

10324-67

05-03-2012

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



United States
Environmental Protection
Agency

Office of Pesticide Programs

Mrs. Elizabeth Tannehill,
Mason Chemical Company,
721 W. Algonquin Road,
Arlington Height, Ill. 60005

MAY -3 2012

Subject:	Product Name:	Maquat MQ615-AS
	EPA Reg. No.:	10324-67
	Notification Date:	April 2, 2012
	EPA Receipt Date:	April 5, 2012
	Submission #:	914806

Dear Mrs. Tannehill,

This letter acknowledges receipt of your notification submitted under the provision of the Federal Insecticide, Fungicide and Rodenticide Act. (FIFRA) section 3(c)9 and PR Notice 98-10.

Proposed Notification for Maquat MQ615-AS

- Add new graphics

General Comments

Based on a review of the submitted materials, your application for pesticide notification of your products is acceptable. A copy of your notification has been placed in our records for future reference.

Should you have any questions or comments concerning this letter, please contact Velma Noble PM team 31 at (703) 308-6233 or Jamil Mixon at (703) 308-8032.

Sincerely,

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



United States
Environmental Protection Agency
 Washington, DC 20460

<input type="checkbox"/>	Registration
<input type="checkbox"/>	Amendment
<input checked="" type="checkbox"/>	Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 10324-67	2. EPA Product Manager Noble	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Maquat MQ615-AS	PM# 31	
5. Name and Address of Applicant (Include ZIP Code) Mason Chemical Company 721 W. Algonquin Rd. Arlington Heights, IL 60005 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

We are adding new graphics on page 14.

This notification is consistent with the provisions of PR Notice 95-2 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 95-2 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

We feel this is a Notification and requires no fee payment. We understand the EPA will contact us with payment information, if needed, upon receipt of application.

Contact Information: Elizabeth (Liz) Tannehill, liz@maquat.com voice number 847-290-1621 fax number 847-290-1625

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Metal	<input checked="" type="checkbox"/> Plastic
				<input type="checkbox"/> Glass	<input type="checkbox"/> Paper
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input checked="" type="checkbox"/> Container		4. Size(s) Retail Container 1 oz., 1 qt., 1 gal., 5 gal., 55 gal.		5. Location of Label Directions <input checked="" type="checkbox"/> On Label	
6. Manner in Which Label is Affixed to Product			<input checked="" type="checkbox"/> Lithograph <input checked="" type="checkbox"/> Paper glued <input checked="" type="checkbox"/> Stenciled <input type="checkbox"/> Other _____		

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Elizabeth Tannehill	Title Regulatory Manager	Telephone No. (Include Area Code) 847-290-1621
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Regulatory Manager	
4. Typed Name Elizabeth Tannehill	5. Date 4/2/12	



MASON CHEMICAL COMPANY

"The Quaternary Specialists"

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April 2, 2012

Velma Noble
Document Processing Desk (AMEND)
Office of Pesticide Programs (7510C), PM31
U.S. Environmental Protection Agency
Room S4900, One Potomac Yard
2777 S. Crystal Dr.
Arlington, VA 22202

Subject: Maquat® MQ615-AS, 10324-67
Notification

Dear Velma:

We are adding new graphics to our labels via notification per PR Notice 98-10. Enclosed are the following items for this notification for Maquat® MQ615-AS, 10324-67:

1. Application/Notification form with Notification Statement
2. One (1) copy of label

Per PR Notice 98-10, Item II (H), "Symbols and graphics may be used in conjunction with and in close proximity to explanatory label text, provided that they do not substitute for or conflict with label text, and are not false or misleading".

We are adding graphics to this label per a customer request. Some of these applications represent application pattern and are in keeping with applications indicated in the directions for use. One of the other graphics indicates an American made product and one of the graphics indicated the container is made with recyclable material. None of these graphics are false or misleading with the already approved directions for use on this label.

In response to your letter dated 3/13/12, we have removed the image as requested.

This is a notification and does NOT require a fee.

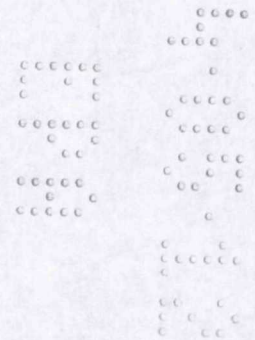
If you have any questions or issues concerning this action, please do not hesitate to contact me at 800-362-1855 or liz@maquat.com. Your assistance with this submission is greatly appreciated.

Very truly yours,

MASON CHEMICAL COMPANY

Elizabeth Fannehill

Enclosures





MASON CHEMICAL COMPANY
"The Quaternary Specialists"

721 W. Algonquin Road | Arlington Heights, IL 60005 | 847-290-1621 or 800-362-1855

E.P.A. Reg. No. 10324-67
E.P.A. Est. No. 10324-IL-1

MAQUAT® MQ615-AS

Net Contents:

Batch No:

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

DANGER. KEEP OUT OF REACH OF CHILDREN. Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed or absorbed through skin. 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 and before eating, drinking, chewing gum, using tobacco or using the toilet. 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 and aquatic invertebrates. 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 use or store near heat or open flame.

Do not mix with oxidizers, anionic soaps and detergents.

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.

Effective Disinfectant in hard water up to 400 ppm hardness (Calculated as CaCO₃) in the presence of 5% serum contamination Whirlpool, Industrial, School, Dairy, Equine, Poultry/Turkey, Farm, Veterinary. Multi-Purpose No-Rinse Acid Cleaner Food Contact Sanitizer. For Dairies, Dairy Barns, Cheese Factory, Brewery, Farm, Wineries, Breweries, Beverage, Food Handling and Process Areas, Restaurants, Bar and Institutional Kitchen Use. For Non-Food Contact Sanitation in: Schools, Colleges, Churches, Athletic Facilities, Health Clubs, Spas and Salons.

Virucidal against Foot and Mouth Disease Virus (FMDV)

Removes Milkstone/Beerstone

ACTIVE INGREDIENTS:

Octyl Decyl Dimethyl Ammonium Chloride.....	3.0750%
Didecyl Dimethyl Ammonium Chloride.....	1.5375
Dioctyl Dimethyl Ammonium Chloride.....	1.5375%
Alkyl (C-14, 50%; C-12, 40%; C-16, 10%) dimethyl benzyl ammonium chloride.....	4.1000%
INERT INGREDIENTS:	89.7500%
TOTAL	100.0000%

**KEEP OUT OF REACH OF CHILDREN
DANGER PELIGRO**

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

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

TRANSPORTATION INFORMATION

DOT Hazard Class: 8 Corrosive

DOT Proper Shipping Name: Disinfectant Liquid Corrosive, NOS (Quaternary Ammonium Compound), 8, UN1903, PG III

(Note to reviewer: The Table of Contents will not be on any label. This is for our customer's reference only. The page numbers will change as the label changes.)

Table of Contents

Description	Page No.
Organism Guide	2
Marketing Claims	2
General	4
Animal Premises	4
Non-Food Contact	6
Food Contact	6

Organism List

(Note: For reference use only. This is a list of all organisms covered by this label. Please see appropriate Directions for Use for proper use dilution.)

