

10324-67

02/12/2002

1/12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FEB 12 2002

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

SUBJECT: Maquat MQ615-AS
EPA Registration Number: 10324-67
Application Dates: August 8 and December 13, 2001
Receipt Date: August 16 and December 14, 2001

Dear Mr. Marc Mason:

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

- The addition of claims for food contact and non food contact sanitization.
- Change of name of record
- Change of formulation
- Submission of data to support acute oral toxicity
- Label language update

Change in Formulation

The proposed change in formulation from an ingredients statement of:

Octyl decyl dimethyl ammonium chloride.....2.295%
Didecyl dimethyl ammonium chloride.....1.1475%
Dioctyl dimethyl ammonium chloride.....1.1475%
Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chlorides.....3.060%

with a total percent of Active Ingredients (AI) equal to 7.65%.

CONCURRENCES

SYMBOL	750C						
SURNAME	J. Lopez						
DATE							

2/12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

to a formulation with a revised ingredients statement of:

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 chlorides.....4.1000%

with a total percent AI equal to 10.25%.

Is acceptable provided you comply with the terms of your fax to the Agency of 11/27/01. In summary you have agreed to: 1) Immediately notify your customers of the label changes after you receive a stamped label. 2) Mason will purchase unused printed labels. You stated that this will reduce the amount of Sentry in the market place almost immediately.

The Confidential Statements of Formula dated 7/7/01 for the Basic and Alternates 2, 4, and 5 as well as Alternate 3 dated 7/17/01 are now acceptable. The submitted Chemistry data MRIDs 454560-01 thru 454560-04 have been reviewed and are acceptable to support this new formulation.

Change in Product Name

The change of product name from "Sentry" to "Maquat MQ615-AS" is also acceptable. Please use this name of record for all future correspondences to the Agency.

Clarification Regarding Submitted Efficacy Data

We have received your correspondence regarding the submitted efficacy study MRID 454134-01. This efficacy study to test the effectiveness of the product against *Escherichia coli* O157:H7 and *Shigella flexneri* was performed on the product with a formulation as follows:

Octyl decyl dimethyl ammonium chloride.....2.295%
 Didecyl dimethyl ammonium chloride.....1.1475%
 Dioctyl dimethyl ammonium chloride.....1.1475%
 Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chlorides.....3.060%

This study and it applicability to the new formulation has been discussed with our efficacy team leader. It has been decided that since the final concentration of product tested in this study was 198 ppm that this study could be used to support the use of the new formulation at 200 ppm against *Escherichia coli* O157:H7 and *Shigella flexneri*.

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Review of Acute Oral Toxicity Study

The following data has been reviewed:

Data Requirement	Means of Support	Status
Acute Oral Toxicity	Submitted study, MRID 454783-01	Acceptable/ Tox Category III

Since there is very little data in the Agency files to aid in determining the appropriate toxicity category for Acute Inhalation, it is suggested that you amend the record for this product to include an Acute Inhalation study for review so that the data set will be complete.

Conditions

Revise the label as follows:

A. Make the following revision to page one:

Revise the statement at the top of page one, right column by including the following statement: "*For Non-Food Contact Sanitization in: Schools, Colleges, Churches, Athletic Facilities, Health Clubs, Spas and Salons*".

B. Make the following revisions to page two:

1. Revise the following statement from "This product helps control microbial contamination and spoilage." to "*This product helps control bacteria that cause spoilage.*" This revision is necessary since you have only supplied data to support sanitization without any additional claims for viruses or fungi.

2. Delete one instance of the following statement which appears twice on this page of the label: "This product is recommended for use as a sanitizer in bottling and beverage dispensing equipment."

3. Revise the following statement since you have not provided appropriate directions for the use of this product as a sanitizer on whirlpools: "This product is a versatile cleaner and scale remover formulated for use on bath and therapy equipment (Whirlpools)." by deleting the term "sanitizer."

4. In the statement beginning: "Food processing plants, USDA inspected food-processing facilities, dairy farms, hog farms, equine farms..." delete the following sites since your label does not include directions for these uses as per DIS/TSS 18 and 19: hog farms, equine farms, poultry and turkey farms, and mushroom farms.

CONCURRENCES

SYMBOL								
SURNAME								
DATE								

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

5. Delete the site "Institutions" from the phrase "Institutions, schools and colleges, churches, classrooms..." You have not provided data to support the use of this product as a disinfectant in hospitals and the broad term "Institutions" could be implied to include hospitals.

6. Revise the following statement such that it specifically lists the sites which may be treated: "Fishery, Milk, Citrus, Ice Cream processing plants".

7. Delete the following statement. This statement appears twice on the label and the version to be deleted also includes a site which is considered porous: stone. "Glass, metal, stainless steel, glazed porcelain, glazed ceramic, fiberglass, stone, granite, marble, plastic, chrome and vinyl."

C. Make the following revisions to page three:

1. Revise to state: "*Sealed* concrete floors."

2. Delete the statement beginning: "This product is recommended for Swine Premise..." and ending "...Nursery, Blocks, Creep Area, Chutes" since your product does not include directions for use for this site as per DIS/TSS 18.

