

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

10324-164

3/30/2006

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MAR 30 2006

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

Subject: Maquat 256PD
 EPA Registration No.: 10324-164
 Amendment Date: November 3, 2005
 EPA Receipt Date: November 7, 2005

Dear Ms. Tannehill,

The following amendment submitted in connection with registration under FIFRA section 3(c)(7)(A) is acceptable with the conditions below.

- Change dilution rate for HIV

Acceptable Data

Data Requirement	Means of Support	Status
Virucidal Efficacy - HIV	Submitted study, MRID 465072-01	Acceptable. 1/2 oz per gallon in 5% soil and 400 ppm hard water for 2 minutes.

Conditions

Revise the label as follows:

1) Revise the 16th statement in the left column and the 6th statement in the right column on page 2 to be in agreement with PR Notice 2000-5 which requires mandatory language. Revise to state: "This product is for use..."

2) Revise the claim for sanitization of footbath surfaces in the 19th statement in the left column on page 2 because the contact time in the data provided is not sufficient to kill the microorganisms of concern on this surface. Revise this statement by stating "Use this product to *sanitize* and disinfect...." and by deleting the phrase, "and footbath surfaces." Our concerns regarding this surface are addressed in more detail in subsequent comments in this letter.

3) Revise the 21st statement in the left column on page 2 by deleting the methods of application which are not in agreement with the directions for use on this label. Delete "automatic washing systems, immersion, and spraying apparatus"

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4) Revise the 6th bullet in the left column on page 4 by qualifying porcelain tile as a hard nonporous surface by stating "glazed" porcelain tile.

5) Revise the 10th, 11th, and 12th statements in the left column on page 4 to be in agreement with PR Notice 2000-5 which requires mandatory language. Revise to state: "This product is for use..."

6) The animal viruses must be deleted from "Virucidal Activity" because the label's organization implies that hard nonporous surfaces in "hospitals, dental offices, nursing homes, and other health care facilities" will mitigate the organisms listed below. However, the animal viruses listed under "Virucidal Activity" are not indicative of these use sites. Therefore, you must relocate the following organisms to the "Animal Premise" section:

Avian Influenza/Turkey Wisconsin Virus
Infectious Bovine Rhinotracheitis Virus
Newcastle disease virus
Equine Arteritis Virus
Porcine Respiratory & Reproductive Virus
Infectious Avian Laryngotracheitis
Transmissible Gastroenteritis Virus

Canine Distemper
Canine Coronavirus
Porcine Rotavirus
Pseudorabies Virus
Bovine Viral Diarrhea Virus
Duck Hepatitis Virus

7) Revise the last statement under "General Deodorization" on page 6 to read "Excess liquid must be wiped up or allowed to air dry."

8) Under "Cleaning of Body Surfaces and Body Orifices of Human Remains" on page 6, revise this section by placing the statement, "Allow a 10 minute contact time for optimal results," to appear after the statement, "A soft brush may be employed on surfaces other than the face." These revisions comply with DIS/TSS 15 by placing mode of application (sponge, washcloth, and soft brush) and surfaces for disinfection (body surfaces, body openings, and entire body) together in the directions.

9) The "Food Processing and Tobacco Premises" directions on page 7 must be revised by placing the 6th statement, "Before using this product, food products and packaging materials must be removed from area or carefully protected," as the first statement in this section because it is consistent with the other food establishment/ processing facility directions on the proposed label, and it must be the first step when disinfecting food processing establishments/facilities.

10) Under the "Shoe Foam Sanitizer Directions" directions on page 10 revise the first statement to begin exactly as follows: "To prevent cross contamination from area to area in animal premises, and the packaging and storage."

11) Delete the "Footbath Sanitizer Directions" that appear on page 9. The Agency is concerned that the reduced contact time is not sufficient to mitigate the microorganisms that may be present in footbaths. If you want to support these directions, you must submit data generated using the Broad Spectrum Performance standard 91-2(a)(3) and method 91-2(c)(1) of

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Subdivision G with a one minute contact time. It is felt that the non-food sanitizer method is not a sufficient test to demonstrate an appropriate kill for organisms typically found in footbaths.