GENERAL DISINFECTION PERFORMANCE NON-MEDICAL (Schools, Restaurants, Food Services, Beverage and Food Processing Plants): This product is bactericidal according to the AOAC Use Dilution Test method, Virucidal* according to the virucidal qualification on hard inanimate surfaces modified in the presence of 5% organic serum and 400 ppm hard water as CaCO₃ against:

- Salmonella enterica* (ATCC 10708)
- Staphylococcus aureus* (ATCC 6538)

VIRUCIDAL PERFORMANCE: This product is Virucidal* according to the virucidal qualification on hard inanimate surfaces against:

- Infectious Bronchitis Virus*

ANIMAL PREMISE VIRUCIDAL PERFORMANCE: This product is Virucidal* according to the virucidal qualification on hard inanimate surfaces against:

- Avian Reovirus* (ATCC VR-2449)
- Avian Influenza A* (ATCC VR-2072)
- Infectious Laryngotracheitis*
- Newcastle Disease Virus* (ATCC VR-108)
- Foot and Mouth Disease Virus (FMDV)*

NON-FOOD CONTACT SANITIZING PERFORMANCE: This product is an effective one-step non-food contact sanitizer against the following bacteria:

- Enterococcus aerogenes* (ATCC 13048)
- Staphylococcus aureus* (ATCC 6538)

FOOD CONTACT SANITIZING PERFORMANCE: According to the AOAC Germicidal and Detergent Sanitizing Action of Disinfectants test this product is effective against the following bacteria:

- Campylobacter jejuni*
- Escherichia coli*
- Escherichia coli* 0157:H7
- Listeria monocytogenes*
- Salmonella enterica*
- Shigella dysenteriae*
- Shigella flexneri*
- Staphylococcus aureus*
- Yersinia enterocolitica*

Marketing Claims

Maquat MQ615-AS for use in:

- Restaurants, restaurants and bars, kitchens, taverns, cafeterias, institutional kitchens, fast food operations and food storage areas, supermarkets.
 - Food processing plants, USDA inspected food-processing facilities, food storage areas, federally inspected meat and poultry plants, farms, dairy farms, egg processing plants, hog farms, equine farms, poultry and turkey farms, meat/poultry producing establishments, meat/poultry processing plants, canneries, caterers, bakeries.
 - Hog farms, equine farms, poultry and turkey farms.
 - Mushroom farms.
 - Dairy farms, dairies, cheese factories, milk storage and handling systems, bulk milk tanks.
 - Milk pails inflations and tubing, dairy product dispensing equipment.
 - Coffee urns, Coffee pots, hot water dispensers, tea dispensers, coffee pots and hot water dispensers, water dispensers, kitchen equipment.
 - Bottle washing.
 - Food establishments, coffee shops, donut shops, bagel stores, pizza parlors, liquor stores.
 - Public restrooms, public facilities, waysides, travel rest areas, shower rooms, shower stalls, bathrooms, shower and bath areas
 - Schools and colleges, churches, classrooms, community colleges, universities, athletic facilities and locker rooms, exercise rooms, gyms, gymnasiums.
 - Veterinary clinics, animals life science laboratories, animal research centers, animal quarantine areas, animal breeding facilities, kennels, dog/cat animal kennels, breeding and grooming establishments, pet animal quarters, zoos, pet shops, tack shops and other animal care facilities.
 - Cosmetic manufacturing facilities, medical device manufacturing facilities, biotechnology firms, pharmaceutical manufacturing facilities, warehouses.
 - Health clubs, spas, tanning spas, massage/facial salons, hair/nail salons, barber/beauty shops, salons, tattoo parlors.
 - Recycling centers.
 - Fishery, Milk, Citrus, Wine, Fruit, Vegetable, Potato, Beverage, Ice Cream processing plants.
- This product may be used on washable hard, non-porous surfaces such as:
- Food preparation, steam tables, dishwashing 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®.
 - Refrigerated storage and display equipment.
 - Kitchen equipment such as food processors, blenders, cutlery, trash compactors and other utensils.

- Countertops (counters), Slurppy® machines, stovetops (stoves), sinks (bathroom, kitchen), appliances, refrigerators, ice machines, tables, microwave ovens and countertop laminates.
 - Interior hard, non-porous surfaces of water softeners, reverse osmosis units, ice machines, water coolers, water holding tanks and pressure tanks.
 - Glass, laminated surfaces, metal, stainless steel, glazed porcelain, glazed ceramic, sealed granite, sealed marble, plastic (such as polycarbonate, polyvinylchloride, polystyrene or polypropylene), sealed limestone, sealed slate, sealed stone, sealed terra cotta, sealed terrazzo, chrome and vinyl (test surfaces for compatibility first).
 - Baked enameled surfaces, painted woodwork (finished), Formica®, vinyl and plastic upholstery (test surfaces for compatibility first).
 - Exhaust fans, refrigerated storage and display equipment, coils and drain pans of air conditioning, refrigeration equipment and heat pumps.
 - Beer fermentation and holding tanks, bottling or pre-mix dispensing equipment.
 - Wine processing equipment and holding tanks.
 - Citrus processing equipment and holding tanks.
 - Drinking fountains.
 - Tub surfaces, shower stalls, shower doors and curtains, bathtubs and glazed tiles, chrome plated intakes, toilets, toilet seats, toilet bowl surfaces, urinals, portable and chemical toilets and latrine buckets, glazed porcelain, glazed tile, bathroom fixtures and restroom fixtures (test surfaces for compatibility first).
 - Kennels, kennel runs, cages, kennel/cage floors, conductive flooring, examination tables, X ray tables.
 - Sealed concrete floors.
 - Dishes, silverware, glasses, cooking utensils and other similar size food processing equipment can be sanitized by immersion. NO POTABLE WATER RINSE IS ALLOWED (DO NOT RINSE).
- This product is an economical concentrate that can be used with a mop and bucket, trigger sprayers, sponge or by soaking.
- This product may be applied through foaming apparatus and low-pressure sprayers. Follow manufacturers' instructions when using this equipment.
- Use this product on the multi-touch surfaces responsible for cross-contamination.
- This product meets AOAC Use - Dilution Test Standards for general disinfection.
- This product meets AOAC efficacy standards for hard surface non-food contact sanitizers.
- Cleans and shines.
- Cross contamination is of major housekeeping concern. This product has been formulated to aid in the reduction of cross-contamination on treated surfaces.
- Cleans kitchen surfaces and food preparation areas.
- Cleans everyday kitchen messes like dirt, grease and food stains. Cuts through tough grease and grime.
- This product is a versatile sanitizer and scale remover formulated for use in Ultrasonic Baths (Ultrasonic cleaning units).

- This product is a versatile cleaner and scale remover formulated for use on bath and therapy equipment (Whirlpools).
- This product is easily and quickly dispersed in hot or cold water to form a completely uniform solution.
- This product is specially formulated to effectively eliminate offensive odors.
- This product inhibits odor causing bacterial growth on moist surfaces and deodorizes by killing microorganisms that cause offensive odors. (This statement is not applicable in CA)
- This product is for use in household and commercial humidifiers. Use of this product will control unpleasant (malodors) odors.
- This product is for cleaning of showers and tubs, shower doors and curtains, fixtures and toilet bowls.
- This product will not leave a grit or soap scum.
- This product is a (concentrated) (bowl and) bathroom cleaner, which cleans, disinfects and deodorizes in one easy step after removal of gross filth. It cleans, disinfects and deodorizes surfaces by killing many odor-causing microorganisms and mold and mildew. Its non-abrasive formula is designed for use (Use daily) on (hard, non-porous environmental] restroom surfaces): glazed ceramic (restroom) tile, glazed porcelain, chrome, stainless steel and plastic surfaces associated with floors, walls, fixtures, toilets, urinals, sinks, shower rooms and locker rooms.
- *Respiratory illnesses attributable to Pandemic 2009 H1N1 are caused by influenza A virus. This product (Product Name) is a broad-spectrum hard surface disinfectant that has been shown to be effective against (Influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu).
- *This product has demonstrated effectiveness against influenza A virus and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 influenza A virus.
- *This product has demonstrated effectiveness against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu).
- *Kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu).
- *Kills Pandemic 2009 H1N1 influenza A virus.
- This product is a versatile Disinfectant & Sanitizer for Veterinarian, Veterinary Practice, Animal Care, Animal Laboratory, and Agricultural and Farm Premise applications.
- This product cleans by removing dirt, grime, blood, urine, fecal matter and other common soils found in animal housing facilities, livestock, swine poultry facilities, grooming facilities, farms, kennels, pet stores, veterinary clinics, laboratories or other small animal facilities.
- This product is for use in 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 other hard, non-porous Poultry House related equipment, and surfaces in the Hatchery environment.
- This product is for Swine Premise disinfection; Waterers and Feeders, Hauling Equipment, Dressing Plants, Loading Equipment, Farrowing Barns and Areas, Nursery, Blocks, Creep Area, Chutes.
- Kill Avian Influenza A on pre-cleaned environmental surfaces.

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

For use in:

Federally inspected meat and poultry plants on all hard, non-porous surfaces in inedible product processing areas, non-processing areas and/or exterior areas. All surfaces must be thoroughly rinsed with potable water.

Federally inspected meat and poultry plants as a floor and wall cleaner for use in all departments. Food products and packaging material must be removed from the room or carefully protected. All surfaces must be thoroughly rinsed with potable water.

