed 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 with the recommended disinfecting or virucidal solution for a period of 10 minutes.
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.

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 transversed by animals. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use solution of 2 ounces per 3 gallons of water (or equivalent dilution) (729 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 which dispenses food or water with soap or detergent, and rinse with potable water before reuse.

COMMERCIAL FLORIST USE DIRECTIONS: To clean, disinfect and deodorize hard non-porous surfaces in one step, prepare Use solution by adding (mixing) 2.25 ounces per 5 gallons of water (492 ppm active). For heavy-duty use, add (mix) 9 ounces per 5 gallons of water (1,968 ppm active).

Remove all leaves, petals, garbage and refuse. Pre-clean surfaces using pressurized water where possible. Apply Use solution to hard (inanimate) non-porous surfaces, thoroughly wetting surfaces as recommended and required, with a cloth, mop, brush, sponge or sprayer.

For heavily soiled areas, a preliminary cleaning is required.

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

Treated surfaces must remain wet for 10 minutes. Allow to air dry.

Prepare a fresh solution at least daily or sooner if use solution becomes visibly dirty.

SHOE FOAM ... animal areas, and ... approximately 0.5 to 2 inches ... water ... buildings, ... facilities by ... be washed ... at least daily or when it appears dirty.

GLUE PIPE REMOVER DIRECTIONS: ... organisms ... pre- ... clean ... the ... or

SALON ... DIRECTIONS: ... and ... Free ... daily or more often ... comes ...

... not ... solution.

Humidifier Bacteria/Algae Treatment: Formulated for use in portable humidifiers. Thoroughly clean water tank and filters before each heating season, or sooner if necessary. For every 1.375 gallons of water in the humidifier tank add 0.1 ounces of this product. When you refill the tank, add 0.1 ounces of this product for every 1.375 gallons of water added.

Not for use in heat vaporizing or atomizing type humidifiers.

WATER AND SMOKE DAMAGE RESTORATION

Effective against odor causing bacteria and fungi for home, institutional, industrial and hospital use. This product is particularly suitable for use in water damage restoration situations against odor causing bacteria on the following porous and semi-porous materials: carpets, carpet cushion, sub floors, drywall, trim, frame lumber, tackless strip and paneling. Using solutions recommended, saturate affected materials with enough product to remain wet for at least 10 minutes. Use proper ventilation.

Sewer Backup & River Flooding: During mitigation procedures, dilute 1-2 ounces of this product per gallon of water allowing for the diluting effect of absorbed water within saturated materials. Remove gross filth or heavy soil along with non-salvageable

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materials. Saturate all affected areas with a sprayer using a coarse spray tip before and after cleaning and extraction.

Carpets, carpet cushions and other porous materials such as sub floors, drywall, trim and frame lumber, tackless strip and paneling: For water damage from a clean water source, extract excess water. Test hidden area for colorfastness. Dilute 1-2 ounces of the product per gallon of water (795-1590 ppm active quat), allowing for the diluting effect of absorbed water within saturated materials. Remove gross filth or heavy soil. Apply directly with a sprayer using a coarse spray tip to fully saturate affected materials. Roll, brush or agitate into materials and allow the materials to remain damp for 10 minutes. Follow with a thorough extraction. Dry rapidly and thoroughly.

Special Instructions for Cleaning Carpet Against Odor Causing Bacteria: This product may be used in industrial and institutional areas such as homes, motel & hotel chains, nursing homes, schools and hospital(s). For use on wet, cleanable synthetic fibers. Do not use on wool. Vacuum carpet thoroughly prior to cleaning. Test fabric for color fastness.

For portable extraction units: Mix ½ ounce of this product per 1.375 gallons of water.

For truck mounted extraction machines: Mix 1 ¼ ounces of this product per 1.375 gallons of water and meter at 4 gallons per hour.

For rotary floor machines: Mix 1 ounce of this product per 1.375 gallons of water and apply at the rate of 300-500 sq. ft. per gallon.

Do not mix this product with other cleaning products. Follow the cleaning procedures specified by the manufacturer of the cleaning equipment. After using this product, set the carpet pile and protect the carpet from furniture legs and bases while drying. Do not over wet. If applied to stain resistant nylon carpet, apply a fabric protector according to the carpet manufacturer's directions.

CARPET SANITIZER AGAINST ODOR-CAUSING BACTERIA, FOR HOME, INSTITUTIONAL, INDUSTRIAL AND HOSPITAL USE

This product sanitizes the carpet by controlling/reducing the growth of odor-causing bacteria. It can be used in industrial and institutional areas such as homes, motels, hotel chains, nursing homes and hospitals.