12) The heading, "Humidifier Sanitizer Directions" on page 9 must be revised to read "Humidifier Directions" because the term, sanitizer, is inappropriate for this use. The directions state that the product is treating the water not the tank; this product is registered for disinfecting/sanitizing hard, nonporous surfaces.

General Comments

The Confidential Statements of Formulas for alternate formulations # 2, 3, 5, and 6 are acceptable. They are in compliance with PR Notice 91-2 and in agreement with the label.

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 Jacqueline McFarlane at (703) 308-6416.

Sincerely,



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

Enclosure: Stamped Label
Efficacy Evaluation
Chemistry Evaluation

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

DANGER. KEEP OUT OF REACH OF CHILDREN. Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed or absorbed through the skin. Do not get in 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 and before eating, drinking, or using tobacco. 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 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 and place in locked storage area. Keep from freezing. Do not contaminate water, food, or feed by storage or disposal. Small spills may be mopped up or flushed away with water or absorbed on some absorbent material. Wrap container and put in trash. Securely wrap original container in several layers of newspaper and discard in trash.

**MAQUAT[®] 256 PD
DETERGENT/DISINFECTANT**

Cleaner, Disinfectant, Detergent, Fungicide (against Pathogenic fungi), Deodorizer, Sanitizer, Virucide*, Mildewstat (on hard inanimate surfaces) – 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.

Formulated for effective Poultry Sanitation.

Formulated for effective Swine Premise Sanitation.

Formulated for effective Mushroom Farm Sanitation.

ACTIVE INGREDIENTS:

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

dimethyl benzyl ammonium chloride 6.25%

n-Alkyl (68%C₁₂, 32%C₁₄)

dimethyl ethylbenzyl ammonium chloride 6.25%

INERT INGREDIENTS: 87.50%

TOTAL: 100.00%

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 SPECIALTIES

721 W. Algonquin Road

Arlington Heights, IL 60005

847-290-1621

Toll Free:

1-800-362-1855

E.P.A. Reg. No. 10324-164

E.P.A. Est. under the Federal Insecticide, Fungicide, and Rodenticide Act as

amendatory for the pesticide,

registered under EPA Reg. No. 10324-164

NET CONTENTS

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 detergent/disinfectant has been designed specifically for hospitals, nursing homes, schools, food processing plants, food service establishments and other institutions where housekeeping is of prime importance.

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 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 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.

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

This product is [REDACTED] for use in household and commercial humidifiers. Use of this product will control unpleasant (malodors) odors. *(Not for use in CA)*

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 sanitizer and disinfect non-porous salon/barber tools and instruments such as combs, brushes, scissors, clippers, trimmers, razors, blades, tweezers and manicure instruments, and [REDACTED].

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 may be applied through a [REDACTED] 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 specifically 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 is [REDACTED] for non-scratch cleaning of showers and tubs, shower doors and curtains, fixtures and toilet bowls.

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

This product is a no rinse disinfectant cleaner that disinfects, cleans and deodorizes in one labor saving step.

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 the hard, non-porous surfaces specified 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. *(Not for use in California.)*

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. *(Not for use in California.)*

This product may be relied on to deodorize coolers, buckets, garbage pails and other areas where obnoxious odors may develop. *(Not for use in California.)*

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. *(Not for use in California.)*

This product may be used as a general purpose antimicrobial detergent in florist shops, wholesale florist, shippers, green house packing areas and other commercial floriculture places for efficient cleaning and antimicrobial action against certain bacteria which cause: *(Not for use in California.)*

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.

Floor cleaner.

One step cleaner.

Cleans everyday kitchen messes.

Cleans kitchen surfaces and food preparation areas.

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Cleans and shines.

Great for use (on) (in) the (kitchen), (bathroom), (floors) and other household areas. Removes (eliminates) odors. Deodorizes. Safe for most surfaces.

Safe for most surfaces. For a cleaner, fresher household. Removes stains. Removes dirt. Non-staining. Clear formula.

Eliminates odors caused by bacteria (and) (mildew) (and) (non-fresh foods). Kills odor causing bacteria in the kitchen (bathroom).

Cleans everyday kitchen messes like dirt, grease and food stains. Cuts through tough grease and grime.