Federally inspected meat and poultry plants as a disinfectant agent for use in all departments. Food products and packaging material must be removed from the room or carefully protected. Use product in accordance with its label. All surfaces must be thoroughly rinsed with potable water.

This product is for use as a food contact sanitizer at a concentration of 200-400 ppm active. No potable water rinse is allowed when used as a sanitizer on food contact surfaces.

This product is for use as a sanitizer on dishes, glassware, steam tables and utensils (at 200-400 ppm active) on hard, non-porous surfaces. No potable water rinse is allowed when used as a sanitizer on food contact surfaces.

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

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

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

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

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

This product is for use as a Food Grade Egg Shell sanitizer, with the best results achieved in water temperatures ranging from 78°-100°F.

Escherichia coli (E. coli) and Staphylococcus aureus (Staph) are common bacteria found where food is prepared and stored. This product kills these bacteria and helps prevent cross-contamination on treated kitchen surfaces listed on this label. When used as a disinfectant, a potable water rinse is required after application on food contact surfaces.

This product has been cleared by the EPA in 40 CFR Section 180.940 (c) for use on food processing equipment and utensils at a concentration of 200-400 ppm active in the presence of 500 ppm hard water (CaCO₃).

This product has been cleared by the EPA in 40CFR180.940 (a) for use on food contact surfaces in public eating places, dairy processing equipment and food processing equipment and utensils at a concentration of 200-400 ppm active in the presence of 500 ppm hard water (CaCO₃).

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

Regular, effective cleaning and sanitizing of equipment, utensils and work or dining surfaces which could harbor hazardous bacteria 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 microorganisms that may be present on equipment and utensils after cleaning, and reduces the potential for the transfer, either directly through tableware such as glasses, cups and flatware or indirectly through food.

To prevent cross contamination, kitchenware and food contact surfaces of equipment must 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 must 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.

This product helps control bacteria that cause spoilage.

This product is quat and phosphoric acid food contact sanitizer.

Milkstone and scale can build up on pipelines, storage tanks, tank trucks, silos and processing equipment in the dairy industry. Use of this product will remove this material from dairy and cheese making equipment and help maintain the efficiency of operation as well as eliminate bacterial growth.

Beerstone and scale can build up on pipelines, storage tanks, tank trucks, silos and processing equipment in the brewery industry. Use of this product will remove this material from equipment and help maintain the efficiency of the operation as well as eliminate bacterial growth.

This product not only sanitizes but also removes lime and scale in breweries and bottle washing.

This product is for cleaning and sanitizing of stainless steel and other hard surfaces found in restaurant and cafeteria kitchens for the removal of smut, soil, scale and rust from these surfaces.

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

This product is for use on pre-cleaned surfaces such as tableware, utensils, dishes, equipment, pipelines, tanks vats, fillers, evaporators, pasteurizers and aseptic equipment in restaurants, food service operations, dairies, breweries, wineries, beverage and food processing plants. This product is effective as a sanitizer when solution is prepared in water of up to 500 ppm hardness as CaCO₃.

DIRECTIONS FOR USE

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

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 spray 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.

GENERAL DISINFECTANT-NON-MEDICAL (Schools, Restaurants, Food Services, Dairies, Farm, Equine, Poultry/Turkey Veterinarian, Beverage and Food Processing Plants): For water hardness up to 400 ppm add 1 ounce per gallon of

water (1:128) (or equivalent dilution) to disinfect hard non-porous surfaces. Treated surfaces must remain wet for 10 minutes.

At this use level, this product is bactericidal according to the AOAC Use Dilution Test method, Virucidal* according to the virucidal qualification on hard inanimate surfaces on hard inanimate surfaces modified in the presence of 5% organic serum and 400 ppm hard water as CaCO₃ against

Avian Reovirus (ATCC VR-2449)
Avian Influenza A (ATCC VR-2072)
Infectious Bronchitis Virus
Infectious Laryngotracheitis
Newcastle Disease Virus (ATCC VR-108)
Salmonella enterica (ATCC 10708)
Staphylococcus aureus (ATCC 6538)

VIRUCIDAL PERFORMANCE: At 1 ounce per gallon use level (or equivalent use dilution) in 400 ppm hard water, this product was evaluated in the presence of 5% serum with a 10-minute contact time and found to be effective against the following virus on hard, non-porous environmental surfaces:

Infectious Bronchitis Virus

NON-FOOD CONTACT SANITIZING PERFORMANCE: Add 1 ounce of this product to 4 gallons of water (or equivalent use dilution) (200 ppm active) to sanitize hard, non-porous surfaces. At 200 ppm active, this product is an effective one-step sanitizer in 500-ppm hard water as CaCO₃ against:

Enterobacter aerogenes
Staphylococcus aureus

DISINFECTION*/VIRUCIDAL DIRECTIONS: Use at a rate of 1 ounce per gallon (or equivalent use dilution) OR mix a 1-ounce packet with one gallon of water. Allow surfaces to remain wet for 10 minutes. Apply use solution to hard inanimate, non-porous surfaces thoroughly wetting surfaces as 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. Prepare a fresh solution at least daily or when use dilution becomes diluted or soiled.

CLEANING AND DISINFECTION: For heavily soiled areas, a pre-cleaning step is required. For one step cleaning and disinfection, use 1 ounce per one gallon of water (or equivalent use dilution). Apply use solution using a cloth, mop, or pressure sprayer so as to thoroughly wet surface to be disinfected/cleaned. For sprayer applications, use a coarse spray device. Allow surfaces to remain wet for 10 minutes and then air dry. Prepare a fresh solution at least daily or when solution becomes visibly dirty or diluted.

FOR USE AS A ONE-STEP CLEANER/DISINFECTANT:

1. Pre-clean heavily soiled areas.
2. Apply use solution (1 ounce per gallon) (or equivalent use dilution) to hard, non-porous environmental surfaces.
3. To disinfect, all surfaces must remain wet for ten (10) minutes.
4. Wipe surfaces or let air dry.

Note: All food contact surfaces such as appliances and kitchen countertops must be rinsed with potable water. Do not use this use dilution to clean or disinfect glassware, utensils, dishes or interior surfaces of appliances.

FOR DISINFECTING HARD, NON-POROUS SURFACES AGAINST AVIAN INFLUENZA A: For use in animal housing facilities, the directions for use for the

Animal Premise disinfection directions must be followed using a rate of 1 oz per gallon of water.

PREPARATION OF NON-FOOD CONTACT SANITIZER USE SOLUTION: Add 1 ounce of this product to 4 gallons (0.25 ounces per gallon) of water (or equivalent use dilution) (200 ppm active) to sanitize hard, non-porous surfaces. 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 spray 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 a minimum of 5 minutes, then wipe with sponge, mop or cloth or allow to air dry. A final rinse is required.

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

DISINFECTION AND VIRUCIDAL * DILUTION CHART

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

DILUTION GUIDE:

For General or Broad Spectrum claims
For Virucidal claims
For Animal Virucidal claims
For Non-Food Contact Sanitizing claims
For Food Contact Sanitizing claims

1oz/1 gal. water
1oz/1 gal. water
1oz/1gal. water
1oz/4 gal. water
1-2oz/4 gal. water

FOOD PROCESSING PREMISES

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 (Do not rinse) 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.

DIRECTIONS FOR FOOD PROCESSING PLANTS: For use on non-food contact surfaces such as floors, walls, tables, garbage cans and disposal areas. Before using this product, food products and packaging materials must be removed from the room carefully protected. Follow Disinfection directions.

DIRECTIONS FOR FOOD STORAGE AREAS: For use on non-food contact surfaces such as shelves, floors, walls and tables. Before using this product, food products and packaging materials must be removed from the room or carefully protected. Then follow Disinfection directions.

FOR USE AS A CLEANER/DISINFECTANT IN FOOD PROCESSING PLANTS:

1. Before using this product in food processing areas, food products and packaging materials must be removed from the room or carefully protected.
2. Apply use solution of 1 ounce of this product per 1 gallon of water evenly over surface using a cloth, mop, sponge or coarse spray device. Be sure to wet all surfaces thoroughly. Do not breathe spray.
3. Allow product to remain on surface for ten (10) minutes.
4. Wipe with clean cloth, sponge or paper towel.
5. For heavily soiled areas, thoroughly clean surface prior to disinfecting.