3. Revise the following statement: "Regular, effective cleaning and sanitizing of equipment utensils and work or dining surfaces which could harbor hazardous *bacteria* minimizes the..." since you have only provided data to support sanitization.

4. Revise the first section at the top right column of page 3 beginning: "Apply this product with a cloth, mop or..." by changing the contact time from 10 minutes to *1 minute*. Also in this same section, revise the phrase to read "*Prepare a fresh solution at least daily...*" such that your label incorporates mandatory language as per PR Notice 2000-5.

5. Revise the first statement following the heading: "Food Contact Sanitizer" to begin as follows: "Sanitizing of Food Processing Equipment and Other Hard *Nonporous* Surfaces in Food..."

D. Make the following revisions to page four:

1. Revise the section following the heading "Directions for Sanitizing Food Processing Equipment, Utensils, and Food Contact Article Regulated by 21CFR sec 178.1010" to read: "Sanitize article using a solution of 0.25 to **0.5** ounces of this product per gallon of water (**200-400ppm** active)."

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

2. Revise the section following the heading "U.S. Public Health Service Food Service Sanitization Recommendations" such that it is in agreement with EPA Reg. # 10324-117: "Sanitize equipment and utensils by immersion in 1 ounce of this product per 4 gallons..." and "For equipment and utensils too large to sanitize by immersion, apply 0.75 ounces to 2 gallons of water (300 ppm active)..."

3. Revise the directions for "Sanitizing Milking Equipment" as per DIS/TSS-17 to begin: "Preflush, presoak, or prescrape then clean and rinse with potable water all milking equipment, pails lines and tubing. Sanitize prior to milking..."

4. Revise the directions for "Sanitizing Bulk Milk Tanks" to begin: "To sanitize hard non-porous food contact surfaces, preflush, presoak, or prescrape then clean with a good detergent and rinse with potable water..."

5. Revise the directions for "Sanitizing Dairy Product Dispensing Equipment to begin: "Preflush, presoak, or prescrape then clean and rinse with potable water dairy product dispensing equipment. Sanitize by preparing..."

6. Revise the "Directions for Food Processing Equipment and Dairies" to begin: "Equipment and utensils must be thoroughly preflushed, presoaked and when necessary prescaped to remove gross food particles. Clean and rinse equipment..."

7. Revise your directions for "Beverage Dispensing Equipment Sanitizer Directions" to include the following statements to bring it into agreement with EPA Reg. # 10324-117. "For sanitizing of bottling or pre-mix dispensing equipment, after cleaning thoroughly rinse equipment with a potable water rinse." also add "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 changeover between products the system should be cleaned, rinsed and flushed with the sanitizing solution for at least 1 minute. Drain thoroughly..."

8. Revise your directions for "Sanitary Filling Equipment Sanitizer Directions" to include the following statements to bring it into agreement with EPA Reg. # 10324-117. "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..."

9. Revise your directions for "Storage Tank Sanitizer" to begin: "To sanitize hard non-porous food contact surfaces, preflush, presoak, or prescrape then clean with a good detergent and follow with a potable water rinse. Prepare a solution of 1 ounce..."

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

6/12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

10. Revise your directions "For Sanitizing in Fisheries, Milk, Citrus, Potato and Ice Cream Processing Plants" as follows: "For use as a sanitizer on conveyor *belts* and ..."

E. Make the following revisions to page five:

1. Revise your directions for "Dairy Cow Application" to agree with the label for Reg. No. 10324-117. Revise to state "...washed with a solution of **0.75 oz.** of this product in 4 gallons of warm water."

2. Revise the first section "Ultrasonic Bath Sanitizing Directions" by correcting the stated contact time: "...operate for a minimum of *1 minute.*" instead of 10 minutes. Also in this same section, revise the phrase to read "Replace solution *at least* daily..." as per PR Notice 2000-5.

3. Your label includes directions "For **Cleaning** Hard Nonporous Fiberglass Bath and Therapy Equipment". Delete the last statement in this section which is not in agreement with a cleaning claim: "Product to surface contact time must be at least 60 seconds for proper sanitizing." which does not agree with a cleaning claim.

4. Your label includes the sites hair/nail and barber/beauty salons without the appropriate directions for use at these sites. Revise your label by adding the following set of statements:

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

General Comments

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

CONCURRENCES

SYMBOL								
SURNAME								
DATE								

7/12

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

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

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

Sincerely,



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

Enclosure: Stamped Label
7510C:T.Lantz:2/11/02:10324-67g

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).

ACCEPTED
with COMMENTS
in EPA Letter Dated:
FEB 12 2002
Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 10324-67

MAQUAT MQ615-AS

Multi-Purpose No-Rinse Acid Cleaner Food Contact Sanitizer For Dairies, Dairy Barns, Cheese Factory, Brewery, Farm, Wineries, Beverage, Food Handling and Process Areas, Restaurants, Bar and Institutional Kitchen Use

Removes Milkstone

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 PELIGRO

See left panel for additional precautionary statements

First Aid

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

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

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

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

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

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

MASON CHEMICAL COMPANY

"THE QUATERNARY SPECIALISTS"

721 W. Algonquin Road
Arlington Heights, IL 60005

847-290-1621

Toll Free:

1-800-362-1855

E.P.A. Reg. No. 10324-67

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

BATCH NO



NET CONTENTS

8/18

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.