Disinfects (and Sanitizes) kitchen surfaces (bathroom surfaces and floors). Sanitizes kitchen surfaces. Kills germs. Kills household bacteria.

Antibacterial.

Kills Athlete's Foot fungus on bathroom surfaces.

Hospital Use Disinfectant. Institutional Disinfectant (Sanitizer).

Kills common kitchen (bathroom) germs.

Maquat 128 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 (rooms), anesthesia, Emergency Rooms, X-ray cat labs, newborn nurseries, orthopedics, whirlpools, footbath surfaces, respiratory therapy, surgi-centers, labs, blood collection rooms, central supply, housekeeping & janitorial rooms.
- EMS & fire facilities, emergency vehicles, ambulances(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 stores, 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, dorms.

• 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, footbath surfaces, 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.

• 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, porches.

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

- Storage areas.
- Kitchen equipment such as trash compactors
- Countertops (counters), stovetops (stoves), sinks (bathroom, kitchen), tub surfaces.
- 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.

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- Exhaust fans, refrigerated storage and display equipment, cold drain pans of air conditioning and refrigeration equipment and heat pumps.
- Large, inflatable, non-porous plastic and rubber structures: animals, promotional items, moonwalks, slides, obstacle course play and exercise equipment.
- Non-wooden picnic tables and outdoor (patio) furniture, except cushions and wood frames.
- Telephones and Telephone booths.
- Highchairs.
- Shower stalls, shower doors and curtains, bathtubs and glazed tiles, chrome plated intakes, toilets, toilet bowls, 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.
- Wrestling and gymnastic mats, athletic training tables, physical therapy tables.

Use this product to clean, sanitize and disinfectant non-porous personal protective safety equipment, protective headgear, athletic helmets, wrestling/boxing headgear, athletic shoe soles, 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. (Precaution: Cleaning at the 120°F temperature will avoid overheating and distortion of the personal safety equipment that would necessitate replacement.)

This product is [REDACTED] for Poultry Premise Sanitation (Hatcheries)

Egg Receiving Area	Tray Dumping Area	Chick Processing Area
Egg Holding Area	Chick Holding Area	Chick Loading Area
Setter Room	Hatchery Room	Poultry Buildings

This product is [REDACTED] for Swine Premise Sanitation:

Farrowing Barns and Areas	Dressing Plants	Blocks
Waterers and Feeders	Loading Equipment	Creep Area
Hauling Equipment	Nursery	Chutes

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

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 has passed the Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces Utilizing Human Coronavirus.

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

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

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 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, food contact 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. 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.

To disinfect hard, inanimate surfaces (such as walls, floors, table tops), add 1/2 oz. detergent/disinfectant (this product) per (to) gallon of water (OR mix 1/2 oz. packet with one gallon of water). Apply solution with mop, cloth, sponge or mechanical sprayer so as to wet all surfaces thoroughly. Allow (treated surfaces) to remain wet for 10 minutes and then let air dry.

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

For heavily soiled areas, a pre-cleaning step is required.

Prepare a fresh solution at least daily or when use dilution becomes diluted or soiled.

DISINFECTION/FUNGICIDAL ACTIVITY: At 1/2 oz per gallon dilution, with a 10 minute contact time, this product exhibits effective disinfectant activity against the following:

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:

Brevibacterium ammoniagenes ATCC 6872
Enterococcus faecalis (Vancomycin resistant) – VRE (ATCC 51299)
Enterobacter aerogenes ATCC 13408
Escherichia coli ATCC 11229
Enterococcus faecalis ATCC 29212
Legionella pneumophila ATCC 33153

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Klebsiella pneumoniae ATCC 4352
Proteus mirabilis ATCC 9240
Pseudomonas aeruginosa, PRD-10 ATCC 15442
Salmonella schottmuelleri ATCC 8759
Salmonella choleraesuis ATCC 10708
Serratia marcescens ATCC14756
Shigella dysenteriae ATCC 11835
Staphylococcus aureus ATCC 6538
Staphylococcus aureus (Methicillin resistant) ATCC 33592
Streptococcus faecalis
Streptococcus salivarius ATCC 7073
Staphylococcus aureus (Vancomycin resistant) – VISA (HIP 5836)