6. When disinfecting food contact surfaces used for food preparation, rinse surfaces thoroughly with potable water. This product must not be used to clean the following surfaces: utensils, glassware, dishes or interior surfaces of processing equipment.

TO DISINFECT FOOD-PROCESSING AND TOBACCO PREMISES: Before using this product, food products and packaging materials must be removed from area or carefully protected. For use on floors, walls and storage areas, add 1 ounce of this product to one gallon of water (or equivalent use dilution). 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 application use a coarse spray. Allow surface to remain wet for 10 minutes. Then remove excess liquid. 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. Before using this product food products and packaging materials must be removed from area or carefully protected. Add 1 ounce of this product to one gallon of water (or equivalent use dilution). 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 application use a coarse spray. Allow surface 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 AND WINE INDUSTRY: Use 1 ounce of this product per one gallon (or equivalent use dilution of water. Follow the general disinfectant directions above.

SANITIZER DIRECTIONS FOR NON-FOOD CONTACT SURFACES in FOOD PROCESSING FACILITIES

SHOE (BOOT) BATH SANITIZER DIRECTIONS: To prevent cross contamination from area to area in animal areas, and the packaging and storage areas of food plants, shoe baths containing one inch of freshly made sanitizing solution must be placed at all entrances to buildings, hatcheries and at all the entrances to the production and packaging rooms. Scrape waterproof shoes and place in a 1-ounce of this product per 4 gallons of water (or equivalent use dilution) (200 ppm active quat) solution for 5 minutes 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 cross contamination from area to area in animal areas, and the packaging and storage areas of food plants. Apply a foam layer approximately 0.5 to 2 inches thick made from a solution of 1 to 1.5 ounces per gallon of water (or equivalent use dilution) (800 to 1200 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 manufacturer of the foam generator/aerator. Scrape waterproof shoes. Stand and/or walk through foamed area for 5 minutes prior to entering area. Foam area must be washed and replaced at least daily or when it appears dirty.

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

ENTRYWAY SANITIZING SYSTEMS: To prevent cross contamination from area to area, set the system to deliver (0.5 to 1.5 ounce per gallon of water) (400 - 800 ppm active) of sanitizing solution. The spray (foam) must cover the entire path of the doorway. Set the system so that a continuous wet blanket of sanitizer solution is delivered to the floor.

Do not mix other foam additives to the sanitizing solution.

MUSHROOM FARM INDUSTRY USE DIRECTIONS

Site Preparation: The first step in any ongoing sanitation program must 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 1 ounce of this product per gallon of water (or equivalent dilution). Wet all surfaces thoroughly. Treated surfaces must 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 2 ounces 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.

FOOD CONTACT AND TOBACCO PROCESSING EQUIPMENT SANITIZING DIRECTIONS

FOOD CONTACT SANITIZING PERFORMANCE: At a minimum of 1 and a maximum of 2 ounces per 4 gallons (200-400 ppm) this product eliminates 99,999% of (following bacteria in 60 seconds in 500 ppm hard water (calculated as CaCO₃) according to the AOAC Germicidal and Detergent Sanitizing Action of Disinfectants test:

Campylobacter jejuni
Escherichia coli
Escherichia coli 0157:H7
Listeria monocytogenes
Salmonella enterica
Shigella dysenteriae
Shigella flexneri
Staphylococcus aureus
Yersinia enterocolitica

TO SANITIZE IMMOBILE ITEMS (such as tanks, chopping blocks, countertops, refrigerated storage and display equipment and food processing equipment): Flood the area with appropriate ppm active quaternary solution for at least 1 minute, making sure to wet all surfaces completely. Remove excess, drain the use-solution from the surface and air dry. No potable water rinse is allowed.

TO SANITIZE MOBILE ITEMS (such as drinking glasses and eating utensils): Immerse in appropriate ppm active quaternary solution for at least 1 minute, making sure to immerse completely. Remove items, drain the use-solution from the surface and air dry. Prepare a fresh solution at least daily or more frequently as soil is apparent. No potable water rinse is allowed.

FOOD CONTACT SANITIZING DILUTION GUIDE

To prepare a 200, 300 or 400 ppm active quaternary solution use the following dilution table. Prepare correct dilution rate based upon the directions below associated with the appropriate use site.

FOOD CONTACT SANITIZING DILUTION CHART

Active quat solution	4 gallons	10 gallons	20 gallons
200 ppm	1.0 ounce	2.5 ounces	5.0 ounces
300 ppm	1.5 ounces	3.75 ounces	7.5 ounces
400 ppm	2.0 ounces	5.0 ounces	10.0 ounces

SANITIZING OF FOOD PROCESSING EQUIPMENT AND OTHER HARD, NON-POROUS 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 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 (Do not rinse) 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 a solution of 1 to 2 ounces of this product in 4 gallons of water (or equivalent use dilution) (200-400 ppm active) OR mix a (one) two 1-ounce packet with 4 gallons of water to pre-cleaned, hard, non-porous surfaces thoroughly wetting surfaces with a cloth, mop, sponge, sprayer or by immersion. For spray applications, use a coarse spray, pump or trigger sprayer. Spray 6 to 8 inches from surface. Rub with brush, sponge, or cloth. Do not breathe spray. With spray applications cover or remove all food products. From a Closed Loop Dilution Center, apply 200-400 ppm active solution to the surface to be sanitized. Surfaces must remain wet for at least 1 minute followed by adequate draining (and air-drying). A fresh solution must 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 (Do not rinse) after application of the sanitizing solution (after use as a sanitizer).

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 to 2 ounce of this product per 4 gallons of water solution (200-400 ppm active) (or equivalent use dilution). **NO POTABLE WATER RINSE IS ALLOWED.**

PUBLIC EATING PLACES, DAIRY PROCESSING

FOR PUBLIC EATING PLACES, DAIRY PROCESSING EQUIPMENT, FOOD PROCESSING EQUIPMENT AND UTENSILS: Prior to application, remove gross food particles and soil by pre-flush or pre-scrape, and when necessary, pre-soak. Then thoroughly wash or flush objects with a compatible detergent followed by a potable water rinse before applications of sanitizing solutions. Apply a solution of 1 to 2 ounces of this product in 4 gallons of water (or equivalent use dilution) (200-400 ppm active) OR mix a (one) two 1-ounce packet with 4 gallons of water to pre-cleaned, hard, non-porous surfaces, thoroughly wetting surfaces with a cloth, mop, sponge, sprayer or by immersion. For spray applications, use a coarse bump or trigger sprayer. Spray 6 to 8 inches from surface. Rub with brush, sponge, or cloth. Do not breathe spray. With spray applications cover or remove all food products. From a Closed Loop Dilution Center, apply 200-400 ppm active solution to the surface to be sanitized. Surfaces must remain wet for at least 1 minute followed by adequate draining (and air drying). (Alternate statement: Surfaces must remain wet for at least 1 minute, then allow sanitized

surfaces to adequately drain before contact with food). A fresh solution must 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).

DIRECTIONS FOR SANITIZING FOOD CONTACT SURFACES IN PUBLIC EATING PLACES, DAIRY PROCESSING EQUIPMENT AND FOOD PROCESSING EQUIPMENT AND UTENSILS REGULATED BY 40CFR sec 180.940(a):

1. Scrape, flush or presoak articles (whether mobile or stationary) to remove gross food particles and soil.
2. Thoroughly wash articles with an appropriate detergent or cleaner.
3. Rinse articles thoroughly with potable water.
4. Sanitize articles using a solution of 0.25 to 0.5 ounces of this product per gallon of water (or equivalent use dilution) (200-400 ppm active). Articles that can be immersed in solution must remain in solution for 60 seconds. Articles too large for immersing must be thoroughly wetted by rinsing, spraying or swabbing.
5. Remove immersed items from solution to drain and then air dry. Non-immersed item must be allowed to air dry also. (Alternate statement: Allow sanitized surfaces to adequately drain before contact with food).

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.
2. Rinse utensils and equipment thoroughly with potable water.
3. Sanitize equipment and utensils by immersion in 1 ounce of this product per 4 gallons of water for at least 60 seconds at a temperature of 75°F. This dilution is equivalent to a solution containing 50 ppm available chlorine.
4. For equipment and utensils too large to sanitize by immersion, apply 1.0 to 2 ounces to 4 gallons of water (200-400 ppm active) (or equivalent use dilution) by rinsing, spraying or swabbing until thoroughly wetted.
5. Allow sanitized surfaces to drain and air dry. No potable water rinse is allowed.

