#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

June 12, 2018

Bridget Middleton Regulatory Specialist Ecolab, Inc. 1 Ecolab Place St. Paul, MN 5512

Subject: Notification per PRN 98-10 – Clarification to directions for use Product Name: Multi-Quat EPA Registration Number: 1677-198 Application Date: March 5, 2018 Decision Number: 538988

Dear Ms. Middleton:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Antimicrobials Division (AD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you have any questions, you may contact Tara Flint via email at flint.tara@epa.gov.

Sincerely,

E. Minderhoff

Eric Miederhoff Product Manager 31 Regulatory Management Branch I Antimicrobials Division (7510P) Office of Pesticide Programs

#### NOTIFICATION

#### 1677-198

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

06/12/2018

# Multi-Quat

(Disinfectant - Sanitizer – Deodorizer – Cleaner) (For Industrial and Commercial Use)

(Schools - Restaurants -Food Services - Dairies - Beverage and Food Processing Plants – Farm Premises - Poultry Premises - Poultry Hatcheries – Animal Housing Facilities)

#### **ACTIVE INGREDIENTS:**

Alkyl (C14, 50%; C12, 40%; C16, 10%)	
dimethyl benzyl ammonium chloride	
Octyl decyl dimethyl ammonium chloride	2.25%
Didecyl dimethyl ammonium chloride	1.35%
Dioctyl dimethyl ammonium chloride	0.90%
OTHER INGREDIENTS:	
TOTAL:	100.00%

#### KEEP OUT OF REACH OF CHILDREN

### DANGER

(See [back], [side], [inner] [other] [fold-out] [booklet] [supplemental hang tag] [product container] [label(s)] [panel(s)] [container] for [complete] [additional] [information] [directions for use] [precautionary statements] [and] [first aid] [and] [storage and disposal]).

(Si no puede leer en inglés, pregunte a su supervisor sobre las instrucciones de uso apropiadas antes de trabajar con este producto.)

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** CORROSIVE: Causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses), protective clothing and rubber gloves. Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

#### **FIRST AID**

**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 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 SWALLOWED:** Call a poison control center or doctor 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.

#### FOR EMERGENCY MEDICAL INFORMATION, CALL TOLL-FREE 1-800-328-0026 OUTSIDE NORTH AMERICA, CALL 1-651-222-5352

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

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

(Note to Reviewer: For containers of 5 gallons or more, the following Environmental Hazards language will appear on the final product label.)

#### **ENVIRONMENTAL HAZARDS**

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 to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

**Disinfection:** 3 fl. oz. per 1 gallon up to 500 ppm hard water for a 10 minute contact time: Staphylococcus aureus (ATCC 6538) Salmonella enterica (ATCC 10708) Escherichia coli O157:H7 (ATCC 35150) Listeria monocytogenes (ATCC 19117)

**Disinfection:** 4 fl. oz. per 1 gallon up to 200 ppm hard water for a 10 minute contact time: Salmonella enterica (ATCC 10708) MRID Staphylococcus aureus (ATCC 6538)

**Virucidal:** 3 fl. oz. per 1 gallon of water in the presence of 5% organic soil for a 10 minute contact time: \*Herpes Simplex Type I Virus (ATCC VR-735) \*Avian Influenza Virus (VNH5N1-PR8)

\*Canine Distemper Virus (ATCC VR-2006)

\*Newcastle's Disease Virus (ATCC VR-109

**Food-contact sanitizer:** 0.26 – 0.68 fl. oz. per 1 gallon up to 500 ppm hard water for a 1 minute contact time (150 ppm to 400 ppm active quat): *Escherichia coli* (ATCC 11229) *Staphylococcus aureus* (ATCC 6538)

Food contact sanitizer: 0.34 – 0.68 fl. oz. per 1 gallon up to 500 ppm hard water for a 1 minute contact time (200 ppm to 400 ppm active quat): *Escherichia coli* (ATCC 11229) *Staphylococcus aureus* (ATCC 6538) *Klebsiella pneumoniae* (ATCC 4352) *Listeria monocytogenes* (ATCC 19117) Yersinia enterocolitica (ATCC 23715) *Enterobacter sakazakii* (ATCC12868) *Escherichia coli* O157:H7 (ATCC 35150) *Shigella sonnei* (ATCC 11060) *Salmonella enterica* (ATCC 10708) *Campylobacter jejuni* (ATCC 33291)