VIRUCIDAL* ACTIVITY: The product when used on environmental inanimate hard surfaces at ½ oz per gallon of water exhibits effective virucidal* activity against:

OR

At ½ ounce per gallon use level, this product was evaluated in the presence of 5% serum with a 10 minutes contact time and found to be effective against the following viruses on hard, non-porous environmental surfaces:

Adenovirus Type 2 (causative agent of upper respiratory infections)
 Canine Coronavirus
 Human Coronavirus
 Herpes simplex, Type 1 (causative agent of fever blisters)
 Herpes simplex, Type 2
 Influenza A2 /Japan (representative of the common flu virus)
 Vaccinia Virus (representative of the pox virus group)

At ¾ ounce per gallon use level, this product is effective against the following:

Avian influenza A/Turkey/Wisconsin
 Canine Distemper
 Equine Arteritis Virus
 Infectious Bronchitis Virus
 Infectious Avian Laryngotracheitis
 Infectious Bovine Rhinotracheitis virus (IBR)
 Newcastle disease virus
 Porcine Respiratory & Reproductive virus (PRRSV)
 Porcine Rotavirus
 Pseudorabies virus
 Transmissible Gastroenteritis (TGE)

Fungicidal Performance:

Aspergillus niger ATCC 6275
Trichophyton mentagrophytes ATCC 9533

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

Ounces of Product	Amount of Water
1/8 ounce	1 quart
¼ ounce	½ Gallon
½ ounce	1 gallon
1½ ounces	2½ gallons
2½ ounces	5 gallons

5 our

10 gallons

At ½ ounce per gallon (or equivalent use dilution) (488 ppm active quat) in the presence of 5% blood serum and 400 ppm of hardness for a 2 minute contact time this product was found to be effective against HIV-1 (AIDS Virus).

At ¾ ounce per gallon of water (or equivalent use dilution) (732 ppm active quat) in the presence of 5% organic load this product was proven to be effective against (Duck) Hepatitis B Virus with a contact time of 10 minutes.

At ¾ ounce per gallon of water (or equivalent use dilution) (732 ppm active quat) in the presence of 5% organic load this product was proven to be effective against Bovine viral diarrhea virus (BVDV) (Surrogate for human Hepatitis C virus) with a contact time of 10 minutes.

***KILLS HIV, HCV AND HBV ON PRE-CLEANED ENVIRONMENTAL SURFACES/OBJECTS PREVIOUSLY SOILED WITH BLOOD/BODY FLUIDS** in health care settings or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or 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), Hepatitis B virus (HBV) and Hepatitis C virus (HCV).

SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV-1, HCV 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: Leave surfaces wet for 2 minutes for HIV and ten minutes for HBV and HCV. This contact time will not control other common type of viruses and bacteria.

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

Disinfection/Fungicidal Directions: Use at a rate of ½ ounce per gallon. Allow surfaces to remain wet for 10 minutes. Apply use solution to hard inanimate, non-porous surfaces thoroughly wetting surfaces as recommended and required, with a cloth, mop, sponge or sprayer. For heavily soiled areas, a preliminary cleaning is required. For sprayer applications use a coarse spray device. Spray 6-8 inches from surface. Rub with brush, sponge or cloth. Do not breathe spray.

Add ½ ounce per gallon of water to disinfect hard, non-porous surfaces. Treated surfaces must remain wet for 10 minutes. Prepare a fresh solution at least daily or when use dilution becomes diluted or soiled.

For Use on Finished Floors: To limit gloss reduction, use ½ ounce of this product per 1 gallon of water. Apply with a damp mop or auto scrubber. Allow to air dry.

To clean and deodorize: Add ½ oz. per gallon of water. Swab with cloth, mop or mechanical spray device so as to thoroughly wet surfaces. Wipe excess or allow to air dry. Prepare a fresh solution at least daily or when use solution becomes visibly dirty.