WISCONSIN STATE DIVISION OF HEALTH

DIRECTIONS FOR EATING ESTABLISHMENTS (Not applicable in CA)

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 1-2 ounces of this product per 4 gallons water (or equivalent use dilution) (200-400 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. Prepare fresh sanitizing solution at least daily or more often 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 (Not applicable in CA)

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 (200-400 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. Prepare fresh sanitizing solution at least daily or more often 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.

DIRECTIONS FOR RESTAURANT AND BAR SANITIZER

Equipment and utensils must be thoroughly pre-flushed or pre-scraped 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 1-2 ounces of this product per 4 gallons of water (or equivalent use dilution) (200-400 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: Remove gross food particles by pre-flush, scrape, 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 (200-400 ppm active quaternary). Allow surface to remain wet for at least 60 seconds. Drain thoroughly and air dry before reuse. (Alternate statement: Allow sanitized surfaces to adequately drain before contact with food). No potable water rinse is allowed.

SANITIZING OF FOOD PROCESSING EQUIPMENT (ICE MACHINES) AND UTENSILS: 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 pre-scraped and when necessary presoaked to remove gross food particles.

1. Turn off refrigeration
2. Wash and rinse all surfaces thoroughly.
3. Apply a solution of 1 to 2 ounces this product in 4 gallons of water (or equivalent use dilution) (200-400 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. Prepare a fresh solution 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 must occur after initial installation, after the system is serviced and periodically during its use.

1. Tank must be washed with a compatible detergent and rinsed with potable water before sanitizing.
2. Backwash the softener and add 2 to 4 ounces of sanitizer per 8 gallons of water (or equivalent use dilution) (200-400 ppm active) to the brine tank well. (The brine tank must have water in it to permit the solution to be carried into the softener.) (NOTE: Standard system capacity is 48 gallons.)

3. Proceed with the normal regeneration or interrupt the cycle after the brining step and let the softener soak for a minimum of 60 seconds.
4. Backwash the softener with potable water to make sure all sanitizing solution is thoroughly rinsed from the unit before returning the system to service. Return system to service.

Reverse Osmosis (RO) Units – Sanitization must 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. Unit must be washed with a compatible detergent and rinsed with potable water before sanitizing
3. Fill empty pre-filter housing with 1 to 2 ounces of sanitizer per 4 gallons of water (or equivalent use dilution) (200-400 ppm active) and turn on raw water. (NOTE: Standard system capacity is 1 to 2 gallons).
4. After holding tank is full, let system stand idle for a minimum of 60 seconds. Turn off water. Drain holding tank.
5. Before the system is put back into service, flush system with potable water assure sanitizing solution is rinsed thoroughly from system. Return unit(s) to normal operation. 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 – Sanitization must occur after initial installation, after the machine is serviced and periodically during its use.

1. Shut off incoming water line to machine.
2. Unit must be washed with a compatible detergent and rinsed with potable water before sanitizing
3. Prepare a solution of 2 to 4 ounces of sanitizer per 8 gallons of water (or equivalent use dilution) (200-400 ppm active).
4. Circulate solution through machine making sure to wet all surfaces and allow a minimum contact of 60 seconds.
5. Drain and complete flush machine twice with potable water.
6. Return machine to normal operation.

Water Coolers, Water Holding Tanks and Pressure Tanks – Sanitization must 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 to 4 ounces of sanitizer per 8 gallons of water (or equivalent use dilution) (200-400 ppm active).
4. Apply or circulate (if possible) to wet all surfaces and allow a minimum contact of 60 seconds.
5. Drain and completely flush system twice with potable water.
6. Return to service by opening incoming water lines.

DIRECTIONS FOR FOOD PROCESSING EQUIPMENT AND DAIRIES

(Not for use in CA)

Equipment and utensils must be thoroughly pre-flushed or pre-scraped and, when necessary, presoaked to remove gross food particles. Clean and rinse equipment thoroughly, then apply sanitizing solution containing 1-2 ounces of this product per 4 gallons of water (or equivalent use dilution) (200-400 ppm active quaternary). Apply solution to pre-cleaned, hard, non-porous surfaces thoroughly wetting surfaces with a cloth, mop, sponge, sprayer or by immersion. For spray applications, use a coarse pump or trigger sprayer. Spray 6-8 inches from surface. Rub with brush, sponge, or cloth. Do not breathe spray. With spray applications, cover or remove all food products. Prepare a fresh solution at least daily or when use solution becomes visibly dirty. For mechanical operation, use solution may not be reused for sanitizing applications. No potable water rinse is allowed after application of the sanitizing solution.

At 1 ounce per 4 gallons this sanitizer fulfills the criteria of Appendix F of the Grade A Pasteurized Milk, Ordinance 1978 Recommendations of the U.S. Public Health Services in waters up to 250 ppm of hardness calculated as CaCO₃ when evaluated by the AOAC Germicidal and Detergent Sanitizer Method against Escherichia coli and Staphylococcus aureus.

BEVERAGE DISPENSING EQUIPMENT SANITIZER DIRECTIONS

For sanitizing of bottle or pre-mix dispensing equipment, after cleaning thoroughly rinse equipment with a potable water rinse. Fill equipment with a solution of 1 to 2 ounces of this product per 4 gallons of water (or equivalent use dilution) (200-400 ppm active). Allow solution to remain in equipment for at least 60 seconds or until operations resume at which time the sanitizing solution must be drained from the system. To insure the removal of flavors, it is suggested that during the changeover between products the system must be cleaned, rinsed and flushed with the sanitizing solution for at least 1 minute. Drain thoroughly and allow to air dry before reuse. (Alternate statement: Surfaces must remain wet for at least 1 minute, then allow sanitized surfaces to adequately drain before contact with food). No potable water rinse is allowed.

FOOD PROCESSING EQUIPMENT AND UTENSILS

FOR FOOD PROCESSING EQUIPMENT AND UTENSILS IN FOOD PROCESSING FACILITIES: Prior to application, remove gross food particles and soil by pre-flush, or pre-scrape, and when necessary, pre-soak. Then thoroughly wash or flush objects with a compatible detergent followed by a potable water rinse before application of sanitizing solution. Apply a solution of 1 to 2 ounce(s) of this product in 4 gallons of water (or equivalent use dilution) (200-400 ppm active) to pre-cleaned, hard, non-porous surfaces thoroughly wetting surfaces with a cloth, mop, sponge, sprayer or by immersion. For spray applications, use a coarse pump or trigger sprayer. Spray 6 to 8 inches from surface. Rub with brush, sponge, or cloth. Do not breathe spray. With spray applications cover or remove all food products. For a Closed Loop Dilution Center, apply 200-400 ppm active solution to the surface to be sanitized. Surfaces must remain wet for at least 1 minute followed by adequate draining (and air drying). Prepare a fresh solution 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 (DO NOT RINSE) AFTER APPLICATION OF THE SANITIZING SOLUTION** (after use as a sanitizer).

(Note: The following directions are for use in food processing areas only)

DIRECTIONS FOR FOOD PROCESSING EQUIPMENT AND UTENSILS (AS REGULATED BY) (40CFR sec 180.940(c))

Equipment and utensils must be thoroughly preflushed or pre-scraped and, when necessary, presoaked to remove gross food particles. Clean and rinse equipment

thoroughly. Then apply sanitizing solution containing 1 to 2 ounce(s) of this product per 4 gallons of water (or equivalent use dilution) (200-400 ppm active quaternary). Allow surfaces to remain wet for at least 60 seconds. No potable water rinse is allowed (Do not rinse). Prepare a fresh solution at least daily or when use solution becomes visibly dirty. For mechanical application use solution may not be reused for sanitizing applications.

(Alternate Directions for Sanitizing Food Processing Equipment and Utensils.)

DIRECTIONS FOR SANITIZING FOOD CONTACT SURFACES OF FOOD PROCESSING EQUIPMENT AND UTENSILS, AS REGULATED

BY 40CFR sec 180.940(c):

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 twice.
4. Sanitize articles using a solution of 1 to 2 ounces of this product per 4 gallons of water (or equivalent use dilution) (200 to 400 ppm active). Articles that can be immersed in solution must remain in solution for 60 seconds. Articles too large for immersing must be thoroughly wetted by rinsing, spraying or swabbing.
5. Remove immersed items from solution and make certain all surfaces are adequately drained and air dried. No potable water rinse allowed. Allow non-immersed items to air dry also. (Alternate statement: Allow sanitized surfaces to adequately drain before contact with food). Thoroughly drain non-immersed items and air dry.

