

10324-67

3-13-2003

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Marc Mason
General Manager
Mason Chemical Company
721 W. Algonquin Road
Arlington Heights, IL 60005

MAR 13 2003

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SUBJECT: Maquat MQ615-AS
EPA Registration Number: 10324-67
Application Dates: September 3, 2002
Receipt Date: September 19, 2002

Dear Mr. Marc Mason:

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

- The addition of claims for disinfection
- Additional directions for use

Acceptable Data

Data Requirement	Means of Support	Status
Disinfection <i>Infectious Laryngotracheitis</i>	Submitted study, MRID 457617-01	Acceptable @ 1:128 in 400 ppm hard water, 5% soil for 10 minutes
Disinfection <i>Staphylococcus aureus,</i> <i>Salmonella choleraesuis</i>	Submitted study, MRID 457617-02	Acceptable @ 1:128 in 400 ppm hard water, 5% soil for 10 minutes
Disinfectant <i>Newcastle Disease virus</i>	Submitted study, MRID 457617-03	Acceptable @ 1:128 in 400 ppm hard water, 5% soil for 10 minutes
Disinfectant <i>Avian Reovirus</i>	Submitted study, MRID 457617-04	Acceptable @ 1:128 in 400 ppm hard water, 5% soil for 10 minutes
Disinfectant <i>Avian Influenza A</i>	Submitted study, MRID 457617-05	Acceptable @ 1:128 in 400 ppm hard water, 5% soil for 10 minutes
Disinfectant <i>Infectious Bronchitis Virus</i>	Submitted study, MRID 457617-06	Acceptable @ 1:128 in 400 ppm hard water, 5% soil for 10 minutes

CONCURRENCES

SYMBOL	7510C						
SURNAME	S. Mason						
DATE	3/13/03						

2/11

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Conditions

Revise the label as follows:

A. Make the following revision to page one:

Delete the site "Institutional" from the phrase "...Whirlpool, Institutional, Industrial, School, Dairy..." You have not provided data to support the use of this product as a disinfectant in hospitals and the broad term "Institutional" could be implied to include hospitals.

B. Make the following revision to page two:

Revise to state "This product inhibits *odor causing* bacterial growth on moist surfaces and deodorizes by killing..."

C. Make the following revisions to page three:

1. Revise the statement beginning: "This product is recommended for Swine Premise..." and ending "...Nursery, Blocks, Creep Area, Chutes" by substituting the word "disinfection" for the word "sanitation" since your product does not include directions for sanitation of this site.

2. Add the heading "SANITIZATION" directly below the statement: "It is a violation of Federal Law to use this product in a manner inconsistent with its labeling."

3. Revise the second section in the right column to include the following: "...on previously cleaned hard surfaces. *Surfaces are to be* adequately drained..." deleting the phrase "provided that the".

4. Revise the "Disinfection" section to be in agreement with the submitted data by adding the organism: "*Infectious Bronchitis Virus*" to the list of other organisms in this section.

D. Make the following revisions to page five:

1. Correct the spelling of the heading near the top of the left column: "Food Contact **Sanitizer**".

2. As per PR Notice 2000-5, revise the directions for "Sanitizing Bulk Milk Tanks" to include mandatory text as follows. Delete "A fresh solution should be prepared" and replace with "*Prepare a fresh solution* at least..."

CONCURRENCES

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

**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. Remove contaminated clothing and wash clothing before reuse.

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

ENVIRONMENTAL HAZARD

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

PHYSICAL OR CHEMICAL HAZARDS

Do not mix with oxidizers, anionic soaps and detergents

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

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Open dumping is prohibited. Store only in original container. Do not reuse empty container. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use.

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

CONTAINER DISPOSAL (Larger than 1 gal.) – Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. In addition, plastic containers may be disposed of by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

TOTE CONTAINER DISPOSAL Verify that the tote is empty. Do not rinse or clean. Seal tote and contact supplier for return.

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

STORAGE AND DISPOSAL

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

MAQUAT[®] MQ615-AS

Effective Disinfectant in hard water up to 400 ppm hardness (Calculated as CaCO₃) in the presence of 5% serum contamination Whirlpool, Institutional, 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.