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General Deodorization: To deodorize, add ½ ounce of this product to one gallon of water (or equivalent use dilution) (488 ppm active quat). Allow 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 2.5 ounces of this product per gallon of water (or equivalent use dilution) (2,440 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 ½ ounce per gallon use-level, (or equivalent use dilution) (488 ppm active quat) this product is effective against *Trichophyton mentagrophytes* (athlete's foot fungus) (a cause of Ringworm) on inanimate surfaces in locker rooms, dressing rooms, shower and bath areas and exercise facilities. Pre-clean all surfaces prior to using this product.

OR

At this level the product is also fungicidal against the pathogenic fungi, *Trichophyton mentagrophytes* in areas such as locker rooms, dressing rooms, shower and bath areas and exercise facilities.

MILDEWSTAT: Controls the growth of mold and mildew on pre-cleaned hard, non-porous surfaces (such as floors, walls, table tops) add ½ oz. of this product per gallon of water. Apply solution with a cloth, mop or sponge making sure to wet all surfaces completely. Let air dry. Prepare a fresh solution for each use. Repeat application at weekly intervals or when mildew growth reappears.

OR

Mold and Mildew Control: At ½ ounce per gallon, (or equivalent use dilution) (488 ppm active quat) this product will effectively inhibit and control 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.

For Schools, Industry and Non-Medical Institutional Uses: This product delivers cleaning and germicidal effectiveness. Treated surfaces must remain wet for 10 minutes, then allow to air dry or wipe. For heavily soiled areas, a preliminary cleaning is required. Apply a ½ ounce per gallon of water solution (or equivalent use dilution) (488 ppm). Prepare a fresh solution at least daily or if solution becomes dilution or soiled.

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, apply ½ ounce of this product to 1 gallon of water (488 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, moonwalks, slides, obstacle course play and exercise equipment): Thoroughly clean all surfaces with soap or detergent (or this product) and rinse with water. Saturate surfaces with a use solution of ½ ounce per gallon (488 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.

To control the growth of mold and mildew on non-porous athletic equipment (wrestling and gymnastic mats, athletic training tables, physical therapy tables, athletic helmets, wrestling/boxing headgear, athletic shoe soles): Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use solution of ½ ounce per gallon (488 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 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 gallon solution of the product (or equivalent use dilution) (488 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.

Disinfection of Hard, Non-Porous Surfaces in Footbaths: To remove body oils, dead tissue, soil and all other buildups or organic matter on inanimate surfaces after using the footbath, drain the water and thoroughly clean all hard, non-porous surfaces with soap or detergent, then rinse with water. Saturate surfaces with a use solution of ½ ounce per gallon of water (or equivalent use dilution) (488 ppm active quat) to exposed surfaces with a cloth, mop, sponge or sprayer. Brush or swab thoroughly and allow solution to stand for 10 minutes. For spray applications, use a coarse spray device. After the unit has been thoroughly disinfected, rinse all cleaned surfaces with fresh water. Do not breathe spray. Do not use equipment until treatment has been absorbed, set or dried.

NON-ACID TOILET BOWL (AND URINAL) DISINFECTION/CLEANER DIRECTIONS

Remove gross filth prior to disinfection.

From concentrate: Add ½ ounce to the toilet bowl and mix. Brush thoroughly over exposed surfaces and under the rim, with a cloth, mop or sponge and allow to stand for 10 minutes and flush.

From use solution: Empty toilet bowl or urinal and apply ½ ounce per gallon 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 sprayer applications use a coarse spray device.

For heavy duty cleaning: Empty toilet bowl or urinal and apply 2 ounces per gallon 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.

OR

To disinfect toilet bowls, flush toilet, add ½ oz. detergent/disinfectant directly to the bowl water. Swab the bowl completely using a scrub brush or toilet mop making sure to get under the rim. Let stand for 10 minutes and flush.

Cleaning/Deodorizing Directions: Add ¼ to 1 ounce per gallon of water to clean and deodorize windows, mirrors and glass surfaces. Use a coarse spray device. Spray 6-8 inches from surface. Rub with sponge or cloth. Do not breathe spray.