SANITARY FILLING EQUIPMENT SANITIZER DIRECTIONS

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 200-400 ppm active quat. Prepare a solution of 1 to 2 ounces of this product per 4 gallons of water (200-400 ppm active) for the exterior application for filler and closing machines. Allow surfaces to remain wet for at least 60 seconds. Drain thoroughly and allow to air dry before reuse. (Alternate statement: Surfaces must remain wet for at least 1 minute, then allow sanitized surfaces to adequately drain before contact with food). No potable water rinse is allowed.

STORAGE TANK SANITIZER DIRECTIONS

To sanitize hard non-porous food contact surfaces, preflush, presoak, or pre-scraped then clean with a good detergent and follow with a potable water rinse. Prepare a solution of 1 to 2 ounces of this product per 4 gallons of water (200-400 ppm active) mechanical or automated systems. 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.

(OR)

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 to 2 ounce of this product per 4 gallons of water (or equivalent use dilution) (200 - 400 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 4 gallons of warm water (or equivalent use dilution) (200 ppm active). The solution must be warmer than the eggs, but not to exceed 130°F. Wet eggs thoroughly and allow to drain. Eggs sanitized with this product must be subjected to a potable water rinse only if they are to be broken immediately for use in the manufacture of egg products. Eggs must be reasonably dry before casing or breaking. The solution must not be re-used for sanitizing eggs.

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

FOR 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 200-400 ppm quat level (1-2 ounces per 4 gallons) (or equivalent use dilution) to conveyors with suitable feeding equipment. Do not allow this solution to be sprayed directly on food. Allow surfaces to remain wet for at least 60 seconds. Controlled volumes of sanitizer are applied to return portion of conveyor through nozzles so located as to permit maximum drainage of sanitizer from equipment and to prevent puddles on top of belt. During interruptions in operation, coarse spray equipment, peelers, collators, slicers and saws with this product at a dilution of 200-400 ppm active quat. Conveyor equipment must be free of product when applying this coarse spray.

FOR SANITIZING IN FISHERIES, MILK, CITRUS, POTATO & ICE CREAM PROCESSING PLANTS: For use on conveyors as directed under "For Treatment of Meat and Poultry or Fruit and Vegetable Conveyors" 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 "Sanitary Filling Equipment Sanitizer Directions".

SANITIZING MILKING EQUIPMENT: Preflush, presoak, or prescrape then clean with a compatible detergent and rinse with potable water all milking equipment, pails, inflations, lines and tubing. Sanitize prior to milking operations by preparing a 200-400 ppm solution of active quaternary by mixing 1 to 2 ounces of this product in 4 gallons of water. Scrub or dip equipment into the solution for a minimum of 60 seconds and allow to drain prior to the beginning of the milking operation. For pipelines and tubing circulate solution through system for a minimum of 60 seconds. Allow to drain thoroughly and allow to air dry before use. Do not rinse equipment with water after treatment.

SANITIZING BULK MILK TANKS: To sanitize hard non-porous food contact surfaces, preflush, presoak, or prescrape then clean with a compatible detergent and rinse with potable water. Dilute 1 to 2 ounces of this product in 4 gallons of water (200-400 ppm active) and apply with a cloth, brush, mechanical spray device or by immersion. For spray applications, use a coarse spray, pump or trigger sprayer. Spray 6 to 8 inches from surface, rub with brush, sponge, or cloth. Do not breathe spray. With spray applications cover or remove all food products. Surfaces must remain wet for at least 1 minute followed by adequate draining and air-drying. Prepare a fresh solution at least daily or when use solution becomes visibly dirty. For mechanical application use solution may not be reused for sanitizing applications. No potable water rinse is allowed after application of the sanitizing solution.

SANITIZING DAIRY PRODUCT DISPENSING EQUIPMENT: Preflush, presoak, or prescrape then clean with a compatible detergent and rinse with potable water dairy product dispensing equipment. Sanitize by preparing a 200-400 ppm active solution by

mixing 1 to 2 ounces per 4 gallons of water. Run this solution through the equipment for a minimum of 60 seconds and allow to drain before use. For removable parts, clean and dip in 200-400 ppm solution. Let them air dry. To sanitize immobile items, flood them with a 200-400 ppm active quat by sponging or spraying for at least 60 seconds and let air dry. (Alternate statement: Surfaces must remain wet for at least 1 minute, then allow sanitized surfaces to adequately drain before contact with food). Do not rinse equipment with water after treatment.

At 1 oz. per 4 gallons this sanitizer fulfills the criteria of Appendix F of the Grade A Pasteurized Milk, Ordinance 1978 Recommendations of the U.S. Public Health Services in waters up to 500 ppm of hardness calculated as CaCO₃ when evaluated by the AOAC Germicidal and Detergent Sanitizer Method against *Escherichia coli* and *Staphylococcus aureus*.

DIRECTIONS FOR FOOD PROCESSING EQUIPMENT, BREWERIES AND DAIRIES
Equipment and utensils must be thoroughly preflushed, presoaked and when necessary prescraped to remove gross food particles. Clean and rinse equipment thoroughly with potable water, then apply sanitizing solution containing 1 to 2 ounces of this product per 4 gallons of water. Surfaces must remain wet for at least 1 minute. (Alternate statement: Surfaces must remain wet for at least 1 minute, then allow sanitized surfaces adequately drain before contact with food). No potable water rinse is allowed.

ANIMAL PREMISE USE DIRECTIONS

ANIMAL PREMISE VIRUCIDAL PERFORMANCE: At 1 ounce per gallon of water use level (703 ppm active quat) (or equivalent use dilution), 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 Reovirus (ATCC VR-2449)

Avian Influenza A (ATCC VR-2072)

Infectious Laryngotracheitis

Newcastle Disease Virus (ATCC VR-108)

VETERINARY CLINICS/ANIMAL LIFE SCIENCE LABORATORY/ANIMAL CARE FACILITIES/ANIMAL RESEARCH CENTERS/ANIMAL QUARANTINE AREAS/ZOO/PET SHOP/KENNELS/ANIMAL BREEDING FACILITIES/ANIMAL HUSBANDRY/BREEDING AND GROOMING ESTABLISHMENTS/STACK 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 surface facilities occupied or traversed by animals. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use solution of 1 ounce per gallon of water (or equivalent dilution) 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, scrapers used in removing litter and manure. Ventilate buildings and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried. Thoroughly scrub all treated feed racks, automatic feeders, waterers and other equipment that dispenses food or water with soap or detergent, and rinse with potable water before reuse.

DRESSING PLANT DISINFECTANT/VIRUCIDE DIRECTIONS

Cover or remove all food and packaging material. Remove all gross soils. Disinfect all rooms, exterior walls and loading platforms of dressing plants. Apply to walls and floors in poultry and animal dressing plants a solution of 1 ounce of this product per gallon of water (or equivalent use dilution). Surfaces must remain wet for 10 minutes then thoroughly rinsed with potable water before operations are resumed.

TERRARIUM AND SMALL ANIMAL CAGE AND CAGE FURNITURE DISINFECTION: Animals frequently defecate on hot rocks and other hard non-porous cage furniture items inside your terrarium. This can result in high bacteria and ammonia levels that can lead to possible infection/disease in your animals. When used regularly this product can eliminate these high bacterial/ammonia levels in your cage and on your cage furniture items. (Not for use on rocks or gravel in California.)

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

Note: Substrates for desert terrariums (i.e. gravel) must be completely dry before returning to terrarium to avoid high humidity levels. Always replace substrate if a foul odor persists. Do not apply this product directly onto the small animal. If this product comes into contact with the small animal's skin, then immediately wash the material off of the animal with lukewarm water. If the small animal ingests this product, contact your veterinarian immediately.