**Non-Food Contact Surface Sanitizer:** 0.34 – 0.68 fl. oz. per 1 gallon up to 500 ppm hard water for a 5 minute contact time: *Staphylococcus aureus Enterobacter aerogenes.* 

(This use not approved in CA - will be used for claims not currently approved)

#### **DIRECTIONS FOR USE:**

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

#### DO NOT MIX WITH ANYTHING BUT WATER

Apply *Multi-Quat* with a cloth, disposable wipe, mop or mechanical spray device. When applied with a mechanical spray device, surface must be sprayed until thoroughly wetted. For sprayer applications, use

(Note to Reviewer: Language in ( ) is considered optional or interchangeable.)

a coarse spray device. Spray 6-8 inches from surface; rub with brush, sponge, disposable wipe or cloth. Do not breathe spray. Fresh solution must be prepared (daily) (or) (when the use solution becomes visibly dirty).

#### **GENERAL DISINFECTION / VIRUCIDAL\* DIRECTIONS:**

At 3 fl. oz. per 1 gallon of water, this product is an effective general disinfectant that can be used to disinfect floors, walls, finished woodwork, sink tops, garbage pails, telephones, rest rooms, bathroom fixtures, and other hard, non-porous surfaces. A pre-cleaning step is required prior to disinfection. Apply disinfecting solution to surface by flushing, mopping, sponging or hand pump spraying so as to thoroughly wet surface. Allow surface to remain wet for 10 minutes. Remove solution with a clean mop, cloth, disposable wipe, or wet vacuum pickup or allow to air dry. Prepare fresh solution at least (daily) (or) (when use solution becomes visibly dirty). Any food contact surfaces that have been disinfected must be thoroughly rinsed with potable water. Do not use this product as a disinfectant on glasses, dishes or utensils.

### (Note to reviewer: The following are options for presenting the organism information on the label for General Disinfection/Virucidal\* Directions)

*Multi-Quat* is a disinfectant at 3:128 dilution (3 fl. oz. per 1 gallon of water). Multi-Quat is bactericidal according to the current AOAC Disinfectant Use-Dilution Method against: *Staphylococcus aureus* (ATCC 6538) *Salmonella enterica* (ATCC 10708) *Escherichia coli* O157:H7 (ATCC 35150) *Listeria monocytogenes* (ATCC 19117)

(or)

Multi-Quat kills: (Bacteria) Staphylococcus aureus (ATCC 6538) Salmonella enterica (ATCC 10708) Escherichia coli O157:H7 (ATCC 35150) Listeria monocytogenes (ATCC 19117)

*Multi-Quat* is virucidal at 3:128 dilution (3 fl. oz. per 1 gallon of water) in the presence of 5% organic soil against:

\*Herpes Simplex Type I Virus (ATCC VR-735) \*Avian Influenza Virus (VNH5N1-PR8) \*Canine Distemper Virus (ATCC VR-2006)

\*Newcastle's Disease Virus (ATCC VR-109)

(or)

Multi-Quat is effective against: \*Avian Influenza Virus (VNH5N1-PR8) \*Canine Distemper Virus (ATCC VR-2006) \*Newcastle's Disease Virus (ATCC VR-109) \*Herpes Simplex Type 1 Virus (ATCC VR-735)

(or)

Multi-Quat is a disinfectant at 4:128 dilution (4 fl. oz. per 1 gallon up to 200 ppm hard water) against: Staphylococcus aureus (ATCC 6538) Salmonella enterica (ATCC 10708) Escherichia coli O157:H7 (ATCC 35150) Listeria monocytogenes (ATCC 19117) Salmonella enterica (ATCC 10708) Staphylococcus aureus (ATCC 6538) Before use in federally inspected meat and poultry food processing plants and dairies, food products and packaging materials must be removed from the room or carefully protected.

#### NON-ACID TOILET BOWL DISINFECTANT / CLEANER DIRECTIONS:

Remove gross filth prior to disinfection.

#### From Concentrate:

Add  $\geq$  2.25 fl. oz. of the product to the bowl in order to achieve the same dilution as the 3 fl. oz. per gallon use-solution in a 96 fl. oz. standard toilet bowl and mix. Brush over exposed surfaces and under the rim, allow to stand for 10 minutes and flush. A pre-cleaning step is required prior to disinfection.