Removes Milkstone/Beerstone

ACTIVE INGREDIENTS:

Octyl Decyl Dimethyl Ammonium Chloride	3.0750%
Didecyl Dimethyl Ammonium Chloride.....	1.5375%
Diocetyl 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 panel for additional precautionary statements

First Aid

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

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

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

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

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

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

MASON CHEMICAL COMPANY

"THE QUATERNARY SPECIALISTS" COMMENTS

721 W. Algonquin Road in EPA Letter Dated:

Arlington Heights, IL 60005

847-290-1621

MAR 13 2003

Toll Free:

1-800-362-1858 Under the Federal Insecticide,

Fungicide, and Rodenticide Act as

E.P.A. Reg. No. 10524-8

E.P.A. Est. No. 10324-8

registered under EPA Reg. No.

BATCH NO

10324-67

NET CONTENTS

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 the 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 is easily and quickly dispersed in hot or cold water to form a completely uniform solution.

Cross contamination is of major housekeeping concern. This product has been formulated to aid in the reduction of cross-contamination on treated surfaces.

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

This product helps control bacteria that cause spoilage.

This product is recommended 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 inhibits bacterial growth on moist surfaces and deodorizes by killing microorganisms that cause offensive odors.

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

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

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

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

This product is recommended 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 maximizes labor results by effectively controlling odors.

This product will not leave a grit or soap scum.

This product inhibits bacterial growth on moist surfaces and deodorizes by killing microorganisms that cause offensive odors.

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

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

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

This product is 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 specially formulated to effectively eliminate offensive odors.

This product is recommended 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 harness as CaCO_3 .

Maquat MQ615-AS for use in:

- Restaurants, restaurants and bars, cafeterias, institutional kitchens, fast food operations and food storage areas
- Food processing plants, USDA inspected food-processing facilities, dairy farms, egg processing plants, meat/poultry processing plants, meat/poultry producing establishments
- Hog farms, equine farms, poultry and turkey
- Mushroom farms
- Dairy farms, dairies, cheese factories, milk storage and handling systems, bulk milk tanks
- Milk pails inflations and tubing, dairy product dispensing equipment
- Udders, flanks and teats of dairy cows
- Beer fermentation and holding tanks, bottling or pre-mix 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, travel rest areas, shower rooms, shower stalls, bathrooms
- Schools and colleges, churches, classrooms, community colleges, universities, athletic facilities and locker rooms, exercise rooms, gyms, gymnasiums
- Heath clubs, spas, tanning spas, massage/facial salons, hair/nail salons, barber/beauty shops, salons, tattoo parlors
- Recycling centers
- Humidifier water tanks
- Fishery, Milk, Citrus, Ice Cream processing plants

- Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, 10324-67 registered under EPA Reg. No.
- ACCEPTED with COMMENTS in EPA Letter Dated: MAR 13 2003
- This product may be used on washable hard nonporous surfaces such as:
- Food preparation ~~_____~~ and storage areas ^{steam tables}
 - Refrigerated storage and display equipment
 - Food preparation, dish wash and storage areas
 - Countertops, Slurry machines, stovetops, sinks, appliances, refrigerators, ice machines
 - Glass, metal, stainless steel, glazed porcelain, glazed ceramic, fiberglass, granite, marble, plastic, chrome and vinyl (test surfaces for compatibility first)

- Enameled surfaces, painted woodwork, Formica[®], vinyl and plastic upholstery (test surfaces for compatibility first)
- Exhaust fans, refrigerated storage and display equipment, coils and drain pans of air conditioning and refrigeration equipment and heat pumps
- Beer fermentation and holding tanks, bottling or pre-mix dispensing equipment
- Citrus processing equipment and holding tanks
- Drinking fountains
- Shower stalls, shower doors and curtains, bathtubs and tiles, chrome plated intakes, toilets, toilet bowl surfaces, urinals, portable toilets, porcelain tile and restroom fixtures (test surfaces for compatibility first)
- Kennels, kennel runs, cages floors, conductive flooring
- 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.

ACCEPTED
with COMMENTS
in EPA Letter Dated MAR 13 2003
Federal Insecticide, Fungicide, and Rodenticide Act as amended for the pesticide, registered under EPA Reg. No. 10324-67

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

This product has been authorized by the USDA as a sanitizer for all food contact surfaces.