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 gallon of water (or equivalent use dilution) (488

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ppm active quat) directly into bath chamber. Preclean 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 (Fiberglass) Bath 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 ½ ounce of this product for each gallon of water (488 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 and/all disinfected (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 ½ ounce of this product for each gallon of (488 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 ½ ounce of this product to one gallon of water (or equivalent use dilution) (488 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. Allow to remain wet for 10 minutes. Then remove excess liquid. For sprayer applications, use a coarse spray device. 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, exterior surfaces of appliances, and tables, add ½ ounce of this product to one gallon of water (or equivalent use dilution) (488 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. Allow to remain wet for 10 minutes. Then remove excess liquid and rinse the surface with potable water. For sprayer applications use a coarse spray device. 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 ½ ounce of this product per gallon of water (or equivalent use dilution) (488 ppm active quat). Follow the Disinfectant directions above.

Directions for Fogging: For use in dairies, beverage and food processing plants. 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 1½ ounces product to 1 gallon of water (or equivalent use dilution) (1,230 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 an EPA approved food contact sanitizer solution 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.

POULTRY (AND SWINE) PREMISE SANITATION SITE PREPARATION

The first step in any on-going sanitation program should be the removal of gross contamination and debris. This may be accomplished using a shovel, broom, or vacuum depending on the area to be disinfected. The efficacy of even the most efficient germicidal cleaner is reduced in the presence of heavy organic matter. Once the heavy debris is eliminated thoroughly clean all surfaces with soap or detergent and rinse with water.

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 ¼ ounce of this product per gallon of water (or equivalent use dilution) (732 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: Use ¼ ounce of this product per gallon of water (or equivalent use dilution) (732 ppm active quat) to treat the following hard, non-porous surfaces: hatching, setters, trays, racks, carts, sexing tables, delivery trucks and other hard surfaces. Leave all treated surfaces exposed to disinfectant solution wet for 10 minutes or more. Rinse with potable water before reuse. Then 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 ¼ ounce per gallon of water (or equivalent use dilution) (732 ppm active quat) to treat all vehicles. Leave all treated surfaces exposed to disinfectant solution wet for 10 minutes or more and allow to air dry.

RENDERING PLANT/DRESSING PLANT DISINFECTANT/FUNGICIDE/VIRUCIDAL DIRECTIONS (DRESSING PLANT AND RENDERING PLANT DISINFECTANT - VIRUCIDE DIRECTIONS): Preclean all surfaces before using this product. Disinfect walls and floors in poultry and animal dressing plants. Disinfect offal rooms, exterior walls and loading platforms of dressing plants. Cover or remove all food and packaging materials. Remove all gross soils. Saturate all surfaces with the recommended use solution of ¼ ounce of this product per gallon of water (or equivalent use dilution) (732

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ppm active quat). Scrub to loosen all soils. Allow treated surfaces to soak for 10 minutes and thoroughly rinse all wetted and cleaned surfaces with potable water.

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 ($\frac{3}{4}$ oz. per gallon of water or equivalent use dilution) (732 ppm active quat) 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, scrappers 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, or 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.

CLEANING AND DISINFECTION: For all general cleaning and disinfection use $\frac{1}{2}$ ounce of this product per gallon of water (or equivalent use dilution) (488 ppm active quat). Apply this product using a cloth, mop, or pressure sprayer so as to thoroughly wet surface to be disinfected. Allow to remain wet for 10 minutes and then let air dry. For heavily soiled areas, a pre-cleaning step is required. Prepare a fresh solution after each use. For sprayer applications, use a coarse spray device.

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 $\frac{3}{4}$ ounce per gallon of water (or equivalent dilution) (732 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 (Not for use in California.): To clean, disinfect and deodorize hard, non-porous surfaces in one step, prepare use solution by adding (mixing) $\frac{1}{2}$ ounce per gallon of water (1:256). For heavy-duty cleaning, add (mix) 2 ounces per gallon of water (1:64).

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

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.

SANITIZER DIRECTIONS FOR NON-FOOD CONTACT SURFACES

Preparation of sanitizer use solution: Add $\frac{3}{4}$ ounces of this product to 1 gallon of water (or equivalent use dilution) (732 ppm active) to sanitize hard, non-porous surfaces. At 732 ppm active, 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 and rub with brush, sponge or cloth. Do not breathe spray.

Treated surfaces must remain wet for 60 seconds, then wipe with sponge, mop or cloth or allow to air dry.