#### From Use Solution:

Empty toilet bowl or urinal and apply 3 fl. oz. per gallon use-solution to exposed surfaces and under the rim with a cloth, mop, sponge or mechanical spray. Brush or swab thoroughly. Let stand for 10 minutes and flush.

#### For Heavy Duty Use:

Empty toilet bowl or urinal and apply 4 fl. oz. per gallon use-solution to exposed surfaces including under the rim with a cloth, mop, sponge or sprayer. Brush or swab thoroughly. Let stand for 10 minutes and flush.

### SALON (BARBER) INSTRUMENTS AND TOOLS DISINFECTION (BACTERICIDE) / VIRUCIDE\* / FUNGICIDE DIRECTIONS:

Mix 3 fl. oz. of *Multi-Quat* per 1 gallon of water (or equivalent dilution) to disinfect hard, non-porous instruments and tools. Completely immerse combs, brushes, rollers, razors, scissors, blades, manicure and other salon instruments and tools for 10 minutes. A pre-cleaning step is required prior to disinfection. Rinse thoroughly and dry before use. Prepare a fresh solution daily or more often if the solution becomes visibly diluted, cloudy or soiled.

**Note:** Plastics may remain immersed until ready to use. Stainless steel shears and instruments must be removed after 10 minutes, rinsed, dried and kept in a clean, non-contaminated receptacle. Prolonged soaking may cause damage to metal instruments.

#### ULTRASONIC BATH DISINFECTANT DIRECTIONS:

Use *Multi-Quat* to disinfect hard, non-porous objects compatible with Ultrasonic cleaning units. Pour fresh use-solution of 3 fl. oz. of *Multi-Quat* per 1 gallon of water (or equivalent dilution) directly into bath chamber. A pre-cleaning step is required prior to disinfection. Place objects into unit and operate for a minimum of 10 minutes, according to manufacturer's use directions. Remove objects and rinse with sterile water (sterile water for injection), or allow to air dry. Prepare a fresh solution for each use.

#### WHIRLPOOL BATH DISINFECTION DIRECTIONS:

After using whirlpool unit, drain and fill with a use solution of 3 fl. oz. of *Multi-Quat* per 1 gallon of water to just cover the intake valve. Start the pump to circulate the solution. Wash down the unit sides, seat of the chair lift, and any related equipment with a clean swab, brush or sponge. Treated surfaces must remain wet for 10 minutes. After the unit has been thoroughly disinfected, drain the solution from the unit and rinse disinfected surfaces with fresh water. A pre-cleaning step is required prior to disinfection

#### POULTRY AND SWINE PREMISE DISINFECTION:

- 1. Remove all poultry and feeds from premises, vehicles and enclosures such as coops and crates.
- 2. 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.
- 3. Empty all troughs, racks and other feeding and watering appliances.
- 4. Thoroughly clean all surfaces with a detergent and rinse with water.
- 5. Saturate hard, non-porous surfaces with 12 fl. oz. per 4 gallons of water *Multi-Quat* solution for a period of at least 10 minutes. Wipe or allow to air dry.
- 6. 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. Wipe or allow to air dry.
- 7. Ventilate buildings, cars, trucks coops and other closed spaces. Do not house poultry or employ equipment until treatment has been absorbed, set or dried.
- 8. Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains and waterers with a detergent and rinse with potable water before reuse.

(See your Ecolab representative for specific recommendations for all cleaning and rinsing requirements.)

#### POULTRY HATCHERY DISINFECTION:

Use to treat hatchers, setters, trays, racks, carts, sexing tables, delivery trucks and other hard non-porous surfaces. Clean out any remaining eggs and chicks. Remove gross soils, such as litter, down, shell fragments or other hatching related debris. Empty all racks and other equipment. Thoroughly wash all surfaces, including floors, walls, conveyors, trays and water systems with a detergent. Rinse thoroughly with water. Apply 12 fl. oz. per 4 gallons of water solution of *Multi-Quat* with a mop, cloth, brush or coarse spray. Apply to hatchers, setters, trays, racks, sexing tables, delivery trucks and other hard surfaces. Wet surfaces and allow to remain wet for 10 minutes. Ventilate buildings and other closed spaces. Allow to dry before reintroducing eggs.