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 microbial contamination and spoilage.

This product is recommended for use as a food contact sanitizer at a concentration of 200-400 ppm active. A potable water rinse is not required when used as a sanitizer on food contact surfaces.

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

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

This product is recommended for use 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. A potable water rinse is not required when used as a sanitizer on food contact surfaces.

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

This product is recommended for use 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, sanitizer, 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, hog farms, equine farms, poultry and turkey farms and egg processing plants, meat/poultry processing plants, meat/poultry producing establishments, 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
- Institutions, 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 and other food processing and storage plants

This product may be used on washable hard nonporous surfaces such as:

- Food preparation and storage areas.
- Glass, metal, stainless steel, glazed porcelain, glazed ceramic, fiberglass, stone, granite, marble, plastic, chrome and vinyl.
- Refrigerated storage and display equipment
- Food preparation and storage areas.
- Countertops, Slurppy 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.

ACCEPTED
with COMMENTS
in EPA Letter Dated:
FEB 12 2002
Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 10324-67

9/12

- 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.
- Concrete floors
- Dishes, silverware, glasses, cooking utensils and other similar size food processing equipment can be sanitized by immersion. **NO POTABLE WATER RINSE REQUIRED**

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

This product has been 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 (CaCO_3).

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

This product meets AOAC efficacy standards for hard surface sanitizers.

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

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

Where equipment and utensils are used for preparation of foods on a continuous or production line basis, utensils and the food contact surfaces of equipment 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 cloth, mop or mechanical spray device. When applied with a mechanical spray device, surfaces must be sprayed until thoroughly wetted. Treated surfaces must remain wet for 10 minutes. For sprayer applications, use a coarse mist pump or trigger sprayer. Spray 6-8 inches from surface, rub with brush, sponge or cloth. Do not breathe spray mist.

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

FOOD CONTACT SANTIZER

Sanitizing of Food Processing Equipment and Other Hard Surfaces in Food Processing Locations, Dairies, Restaurants and Bars Directions: For sanitizing food processing equipment, dairy equipment, sink tops, countertops, refrigerated storage and display equipment and other hard non-porous surfaces. **NO POTABLE WATER RINSE IS REQUIRED.**

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 required 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 REQUIRED.**

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 REQUIRED.**

At a minimum of 1 ounce per 4 gallons (200 ppm) this product eliminates 99.999% of the of the following bacteria in 500 ppm hard water (calculated as CaCO_3) according to the AOAC Germicidal and Detergent Sanitizing Action of Disinfectants test.

ACCEPTED FOR REGISTRATION
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 10524-67
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.

10/1

3. Rinse articles thoroughly with potable water.
4. Sanitize articles using a solution of 0.25 to 0.66 ounces of this product per gallon of water (150-400 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 a 1 to 1.33 ounces 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 1.25 ounces to 2 gallons of solution of this product (366 ppm active) by rinsing, spraying or swabbing until thoroughly wetted.
5. Allow sanitized surfaces to drain and air dry. Do not rinse.

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: Previously cleaned milking equipment, pails, inflations, lines and tubing should be sanitized 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, clean with a good detergent and rinse thoroughly. 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 required after application of the sanitizing solution.

Sanitizing Dairy Product Dispensing Equipment: Previously cleaned dairy product dispensing equipment should be sanitized 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 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 AND DAIRIES

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 rinse is required.

BEVERAGE DISPENSING EQUIPMENT SANITIZER DIRECTIONS

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. Drain thoroughly and allow to air dry before reuse. No rinse required.

SANITARY FILLING EQUIPMENT SANITIZER DIRECTIONS

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 rinse required.

STORAGE TANK SANITIZER DIRECTIONS

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 rinse required.

FOR SANITIZING IN FISHERIES, MILK, CITRUS, POTATO & ICE CREAM PROCESSING PLANTS: For use as a sanitizer on 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 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 required.

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. Fresh solution should be prepared for each cleaning. No potable water rinse is required when product is used as directed.
4. Return machine to service.

ACCEPTED

With COMMENTS
in EPA Letter dated
FEB 1 9 2002

Fluor and Rodenticide Act as
the pesticide,
under EPA Reg. No. 10524-67

11/12

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 1 oz of this product in 4 gallons of warm water. Use a fresh towel for each cow. Avoid contamination of wash solution by dirt and soil. Do not dip used towel back into wash solution. When solution becomes visibly dirty, discard and provide fresh solution.

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 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 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. Product to surface contact time must be at least 60 seconds for proper sanitizing.

1.0 OUNCE PACKET LABEL TO BE USED WITH MASTER CONTAINER LABEL

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 (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: **ACCEPTED**
1-800-362-1855 **With COMMENTS**
in EPA Letter Dated:

FEB 12 2002

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

12/12