VEAL, CALVING, HOG, CATTLE AND HORSE OPERATIONS: Between depopulations of facilities, cleaning and disinfection of pens, hutches, aisles and other environmental surfaces may be required. Empty all troughs, racks, and other feeding and watering appliances. Flush soils from these areas. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate all surfaces with disinfection and virucidal solution (1 oz. per gallon of water) (or equivalent use dilution) and allow surface to remain wet 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 in removing litter and manure. Ventilate buildings, cars, trucks, boats and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set 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.

FARM PREMISE DISINFECTION DIRECTIONS: Do not use in milking stalls, milking parlors or milk houses. Remove all animals and feed from premises, vehicles and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, stables, 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. Saturate all surfaces with disinfection and virucidal solution (1 oz. per gallon of water) (or equivalent use dilution) and allow to remain wet 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 in removing litter and manure. Ventilate buildings, cars, trucks, boats and other closed spaces. Do not house livestock or employ equipment until treatment

has been absorbed, set 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.

FOR USE IN EQUINE, DAIRY AND HOG FARMS:

- (OR)
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, stables, chutes and other facilities and fixtures occupied or traversed by animals.
 3. Empty all troughs, racks and other feeding and watering appliances.
 4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
 5. Saturate all surfaces with the disinfecting and virucidal solution (1 oz. per gallon of water) (or equivalent use dilution) 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.

DIRECTIONS FOR FOOT AND MOUTH DISEASE VIRUS (FMDV) This product was tested and has proven to be effective against Foot and Mouth Disease Virus (FMDV) in the presence of 5% soil load. Remove all animals and feed from premises, vehicles and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, stables, 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. Saturate all surfaces with disinfection and virucidal solution (1 oz. per gallon of water) (or equivalent use dilution) and allow to remain wet for a period of 1 minute (60 seconds). **Note: this contact time may not control other bacteria or viruses.** Immerse all halters, ropes and other types of equipment used in handling and restraining animals as well as forks, shovels and scrapers used in removing litter and manure. Ventilate buildings, cars, trucks, boats and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set 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.

(OR)

DIRECTIONS FOR FOOT AND MOUTH DISEASE VIRUS (FMDV) This product was tested and has proven to be effective against Foot and Mouth Disease Virus (FMDV) in the presence of 5% soil load.

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, stables, chutes and other facilities and fixtures occupied or traversed by animals.
3. Empty all troughs, racks and other feeding and watering appliances.
4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
5. Saturate all surfaces (floors, walls, cages and other washable hard, non-porous environmental surfaces) with the disinfecting and virucidal solution (1 ounce per gallon of water or equivalent use dilution) for a period of 1 minute (60 seconds) **(Note: this contact time may not control other bacteria and viruses).** For smaller surfaces, use a trigger spray bottle to spray all surfaces with solution until wet.

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

FOR USE FOR TREATMENT OF ANIMAL HOUSING FACILITIES:

1. Remove all animals and feed from premises, vehicles and enclosures.
2. Remove all litter and manure from floors, walls and surfaces of barn, pens, stalls, stables, chutes and other facilities and fixtures occupied or traversed by animals.
3. Empty all troughs, racks and other feeding and watering appliances.
4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
5. Saturate all surfaces (floors, walls, cages and other washable hard, non-porous environmental surfaces) with the disinfecting and virucidal solution (1 ounce per gallon of water or equivalent use dilution) for a period of 10 minutes. For smaller surfaces, use a trigger spray bottle to spray all surfaces with solution until wet.
6. Immerse all halters, ropes and other types of equipment used in handling and restraining animals as well as forks, shovels, scrapers used in removing litter and manure.
7. Ventilate buildings, cars, trucks, boats and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set and dried.
8. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent and rinse with potable water before reuse.

DISINFECTANT/VIRUCIDAL OF POULTRY/TURKEY EQUIPMENT, SWINE QUARTERS, EQUINE QUARTERS, LIVESTOCK FARMS, EQUINE QUARTERS, ANIMAL QUARTERS AND KENNELS DIRECTIONS: Remove all animals and feeds from premises, vehicles (trucks and cars) and enclosures (coops, crates, kennels stables). Remove all litter, droppings and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other surfaces of facilities and fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Use 1 ounce of this product per gallon of water (or equivalent use dilution). Saturate surfaces with the disinfecting solution for 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 animals or employ equipment until treatment has been absorbed, set 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.

POULTRY (AND SWINE) PREMISE SANITATION SITE PREPARATION

Site Preparation: The first step in any on-going sanitation program must 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.

APPLICATION AND USE DILUTION POULTRY/TURKEY/SWINE PREMISE, ANIMAL QUARTERS AND KENNELS: Remove all animals and feeds from premises, vehicles

(trucks and cars), and enclosures (coops, crates, kennels). Remove all litter, droppings and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and surfaces of fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Use (1 oz. per gallon of water) (or equivalent use dilution). Saturate surfaces with the 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. Thoroughly scrub all treated feed racks, troughs, automatic feeders, fountains and waterers, and other equipment which may contact food or water with soap or detergent, and rinse with potable water before reuse.

HATCHERIES: For disinfection/virucide, use 1 ounce of this product per gallon of water. Apply to hatchers, setters, trays, racks, egg flats, walls, floors, ceilings, chickboxes, egg cases, trash containers, 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 spray applications use a coarse spray device. Use 1 ounce of this product per gallon of water for disinfection/virucide. Leave all treated surfaces exposed to solution for 10 minutes or more and allow to air dry.

DISINFECTANT DIRECTIONS FOR CHICK VANS, EGG TRUCKS HATCHERY and FARM VEHICLES: Clean all vehicles including mats, crates, cabs, and wheels with high-pressure water and this product. Use the appropriate Virucidal rate to treat all vehicles (1 oz. per gallon of water) (or equivalent use dilution). Leave all treated surfaces exposed to disinfectant solution wet for 10 minutes or more. For sprayer applications, use a coarse spray device.

DISINFECTANT/VIRUCIDAL* DIRECTIONS TO TREAT HARD NON-POROUS, NON-FOOD CONTACT SURFACES OF AUTOMATED TRAY, RACK AND BUGGY WASHERS: Mix a solution containing (1 oz. per gallon of water) (or equivalent use dilution). Remove all litter and manure from surfaces to be treated. Treat hard non-porous, non-food contact surfaces of automated trays, racks and buggy washers with solution for 10 minutes. Thoroughly clean all surfaces with soap or detergent and rinse with water before reuse. Change the disinfecting solution at least daily or when solution appears dirty.

DISINFECTANT/VIRUCIDAL* DIRECTIONS TO TREAT HARD NON-POROUS, NC. FOOD CONTACT SURFACES IN EGG RECEIVING AND EGG HOLDING AREAS: Mix a solution containing (1 oz. per gallon of water) (or equivalent use dilution). Remove all litter and manure from surfaces to be treated. Saturate hard non-porous, non-food surfaces with the solution for a period of 10 minutes. Apply by mop, brush or sprayer. Thoroughly clean all surfaces with soap or detergent and rinse with water before reuse. Change the disinfecting solution at least daily or when solution appears dirty.

MEAT PACKING PLANTS: Use this product to disinfect hard, non-porous surfaces associated with the following sites: livestock vehicles and holding pens, receiving areas and delivery chutes, slaughter areas and conveyors, hand, rub and guide rails, post knock cabinets, stands and flooring surfaces, chains and moving process lines, surfaces of equipment for hide operations consisting of brine curing, hide transfer bin surfaces, chutes, conveyors, tallow and animal feed production hard, non-porous surfaces, processed products and offal equipment surfaces, fabrication and processing areas covering cold storage areas, all stainless steel cut out and prep tables, counter

2/5

tops, conveyors, chains, tables, floors, walls and all stainless surfaces. For pre-cleaning saturate all surfaces with solution and scrub to loosen all soils. Use 1 ounce per gallon of water solution (or equivalent use dilution). Surfaces must remain wet for 10 minutes, then thoroughly rinsed with potable water before operations are resumed. In order to use as a disinfectant or virucide, apply 5 ounces per 5 gallons of water solution (or equivalent use dilution). Follow the same procedure as above.

All treated equipment that will contact animal feed or food surfaces must be thoroughly scrubbed with soap or detergent then rinsed with potable water before reuse.