# (VETERINARY PRACTICE / ANIMAL CARE / ANIMAL LABORATORY / ZOO / PET SHOP / KENNELS DISINFECTION DIRECTIONS:)

For cleaning and disinfecting hard non-porous surfaces of equipment used for animal food or water; utensils, instruments, cages, crates kennels, stables and catteries.

#### OR

#### (FARM PREMISE DISINFECTION DIRECTIONS:)

- 1. Remove all animals and feed from premises, vehicles, and enclosures.
- 2. Remove all litter, droppings and manure from floors, walls and surfaces of facilities occupied or traversed by animals.
- 3. [For "Veterinary Practice...":Empty all feeding and watering appliances.] [For "Farm Premise Use" Empty all troughs, racks and other feeding and watering appliances.]
- 4. Thoroughly clean surfaces with soap or detergent by manual, foam, or spray application and rinse with water.
- 5. Saturate hard, non-porous surfaces with a use-solution of 12 fl. oz. of *Multi-Quat* per 4 gallons of water (or equivalent dilution) and allow to remain wet for a period of at least 10 minutes. Wipe or allow to air dry.
- 6. 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. Wipe or allow to air dry.
- 7. Ventilate buildings and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried.
- 8. [*For "Veterinary Practice…*" Thoroughly scrub all treated feeding and watering appliances with soap or detergent, and rinse with potable water before reuse. [*For "Farm Premise Use"*, Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.]

#### MUSHROOM FARM PREMISE USE:

**Site Preparation:** The first step in any on-going 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.

**General Disinfection:** For general disinfection, use 12 fl. oz. per 4 gallons of water. Apply use solution with a cloth, mop, sponge, disposable wipe, sprayer or by immersion to thoroughly wet the hard, non-porous surfaces. Treated surfaces must remain wet for 10 minutes. Wipe or allow to air dry. A precleaning step is required prior to disinfection Prepare a fresh solution for each use or more often if solution becomes visibly diluted, clouded or soiled.

**Cleaning:** For general cleaning, use 12 fl. oz. per 4 gallons of water. Apply use solution with a cloth, mop, sponge, disposable wipe, sprayer or by immersion to thoroughly wet the surfaces. Wipe or rinse with potable water or allow to air dry. A potable water rinse is required when used on food contact surfaces as a cleaner. For heavily soiled surfaces, pre-clean first. Prepare a fresh solution for each use or more often if solution becomes visibly diluted, clouded or soiled.

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

**VEHICLES:** Clean all vehicles including mats, crates, floors, doors, cabs and wheels with water and *Multi-Quat.* Use 12 fl. oz. per 4 gallons of water. Apply use solution to treat all vehicles. Leave treated surfaces wet for 10 minutes. Allow to air dry.

#### **DEODORIZING DIRECTIONS:**

This product deodorizes garbage storage areas, garbage bins, toilet bowls and any other hard nonporous surfaces in odor causing areas. Mix  $\frac{1}{2}$  fl. oz. per gallon of water and apply solution to surfaces. Thoroughly wet surfaces, allow to air dry.

**GENERAL CLEANING:** For general cleaning, use 12 fl. oz. per 4 gallons of water. Apply use solution with a cloth, mop, sponge, disposable wipe, sprayer or by immersion to thoroughly wet the surfaces. Wipe or rinse with potable water or allow to air dry. A potable water rinse is required when used on food contact surfaces as a cleaner. For heavily soiled surfaces, Pre-clean first. Prepare a fresh solution for each use or more often if solution becomes visibly diluted, clouded or soiled.

**PRE-PASSIVATION CLEANING:** For cleaning prior to passivation, use up to a 3% use solution (up to 4 fl. oz. per gallon of water). Apply use solution manually or by mechanical application to thoroughly clean surfaces. Rinse with potable water or follow with detergent cleaning step. Can capture and re-use solution for additional cleaning if desired.

#### NON-FOOD CONTACT SURFACE SANITIZING:

Add 0.34 – 0.68 fl. oz. of *Multi-Quat* per 1 gallon of water (200 – 400 ppm active quat) to sanitize precleaned, hard, non-porous non-food contact surfaces against *Staphylococcus aureus* and *Enterobacter aerogenes.* Apply sanitizer use-solution with a cloth, mop, sponge, disposable wipe, sprayer or by immersion. For sprayer applications, use a coarse spray device. Spray 6-8 inches from surface. Do not breathe spray. Treated surfaces must remain wet for 5 minutes. Wipe dry with a sponge, mop, disposable wipe, or cloth or allow to air dry.