This product has been cleared by the FDA in 21 CFR Section 178.1010 for use on food processing equipment, utensils, and other food contact articles at a concentration of 200-400 ppm active in the presence of 500 ppm hard water (CaCO₃).

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

This product meets AOAC efficacy standards for hard surface sanitizers.

This product meets AOAC Use – Dilution Test Standards for general disinfection.

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 disease organisms that may be present on equipment and utensils after cleaning, and reduces the potential for the transfer, either directly through tableware such as glasses, cups and flatware or indirectly through food.

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

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

DIRECTIONS FOR USE

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

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 required following use of the product as a sanitizer on previously cleaned hard surfaces provided that the surfaces are adequately drained before contact with food so that little or no residue remains.

Apply this product with a cloth, mop or mechanical spray device. When applied with a mechanical spray device, surfaces must be sprayed until thoroughly wetted. Treated surfaces must remain wet for 1 minute. For sprayer applications, use a coarse mist pump or trigger sprayer. Spray 6-8 inches from surface, rub with brush, sponge or cloth. Do not breathe spray mist.

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

DISINFECTION

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

Salmonella choleraesuis (ATCC 10708)

Staphylococcus aureus (ATCC 6538)

Avian Reovirus (ATCC VR-2449)

Infectious Laryngotracheitis

Avian Influenza A (ATCC VR-2072)

Newcastle Disease Virus (ATCC VR-108)

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) nonporous objects compatible with Ultrasonic cleaning units. Pour fresh solution of 1 ounce per gallon of water (or equivalent use dilution) directly into bath chamber. Preclean soiled objects. Place objects into unit and operate for a minimum of 10 minutes, according to manufacturers use directions. Remove objects and rinse with sterile water (sterile water for injection), or allow to air dry. Replace solution at least daily or when solution becomes visible dirty or discolored.

For Disinfecting Hard Nonporous Bath and Therapy Equipment: To remove body oils, dead tissue, soil and all other buildups or organic matter on inanimate surfaces after using the whirlpool unit, drain the water and refill with fresh water to just cover the intake valve. Add 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 solutions. Turn off pump. Wash down the unit sides, seat of the chair lift, and any/all related equipment with a clean swab, brush or sponge. Product to surface contact time must be at least 10 minutes for proper disinfection. After the unit has been thoroughly disinfected, drain solutions from the unit and rinse any/all cleaned surfaces with fresh water. The unit is ready for reuse

6/11

To disinfect food-processing premises: 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 to remain wet for 10 minutes, then remove excess liquid. Before using this product, food products and packaging materials must be removed from area or carefully protected. After use, all surfaces in the area must be thoroughly rinsed with potable water.

To disinfect food service establishment food contact surfaces: countertops, 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 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.

Disinfection/Virucide of Poultry/Turkey Equipment, Swine Quarters, Animal Quarters and Kennels Directions: Remove all animals and feeds from premises vehicles and enclosures such as coops and crates. Remove all litter, droppings and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Use 1 ounce of this product per gallon of water (or equivalent use dilution). Saturate surfaces with the recommended 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.

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.

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

VEHICLES: Clean all vehicles including mats, crates, cabs, and wheels with high pressure water and this product. For 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.

DRESSING PLANT DISINFECTANT DIRECTIONS

Disinfect equipment, utensils, walls and floors in poultry and animal dressing plants with a solution of 1 ounce of this product per gallon of water (or equivalent use dilution). Equipment and utensils must remain wet for 10 minutes then thoroughly rinsed with potable water before operations are resumed. Disinfect all rooms, exterior walls and loading platforms of dressing plants.

DRESSING PLANT DISINFECTANT/VIRUCIDE DIRECTIONS

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

FARM PREMISE DISINFECTION DIRECTIONS

For use in Equine, Dairy and Hog Farms:

1. Remove all animals and feed from premises, vehicles and enclosures.
2. Remove all litter and manure from floors, walls and surfaces of barn, pens, chutes and other facilities and fixtures occupied or transversed by animals.
3. Empty all troughs, racks and other feeding and watering appliances.
4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
5. Saturate all surfaces with the recommended disinfecting and virucidal solution for a period of 10 minutes.
6. Immerse all halters, ropes and other types of equipment used in handling and restraining animals as well as forks, shovels, scrapers used in removing litter and manure.
7. Ventilate buildings, cars, trucks, boats and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set and dried.
8. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent and rinse with potable water before reuse.