Vacuum carpet thoroughly prior to application. Mix ½ ounce of product per 1.375 gallons of water. Follow the injection and/or extraction procedures as specified for any conventional steam cleaning equipment you are using. For rotary floor machines, mix 1 ounce per 1.375 gallons of water and spray on carpet at a rate of 300-500 sq. ft. per gallon.

For use (Use this product) on washable synthetic fibers. Do not use on wool. Test color fastness of carpet before use. Apply diluted product to a small, concealed spot, then rub with a clean white cloth. If color changes or transfers to (the) cloth, a water-based product should not be used.

After using the product, set carpet pile in one direction with a stiff brush. Place aluminum foil under the legs of furniture while carpet is drying. Over-wetting can cause carpet to shrink. Manufacturer assumes no responsibility for over-wetting misuse.

Note: This product should not be mixed with other cleaning products.

Smoke Damage Restoration: Effective against odor causing bacteria and fungi for home, institutional, industrial and hospital use. This product is particularly suitable for use in smoke damage restoration situations against odor causing bacteria on the following porous and semi-porous materials: carpets, carpet cushion, sub floors, drywall, trim and frame lumber, tackless strip and paneling. Follow directions as outlined

in the Water Damage Restoration section. Using solutions recommended, saturate affected materials with enough product to remain wet for at least 10 minutes. Use proper ventilation.

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 450 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 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 175 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. 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). It is acceptable to fog setters and hatchers with a 1 ounce per 1.375 gallons 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 1.375 gallons 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, Dairies, 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 5.5 gallons of water (or equivalent use dilution) (200 ppm active) OR mix a 1 ounce packet with 5.5 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 (mist) pump or trigger sprayer. Spray 6 to 8 inches from surface. Rub with brush, sponge, or cloth. Do not breathe spray (mist). 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 use as a sanitizer) (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, eating 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.

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 pre-cleaned dishes, glassware, silverware, eating utensils, (and) cooking utensils, immerse in a solution containing 1 ounce of this product per 5.5 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 SANITIZING FOOD PROCESSING EQUIPMENT, UTENSILS, AND FOOD CONTACT ARTICLES REGULATED BY 21CFR sec 178.1010:

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 1 ounce of this product per 5.5 gallons 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 5.5 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.
3. For equipment and utensils too large to sanitize by immersion, apply 1 ounce of this product to 5.5 gallons of water (200 ppm active) by rinsing, spraying or swabbing until thoroughly wetted.
4. Allow sanitized surfaces to drain and air dry. Do not rinse.

WISCONSIN STATE DIVISION OF HEALTH DIRECTIONS FOR EATING ESTABLISHMENTS

1. Scrape and pre-wash utensils and glasses whenever possible.
2. Wash with a good detergent or compatible cleaner.
3. Rinse with potable water.
4. Sanitize in a solution of 1 ounce of this product per 5.5 gallons water (200 ppm active quaternary). Immerse all utensils for at least two minutes or for contact time specified by governing sanitary code.
5. Place sanitized utensils on a rack or drain board to air-dry.
6. Fresh sanitizing solution should be prepared (Prepare 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

1. Scrape and pre-wash utensils and glasses whenever possible.
2. Wash with a good detergent or compatible cleaner.
3. Rinse with potable water.
4. 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.
5. Place sanitized utensils on a rack or drain board to air-dry.

6. Fresh sanitizing solution should be prepared (Prepare 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 preflushed or prescrapped and, when necessary, presoaked to remove gross food particles. No potable water rinse is allowed.

1. Turn off refrigeration.
2. Wash and rinse all surfaces thoroughly.
3. Apply a solution of 1 ounce this product in 5.5 gallons of water (or equivalent use dilution) (200 ppm active) by mechanical spray, direct pouring or by recirculating through the system. Surfaces must remain wet for at least one minute followed by complete draining and drying. Fresh solution should be prepared for each cleaning. No potable water rinse is allowed when product is used as directed.
4. Return machine to service.

SANITIZATION OF INTERIOR HARD NON-POROUS SURFACES OF WATER SOFTENERS AND REVERSE OSMOSIS (RO) UNITS

Water Softeners – Sanitization should occur after initial installation, after the system is serviced and periodically during its use.

1. Backwash the softener and add 2 ounces of sanitizer per 11 gallons of water (200 ppm active) to the brine tank well. (The brine tank should have water in it to permit the solution to be carried into the softener.) (NOTE: Standard system capacity is 48 gallons.)
2. Proceed with the normal regeneration or interrupt the cycle after the brining step and let the softener soak for a minimum of 60 seconds.
3. Return system to service. **NO POTABLE WATER RINSE IS ALLOWED.**

Reverse Osmosis (RO) Units – Sanitization should occur after initial installation, after the system is serviced and periodically during its use.