#### TO SANITIZE BARBER / SALON INSTRUMENTS AND TOOLS:

Immerse pre-cleaned hard, non-porous barber / salon instruments and tools (such as combs, brushes, razors, scissors, blades and manicure instruments) in a use-solution of 0.34 - 0.68 fl. oz. of *Multi-Quat* per 1 gallon of water (or equivalent dilution) for at least 5 minutes. Rinse thoroughly and dry before use. Prepare a fresh solution daily or more often if solution becomes visibly diluted, 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.

#### TO DEODORIZE LAUNDRY (AGAINST ODOR CAUSING BACTERIA):

Use 4 fl. oz. per 100 pounds of dry weight fabric. Dilute the appropriate amount of *Multi-Quat* in 1 to 2 gallons of water then add to the washwheel in the final rinse. Re-treat fabric after each washing. For residual bacteriostatic activity against odor causing bacteria, conditions of high relative humidity or wet contamination are required. Laundered fabric may also be treated by soaking.

#### ENTRYWAY SANITIZING SYSTEMS:

To prevent cross-contamination on treated surfaces from area to area, set the system to deliver sanitizing solution at 0.68 - 2.04 fl. oz. per gallon of water (400-1200 ppm active quat). The foam (or spray) 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.

#### SHOE BATH SANITIZER DIRECTIONS:

To prevent cross-contamination on treated surfaces (into animal areas) (and the packaging and storage areas of food plants), shoe baths containing one inch of freshly made solution must be placed at all entrances to buildings and hatcheries. Scrape waterproof work boots (shoes) and place in solution of 0.34 fl. oz. of *Multi-Quat* per 1 gallon of water (200 ppm)(or equivalent dilution) for 60 seconds prior to entering area. (If there is a heavy soil load or excessive traffic place work (boots) (shoes) in a use-solution of 0.68 - 1.4 fl. oz. per 1 gallon of water (400 - 800 ppm active quat)(or equivalent dilution) for 60 seconds prior to entering area). Change the solution in the bath daily or more often if solution appears diluted or soiled.

#### SHOE FOAM SANITIZER DIRECTIONS:

*Multi-Quat* can be used to prevent cross-contamination on treated surfaces into animal areas and packaging and storage areas of food plants. Apply a foam layer approximately 0.5 to 2 inches thick

made from a solution of 1.4 - 2 fl. oz. per 1 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 60 seconds prior to entering area. Foam area must be washed and replaced daily or when it appears dirty.

### (Note to reviewer: The following are options for presenting the organism information on the label for Food Contact Surface Sanitizing)

*Multi-Quat* can be used to sanitize hard, non-porous food contact surfaces such as tables, counters, utensils and food processing equipment.

*Multi-Quat* is an effective sanitizer against *Escherichia coli* (ATCC 11229) and *Staphylococcus aureus* (ATCC 6538) on food contact surfaces when used at 0.26 – 0.68 fl. oz. per 1 gallon of 400 ppm hard water (150 ppm to 400 ppm active quat).

*Multi-Quat* is an effective sanitizer against *Escherichia coli* (ATCC 11229), *Staphylococcus aureus* (ATCC 6538), *Campylobacter jejuni* (ATCC 33291), *Escherichia coli* O157:H7 (ATCC 35150), *Klebsiella pneumoniae* (ATCC 4352), *Listeria monocytogenes* (ATCC 19117), *Salmonella enterica* (ATCC 10708), *Shigella sonnei* (ATCC 11060), *Yersinia enterocolitica* (ATCC 23715) and *Enterobacter sakazakii* (ATCC 12868) on food contact surfaces when used at 0.34 – 0.68 fl. oz. per 1 gallon of 500 ppm hard water (200 ppm to 400 ppm active quat).