Veterinary Clinics/Animal Life Science Laboratory/Pet Shop/Kennels/Breeding and grooming Establishment/Tack Shops Disinfection Directions: For cleaning and disinfecting the following hard nonporous surfaces: Equipment, utensils, instruments, cages, kennels, stables, stalls and catteries. Remove all animals and feeds from premises, animal transportation vehicles, crates etc. Remove all litter, droppings and manure from floors, walls and surfaces of facilities occupied or transversed by animals. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use solution of 1 ounce per gallon of water (or equivalent dilution) for a period of 10 minutes. Ventilate buildings and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried. Thoroughly scrub all treated feed racks, automatic feeders, waterers and other equipment that dispenses food or water with soap or detergent, and rinse with potable water before reuse.

MUSHROOM FARM INDUSTRY USE DIRECTIONS

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

Disinfection: Use 1 ounce of this product per gallon of water (or equivalent dilution). Wet all surfaces thoroughly. Treated surfaces should be allowed to remain wet for 10 minutes. Let air-dry. For heavily soiled areas, 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.

ACCEPTED COMMENTS
APR 18 2003
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 10324-67

7/11

Humidifier Sanitizer Directions: Thoroughly clean water tank and filters. Add 0.25 ounces of this product per gallon of refill water. Not for use in heat or atomizing type humidifiers.

FOOD CONTACT SANITIZER

Sanitizing of Food Processing Equipment and Other Hard Nonporous Surfaces in Food Processing Locations, Dairies, Restaurants and Bars Directions: For sanitizing food processing equipment, dairy equipment, 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.

Apply a solution of 1 to 2 ounces of this product in 4 gallons of water, (200 - 400 ppm active) to precleaned, hard surfaces thoroughly wetting surfaces with a cloth, mop, sponge, sprayer or by immersion. For spray applications, use a coarse mist, pump or trigger sprayer. Spray 6 to 8 inches from surface, rub with brush, sponge, or cloth. Do not breathe spray mist. With spray applications cover or remove all food products. Surfaces should remain wet for at least 1 minute followed by adequate draining and air-drying. A fresh solution should be prepared at least daily or when use solution becomes visibly dirty. For mechanical application use solution may not be reused for sanitizing applications. No potable water rinse is allowed after application of the sanitizing solution.

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

Dishes, silverware, glasses, cooking utensils and other similar size food processing equipment can be sanitized by immersion in a 1 to 2 ounces of this product in 4 gallons of water (200 - 400 ppm active). **NO POTABLE WATER RINSE IS ALLOWED.**

At a minimum of 1 ounce per 4 gallons (200 ppm) this product eliminates 99.999% of the of the following bacteria in 30 minutes in 500 ppm hard water (calculated as CaCO₃) according to the EPA's Germicidal and Detergent Sanitizing Action of Disinfectants test.

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

DIRECTIONS FOR SANITIZING FOOD PROCESSING EQUIPMENT, UTENSILS, AND FOOD CONTACT ARTICLES REGULATED BY 21CFR sec 178.1010:

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

**U.S. PUBLIC HEALTH SERVICE
FOOD SERVICE SANITIZATION RECOMMENDATIONS**

CLEANING AND SANITIZING:

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

1. Thoroughly wash equipment and utensils in a hot detergent solution.
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 0.75 ounces to 2 gallons of water (300 ppm active) by rinsing, spraying or swabbing until thoroughly wetted.
5. Allow sanitized surfaces to drain and air dry. No potable water rinse is allowed.

To prepare a 200, 300 or 400 ppm active quaternary solution use the following dilution table.

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 Milking Equipment: Preflush, presoak, or prescrape then clean 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 good 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 mist, pump or trigger sprayer. Spray 6 to 8 inches from surface, rub with brush, sponge, or cloth. Do not breathe spray mist. With spray applications cover or remove all food products. Surfaces should remain wet for at least 1 minute followed by adequate draining and air-drying. A fresh solution should be prepared at least daily or when use solution becomes visibly dirty. For mechanical application use solution may not be reused for sanitizing applications. No potable water rinse is allowed after application of the sanitizing solution.