1. Turn off RO system, drain storage tank and remove membrane element and pre-filters. Put membrane element in a plastic bag so it remains wet. Do not use this product to sanitize the membrane element. Membrane element must be sterilized separately.
2. Fill empty pre-filter housing with 2 ounces of sanitizer per 11 gallons of water (200 ppm active) and turn on raw water. (NOTE: Standard system capacity is 1 to 2 gallons).
3. After holding tank is full, let system stand idle for a minimum of 60 seconds. Turn off water. Drain holding tank.
4. Return unit(s) to normal operation. **NO POTABLE WATER RINSE IS ALLOWED.** Follow the manufacturer's directions for re-installation of new pre-filters, membrane element and post filter.

SANITIZATION OF INTERIOR HARD NON-POROUS SURFACES OF ICE MACHINES, WATER COOLERS, WATER HOLDING TANKS AND PRESSURE TANKS

Ice Machines – Sanitizations should occur after initial installation, after the machine is serviced and periodically during its use.

1. Shut off incoming water line to machine.

2. Prepare a solution of 2 ounces of sanitizer per 11 gallons of water (200 ppm active).
3. Circulate solution through machine making sure to wet all surfaces and allow a minimum contact of 60 seconds. No potable water rinse is allowed when product is used as directed.
4. Return machine to normal operation.

Water Coolers, Water Holding Tanks and Pressure Tanks – Sanitization should occur after initial installation, after the system is serviced and periodically during its use.

1. Shut off incoming water line.
2. Units/tanks must be washed with a compatible detergent and rinsed with potable water before sanitizing.
3. Prepare a solution of 2 ounces of sanitizer per 11 gallons of water (200 ppm active).
4. Apply or circulate (if possible) to wet all surfaces and allow a minimum contact of 60 seconds. No potable water rinse is allowed when product is used as directed.
5. Return to service by opening incoming water lines.

DIRECTIONS FOR FOOD PROCESSING EQUIPMENT AND DAIRIES

Equipment and utensils must be thoroughly preflushed or prescrapped 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 5.5 gallons of water (or equivalent use dilution) (200 ppm active quaternary). No potable water rinse is allowed.

At 1 ounce per 5.5 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_3 when evaluated by the AOAC Germicidal and Detergent Sanitizer Method against *Escherichia coli* and *Staphylococcus aureus*.

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 5.5 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.

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 5.5 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, citrus and food processing storage, and holding tanks. Remove gross filth and soil by pre-flush 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 5.5 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.

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 5.5 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.

MUSHROOM FARM INDUSTRY USE DIRECTIONS

Site Preparation: The first step in any on-going sanitation program should be the removal of gross contamination and debris. This may be accomplished by using a shovel, broom, or vacuum, depending on the area to be disinfected.

Disinfection: Use 3 ounces of this product per 7 gallons of water (0.60 ounces per 1.4 gallons of water) (or equivalent dilution). Wet all surfaces thoroughly. Treated surfaces should be allowed to remain wet for 10 minutes. Let air-dry. For heavily soiled areas, preclean first. Prepare a fresh solution for each use.

For Heavy Duty Cleaning: When greater cleaning is desired, use 6 ounces of this product per 7 gallons of water (1.2 ounces of this product per 1.4 gallons of water) (or equivalent dilution). Heavily soiled areas may require repeated cleaning before treatment.

DO NOT APPLY TO THE MUSHROOM CROP, COMPOST OR CASING. Rinse treated surfaces with potable water before they contact the crop, compost or casing.

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 5.5 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, feeders, rollers, slicers and saws with this product at a dilution of 200 ppm active quat. Conveyor equipment should 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, 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 1.5 GALLONS OF WATER

MAQUAT[®] MQ2525M-14

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

NET CONTENTS: 1.0 FLUID OZ.

ACTIVE INGREDIENTS:

Alkyl (C₁₄ 60%, C₁₆ 30%, C₁₂ 5%, C₁₈ 5%)
dimethyl benzyl ammonium chloride 7.04%
Alkyl (C₁₂ 68%, C₁₄ 32%)
dimethyl ethylbenzyl ammonium chloride 7.04%

INERT INGREDIENTS: 85.92%

TOTAL: 100.00%

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

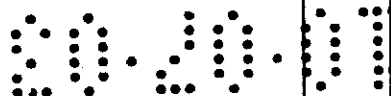
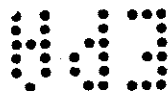
"THE QUATERNARY SPECIALISTS"

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

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