# TO SANITIZE FOOD CONTACT SURFACES, FOOD PROCESSING EQUIPMENT AND OTHER HARD SURFACES (IN FOOD PROCESSING LOCATIONS, DAIRIES, OR RESTAURANTS):

Use *Multi-Quat* to sanitize pre-cleaned hard, non-porous surfaces of food processing equipment, dairy equipment, food utensils, dishes, silverware, glasses, sink tops, countertops, refrigerated storage areas and display equipment and other hard non-porous surfaces in federally inspected meat and poultry plants or restaurants. Prior to application, remove gross food particles and soil by a pre-flush, pre-scrape or when necessary, a pre-soak. 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. Apply a use-solution of 1.04 - 2.72 fl. oz. of *Multi-Quat* per 4 gallons of 400 ppm hard water (150 - 400 ppm active quat) or 1.36 - 2.72 fl. oz. of *Multi-Quat* per 4 gallons of 500 ppm hard water (200 - 400 ppm active quat). Expose all surfaces to the sanitizing solution for a period of not less than 1 minute. Allow equipment to drain thoroughly and air dry.

In dairy processing facilities and restaurants in Wisconsin, clean equipment with a good detergent and follow with a potable water rinse, then rinse equipment with a sanitizing solution of 1.36 - 2.72 fl. oz. of *Multi-Quat* per 4 gallons of 500 ppm hard water (200 - 400 ppm active quat).

**NOTE: FOR MECHANICAL OPERATIONS:** A prepared use solution may not be reused for sanitizing, but may be reused for other purposes such as cleaning.

**FOR MANUAL OPERATIONS**: Prepare a fresh sanitizing solution as soon as it becomes diluted or soiled.

# SANITIZING HARD, NON-POROUS, NON-EDIBLE OUTSIDE SURFACES OF AIRTIGHT, SEALED PACKAGES CONTAINING FOOD OR NON-FOOD PRODUCTS

*Multi-Quat* may be used as a final sanitizing rinse for hard, non-porous non-edible outside surfaces of airtight, sealed packages containing food or non-food products at a use-solution of 1.04 – 2.72 fl. oz. of *Multi-Quat* per 4 gallons of 400 ppm hard water (150 - 400 ppm active quat) or 1.36 – 2.72 fl. oz. of *Multi-Quat* per 4 gallons of 500 ppm hard water (200 - 400 ppm active quat. The treated hard, non-porous, non-edible packaging, such as food wraps and meat casings, must be removed and discarded before packaged food products are further processed or consumed. All surfaces must be exposed to the sanitizing solution for a period of not less than 1 minute. Drain thoroughly. No rinse necessary. This is not to be used on porous surfaces.

#### SANITIZING SANITARY FILLING EQUIPMENT:

Wash equipment with a compatible detergent and rinse with potable water prior to sanitizing. Prepare a use-solution of 1.04 - 2.72 fl. oz. of *Multi-Quat* per 4 gallons of 400 ppm hard water (150 - 400 ppm active quat) or 1.36 - 2.72 fl. oz. of *Multi-Quat* per 4 gallons of 500 ppm hard water (200 - 400 ppm active quat) for final washer and rinser applications. Allow surfaces to remain wet for at least 60 seconds. Drain thoroughly and allow to air dry before reuse. Do not rinse.

#### SANITIZING BEER FERMENTATION AND STORAGE TANKS:

Wash equipment with a compatible detergent and rinse with potable water prior to sanitizing. Prepare a use-solution of 1.04 - 2.72 fl. oz. of *Multi-Quat* per 4 gallons of 400 ppm hard water (150 - 400 ppm active quat) or 1.36 - 2.72 fl. oz. of *Multi-Quat* per 4 gallons of 500 ppm hard water (200 - 400 ppm active quat) for mechanical or automated systems. Allow surfaces to remain wet for at least 60 seconds. Drain thoroughly and allow to air dry before reuse. Do not rinse.

#### **RESTAURANT AND BAR RINSE - SANITIZING EATING AND DRINKING UTENSILS**

- 1. Scrape and pre-flush utensils to remove excess soil.
- 2. Wash with good detergent or compatible cleaner (see your Ecolab representative for a recommendation).
- 3. Rinse with potable water.
- 4. Sanitize in a solution of 0.26 0.68 fl. oz. of *Multi-Quat* to 1 gallon of 400 ppm water (150 400 ppm active quat).
- 5. Drain and air dry.