SHOE BATH SANITIZATION: To prevent cross contamination into treated animal areas, and the packaging and storage areas of food plants, shoe baths containing one inch of freshly made 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 $\frac{3}{4}$ ounces of this product per 1 gallon (or equivalent use dilution) (732 ppm active quat) of water solution for 60 seconds prior to entering area. Change the sanitizing solution in the bath at least daily or sooner if 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 $\frac{3}{4}$ to 1.125 ounces per gallon of water (or equivalent use dilution) (732 to 1098 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.

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 $\frac{3}{4}$ ounce per gallon (or equivalent use dilution) (732 ppm active quat) 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.

Ultrasonic Bath Sanitizer Directions: Use this product to sanitize hard, (inanimate) non-porous, non-critical objects compatible with Ultrasonic cleaning units. Pour a fresh solution of $\frac{3}{4}$ ounce per gallon of water (or equivalent use dilution) (732 ppm active

quat) directly into bath chamber. Pre-clean soiled objects. Place objects into unit and operate for a minimum of 60 seconds, 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.

Sanitization 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 ¾ ounce of this product for each gallon of (or equivalent use dilution) (732 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 60 seconds. After the unit has been thoroughly sanitized, drain the solution from the unit and rinse any/all cleaned surfaces with fresh water. Repeat for heavy soiled units.

[REDACTED]

Humidifier [REDACTED] Directions (Not applicable in CA): Thoroughly clean water tank and filters. Add ¾ ounce of this product per gallon of refill water. Not for use in heat or atomizing type humidifiers.

OR

Humidifier Bacteria/Algae Treatment (Not applicable in CA): Formulated for use in portable humidifiers. Thoroughly clean water tank and filters before each heating season, or sooner if necessary. For every 4 gallons of water in the humidifier tank add 1/3 ounce of this product. When you refill the tank, add 1/3 ounce of this product for every 4 gallons of water in the tank.

Not for use in heat vaporizing or atomizing type humidifiers.

WATER AND SMOKE DAMAGE RESTORATION (Not applicable in CA)

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, and 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 ¾ to 1.5 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 materials. Saturate all effective 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 ¾ to 1.5 ounces of the product per gallon of water, 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. Allow the materials to remain damp for 10 minutes. Follow with a through 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, motels & 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 3/8 ounce of this product per gallon of water.

For Truck Mounted Extraction Machines: Mix 13 ounces of the product per 1½ gallons of water and meter at 4 gallons per hour.

For Rotary Floor Machines: Mix ¾ ounce of this product per gallon 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.

Smoke Damage Restoration (Not applicable in CA): 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.

CARPET SANITIZER AGAINST ODOR-CAUSING BACTERIA, FOR HOME, INSTITUTIONAL, INDUSTRIAL AND HOSPITAL USE (Not applicable in CA)

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, hotels chains, nursing homes and hospitals.

Vacuum carpet thoroughly prior to application. Mix 3/8 ounce of product per gallon 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 gallon 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.

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 44.5 ounces this product to 1 gallon water (or equivalent use dilution).

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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 breathe 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.

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 1¼ ounces of product to 1 gallon of water (1,220 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 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 1¼ ounces of product to 1 gallon of water (1,230 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.

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 ½ ounce of this product per gallon 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, pre-clean first. Prepare a fresh solution for each use.

For Heavy Duty Cleaning: When greater cleaning is desired, use 1 ounce of this product per gallon 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.

(Alter above 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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**HALF OUNCE PACKET LABEL TO BE USED WITH MASTER
CONTAINER LABEL FOR DISINFECTION**

FOR DISINFECTION

MIX EACH PACKET WITH 1 GALLON OF WATER

MAQUAT 256 PD

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

NET CONTENTS: ½ FLUID OZ.

ACTIVE INGREDIENTS:

Alkyl (C₁₄ 60%, C₁₆ 30%, C₁₂ 5%, C₁₈ 5%)
dimethyl benzyl ammonium chloride.....6.25%

Alkyl (C₁₂ 68%, C₁₄ 32%)
dimethyl ethylbenzyl ammonium chloride.....6.25%

INERT INGREDIENTS:87.50%

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"



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