HIDE/LEATHER PROCESSING PLANTS: To use as a disinfectant on hard, non-porous surfaces, add 1 ounce per gallon of water (or equivalent use dilution). The product can be used on hide storage bins, holding tanks, chill tanks, serpentine tanks and chains, machine and tannery equipment surfaces, conveyors and trolleys, hide press, grading and storage areas and scales, etc. Pre-clean all surfaces prior to use to remove gross soils. Thoroughly wet all hard, non-porous surfaces by evenly applying the use solution. Apply use solution with a cloth, mop, sponge, sprayer or by immersion, thoroughly wetting surfaces. For sprayer applications, use a coarse spray device at 6-8" from surfaces. Do not breathe spray. Treated surfaces must remain wet for 10 minutes. Wipe dry or allow to air dry.

SPECIAL INSTRUCTIONS FOR INACTIVATING AVIAN INFLUENZA A: Remove all poultry and feeds from premises, trucks, coops, and crates. Remove all litter and droppings from floors, walls, and surfaces of facilities occupied or traversed by poultry. Empty all troughs, racks, and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with the disinfecting solution (1 oz per gallon of water) (or equivalent use dilution) 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, scrapers used in removing litter and manure. Ventilate buildings, coops, and other closed spaces. Do not house poultry or employ equipment until treatment has been absorbed, set, or dried. Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains, and waterers with soap or detergent, and rinse with potable water before reuse.

SANITIZER DIRECTIONS FOR NON-FOOD CONTACT SURFACES in ANIMAL PREMISES

TO SANITIZE HOOF TRIMMING EQUIPMENT: Prior to application, pre-clean hoof trimming equipment before and after use on each animal with detergent and warm water or compatible cleaner to remove soil using a pre-scraper, pre-flush, or when necessary, pre-soak followed by a potable water rinse. To sanitize, prepare a 1 oz of this product per 4 gallon of water solution (200 ppm active quat) (or equivalent use dilution). Apply to pre-cleaned hard surfaces using a cloth, mop, sponge or sprayer or by immersion to thoroughly wet surfaces. Allow surfaces to remain wet for at least 5 minutes followed by adequate draining or air drying. Prepare fresh solution at least daily or when solution becomes visibly dirty.

OTHER USES

GENERAL DEODORIZATION: To deodorize, add 1.75 ounces of this product to 5 gallons of water (or equivalent use dilution) (260 ppm active quat). Let air dry.

ULTRASONIC BATH DISINFECTANT DIRECTIONS: Use this product to disinfect hard (inanimate) non-porous objects compatible with Ultrasonic cleaning units. Pour fresh solution of 1 ounce per gallon of water (or equivalent use dilution) 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 AND THERAPY EQUIPMENT: To remove body oils, dead tissue, soil and all other buildups or organic matter on inanimate surfaces after using the unit, drain the water and refill with fresh water to just cover the intake valve. Add 1 ounce of this product for each gallon of water (or equivalent use dilution) 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 solutions from the unit and rinse any/all cleaned surfaces with fresh water. The unit is ready for reuse.

FOR CLEANING 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 unit, drain the water and refill with fresh water to just cover the intake valve. Add 2.5 ounces of this product for each 10 gallons (0.25 ounces per gallon) of water (or equivalent use dilution) (200 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 clean swab, brush or sponge. After the unit has been thoroughly cleaned, drain solutions from the unit and rinse any/all cleaned surfaces with fresh water. The unit is ready for reuse.

SANITIZER DIRECTIONS FOR NON-FOOD CONTACT SURFACES

ULTRASONIC BATH SANITIZING DIRECTIONS: Use this product to sanitize hard (inanimate) non-porous objects compatible with Ultrasonic cleaning units. Pour fresh solution of 0.25 ounces per gallon of water (or equivalent use dilution) (200 ppm active quat) directly into bath chamber. Pre-clean soiled objects. Place objects into unit and operate for a minimum of 5 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.

Note: This product in its use solution is compatible with stainless steel, aluminum and most other surfaces. Before product use, it is recommended that you apply product to a smaller test area to determine compatibility before proceeding with its use.

SALON/BARBER INSTRUMENTS AND TOOLS SANITIZER DIRECTIONS: Pre-clean soiled instruments and tools. Completely immerse water safe non-porous instrument and tools in a solution of 0.25 ounces per gallon (or equivalent use dilution) (200 ppm active quat) for at least 5 minutes. Rinse thoroughly and dry before use. Prepare 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.

DIRECTIONS FOR ALTERNATE CONTAINERS

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.

STORAGE AND DISPOSAL

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

(FOR USE ON NON-REFILLABLE CONTAINERS WITH HOUSEHOLD/RESIDENTIAL USES)
PESTICIDE STORAGE: Open dumping is prohibited. Store only in original container. Do not reuse empty container. If a leaky container must be contained within another, mark the outer container to identify the contents. Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

PESTICIDE DISPOSAL/CONTAINER HANDLING/CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Wrap and put in trash or offer for recycling if available.

Batch Code: *(Can be placed on container or label)*

(FOR USE ON NON-REFILLABLE CONTAINERS WITH INSTITUTIONAL/COMMERCIAL/INDUSTRIAL/PUBLIC HEALTH USES)

PESTICIDE STORAGE: Open dumping is prohibited. Store only in original container. Do not reuse empty container. If a leaky container must be contained within another, mark the outer container to identify the contents. Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse this container to hold materials other than pesticides or diluted pesticides (rinsate). Offer for recycling if available or puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities in accordance with local, state and federal regulations.

RESIDUE REMOVAL INSTRUCTIONS: *(For containers less than 5 gallons)*
Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Fill container $\frac{1}{4}$ full with water and recap. Shake 10 seconds. Follow Pesticide Disposal instructions for rinsate disposal. Drain for 10 seconds after the flow begins to drip. Repeat procedure two more times.

RESIDUE REMOVAL INSTRUCTIONS: *(For containers greater than 5 gallons)*
Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Fill the container $\frac{1}{4}$ full with water. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over its other end and tip it back and forth several times. Follow Pesticide Disposal instructions for rinsate disposal. Repeat procedure two more times.

BATCH CODE: *(Can be placed on container or label)*

(FOR USE ON REFILLABLE CONTAINERS)

PESTICIDE STORAGE: Open dumping is prohibited. Store only in original container. If a leaky container must be contained within another, mark the outer container to identify the contents. Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

CONTAINER HANDLING: Triple rinse (or equivalent). Refill this container with this product only. Do not reuse this container for any other purpose. After final use, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities in accordance with local, state and federal regulations.

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.

RESIDUE REMOVAL INSTRUCTIONS: Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**1.0 OUNCE PACKET LABEL TO BE USED WITH MASTER
CONTAINER LABEL**

FOR FOOD CONTACT SANITIZER

MIX EACH PACKET WITH 4 GALLONS OF WATER

MAQUAT MQ615-AS

E.P.A. Reg. No. 10324-67 E.P.A. Est. No. 10324-IL-1

NET CONTENTS: 1.0 FLUID OZ.

ACTIVE INGREDIENTS:

Octyl Decyl Dimethyl Ammonium Chloride 3.0750%
Didecyl Dimethyl Ammonium Chloride 1.5375%
Dioctyl Dimethyl Ammonium Chloride 1.5375%
Alkyl (C₁₄, 50%; C₁₂, 40%; C₁₆, 10%)
dimethyl benzyl ammonium chloride 4.1000%

INERT INGREDIENTS: 89.7500%
TOTAL 100.0000%

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



**1.0 OUNCE PACKET LABEL TO BE USED WITH MASTER
CONTAINER LABEL**

FOR DISINFECTION

MIX EACH PACKET WITH 1 GALLON OF WATER

MAQUAT MQ615-AS

E.P.A. Reg. No. 10324-67 E.P.A. Est. No. 10324-IL-1

NET CONTENTS: 1.0 FLUID OZ.

ACTIVE INGREDIENTS:

Octyl Decyl Dimethyl Ammonium Chloride 3.0750%
Didecyl Dimethyl Ammonium Chloride 1.5375%
Dioctyl Dimethyl Ammonium Chloride 1.5375%
Alkyl (C₁₄, 50%; C₁₂, 40%; C₁₆, 10%)
dimethyl benzyl ammonium chloride 4.1000%

INERT INGREDIENTS: 89.7500%
TOTAL 100.0000%

KEEP OUT OF REACH OF CHILDREN

DANGER

SEE OUTER CONTAINER FOR PRECAUTIONARY STATEMENTS AND
USE DIRECTIONS

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