Sanitizing Dairy Product Dispensing Equipment: Preflush, presoak, or prescrape then clean 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. 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

111

Services in waters up to 500 ppm of hardness calculated as $CaCO_3$ when evaluated by the AOAC Germicidal and Detergent Sanitizer Method against *Escherichia coli* and *Staphylococcus aureus*.

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. No potable water rinse is allowed.

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 ounce of this product per 4 gallons of water (200 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 should be cleaned, rinsed and flushed with the sanitizing solution for at least 1 minute. Drain thoroughly and allow to air dry before reuse. No potable water rinse is allowed.

SANITARY FILLING EQUIPMENT SANITIZER DIRECTIONS

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

STORAGE TANK SANITIZER DIRECTIONS

To sanitize hard non-porous food contact surfaces preflush, presoak, or prescraped then clean with a good detergent and follow with a potable water rinse. Prepare a solution of 1 ounce of this product per 4 gallons of water (200 ppm active) for 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.

FOR SANITIZING IN FISHERIES, MILK, CITRUS, POTATO & ICE CREAM

PROCESSING PLANTS: For use as a sanitizer on conveyor belts and equipment to reduce or eliminate odors in the processing area. Also, for use on filling equipment to reduce bacteria associated with condensation on equipment and pipes. Follow directions for sanitizing food contact surfaces.

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

1. Turn off refrigeration
2. Wash and rinse all surfaces thoroughly.
3. Apply a solution of 1 to 2 ounces this product per 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. Fresh solution should be prepared for each cleaning. No potable water rinse is allowed when product is used as directed.
4. Return machine to service.

SANITIZER DIRECTIONS FOR NON-FOOD CONTACT SURFACES

Preparation of 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, nonporous surfaces. At 200 ppm active, this product is an effective one-step sanitizer against *Staphylococcus aureus* and *Enterobacter aerogenes* in 500-ppm hard water as $CaCO_3$.

Apply sanitizer use solution to precleaned, hard nonporous surfaces with a cloth, mop, sponge, sprayer or by immersion.

For sprayer applications, use a coarse mist pump or trigger sprayer. Spray 6-8 inches from surface, rub with brush, sponge or cloth. Do not breathe spray. **NOTE:** With spray applications, cover or remove all food products.

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 suggested.

Humidifier Sanitizer Directions: Thoroughly clean water tank and filters. Add 0.25 ounces of this product per gallon of refill water (or equivalent use dilution). Not for use in heat or atomizing type humidifiers.

Dairy Cow Application Directions: The udders, flanks and teats of dairy cows can be washed with a solution of 0.75 ounces of this product in 4 gallons of warm water. Use a fresh towel for each cow. Avoid contamination of wash solution by dirt and soil. Do not dip used towel back into wash solution. When solution becomes visibly dirty, discard and provide fresh solution.

Ultrasonic Bath Sanitizing Directions: Use this product to sanitize hard (inanimate) nonporous 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. Preclean soiled objects. Place objects into unit and operate for a minimum of 1 minute, 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 solutions 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.

For Cleaning Hard Nonporous Fiberglass Bath and Therapy Equipment: To remove body oils, dead tissue, soil and all other buildups or organic matter on inanimate surfaces after using the whirlpool unit, drain the water and refill with fresh water to just cover the intake valve. Add 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 a 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.

Salon/Barber Instruments and Tools Sanitizer Directions: Preclean soiled instruments and tools. Completely immerse water safe nonporous instruments and tools in a solution of 0.25 ounces per gallon (or equivalent use dilution) (200 ppm) of water for at least 60 seconds. Rinse thoroughly and dry before use. Prepare fresh solution 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-

ACCEPTED
COMMENTS
EPA Letter
MAR 13 2003
Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended for the pesticide,
registered under EPA Reg. No.
10324-67

contaminated receptacle. Prolonged soaking may cause damage to metal instruments.

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.

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ACTIVE INGREDIENTS:

Octyl Decyl Dimethyl Ammonium Chloride.....	3.0750%
Didecyl Dimethyl Ammonium Chloride.....	1.5375%
Diocetyl 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

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

ACCEPTED
with COMMENTS
in EPA Letter Dated:

MAR 13 2003

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 10324-67

11/10/01

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 (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

SEE OUTER CONTAINER FOR PRECAUTIONARY STATEMENTS AND
USE DIRECTIONS

DISPOSAL: Do not reuse container. Wrap and put in trash collection.

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11/11