#### FOR CONTINUOUS TREATMENT OF 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. During processing, apply *Multi-Quat* at a 150 to 400 ppm quat level to conveyors with MIKRO MASTER or other suitable feeding equipment. Controlled volumes of sanitizer are applied to return portion of conveyor through nozzles so located as to permit maximum drainage of sanitizer from equipment and to prevent puddles on top of belt. During interruptions in operation, coarse spray equipment, peelers, collators, slicers and saws with MIKRO MASTER dispensed *Multi-Quat* solution of 150 to 400 ppm quat. Conveyors and other equipment must be free of product when applying this coarse spray. Use 200 ppm to 400 ppm quat level in Wisconsin dairy processing facilities.

#### SANITIZING SHELL EGGS INTENDED FOR FOOD:

To sanitize previously cleaned food-grade eggs in shell egg and egg product processing plants, spray with a solution of 1.04 - 2.72 fl. oz. of *Multi-Quat* in 4 gallons of warm water (150 to 400 ppm). The solution must be warmer than the eggs, but not to exceed  $130^{\circ}$ F. Wet eggs thoroughly and allow to drain. Eggs sanitized with *Multi-Quat* shall be subjected to a potable water rinse only if broken immediately for use in the manufacture of egg products. Eggs must be reasonably dry before casing or breaking. Do not reuse solution for sanitizing eggs.

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

#### SANITIZING – NON-POROUS GLOVED HANDS:

To prevent cross-contamination on treated surfaces into animal areas and the packaging and storage areas of food plants, dip, soak or spray pre-washed (plastic, latex or other synthetic rubber) gloved hands so that there is enough sanitizing solution to cover the gloved area. For sprayer applications, use a coarse spray device and spray the glove surfaces until thoroughly wetted. Do not breathe spray. **Do not let sanitizing solution come in contact with exposed skin.** Make up the sanitizing solution by adding 1.04 - 2.72 fl. oz. of product per 4 gallons of water (or equivalent use dilution)(150-400 ppm active quat). Dip, soak or spray in solution and allow gloved hands to remain wet for at least 60 seconds. Allow them to air dry. No potable water rinse is allowed. Change the sanitizing solution at least daily or when solution appears dirty.

#### FOGGING – NON-PUBLIC HEALTH

(This product can be applied by fogging to control the growth of non-public health spoilage and decay causing bacteria on hard, non-porous surfaces microorganisms that can cause decay and/or spoilage in dairies, beverage and food processing plants including meat and poultry

### processing facilities. All surfaces must be pre-cleaned and disinfected in accordance with label directions prior to fogging.)

# DIRECTIONS FOR FOGGING (in Dairies, Beverage and Food Processing Plants (including meat and poultry processing facilities))

Prior to fogging, food products and packaging material must be removed from the room or carefully protected. The room or building must be vacant of all personnel during <del>or</del> and within two hours of the fogging. Calculate the volume of the room to determine volume of solution needed to fog the room <del>Fog</del> desired areas using (one quart per 1000 cu. ft. of room area). Prepare with a solution containing 4 fl. oz. per 1 gal. of water (in up to 200 ppm hard water) and fog using a mechanical fogging apparatus. Fog product for length of time necessary to fill room based on fogging apparatus manufacturer directions. Surfaces must remain undisturbed for 5 minutes [after room fill is achieved] before initiating aeration of the room.

Vacate the area of all personnel Do not enter the treated area for a minimum of 2 hours after fogging is completed and a minimum of 8 air exchanges (ACH).-per hour in the facility. If the room or building must be entered prior to complete aeration, the individual must wear a self-contained respirator approved by NIOSH/MSHA, goggles, long sleeves, and long pants.

The fog generated is irritating to the eyes, skin and mucous membranes. Wear a dust mist respirator when mixing the use solution and pouring it into the mechanical fogging apparatus. All food contact surfaces must be thoroughly rinsed with potable water prior to sanitizing with an EPA approved food contact sanitizer.

# NON-PUBLIC HEALTH FOGGING IN HATCHERY ROOMS, DEVICE INCUBATORS, AND HATCHERS:

Prior to fogging, remove all animals and feed from premises, vehicles and enclosures. Remove all litter and manure from floors, walls, and surfaces of the room to be treated. Empty all troughs, racks and other feeding and watering appliances. Do not house livestock or employ equipment until treatment has been absorbed or dried. **Do not allow people or animals to contact or breathe this saturate for a minimum of 2 hours**. Thoroughly clean all surfaces with soap or detergent and rinse with water. Fogging is to be used in addition to acceptable manual cleaning and disinfecting of room and machine surfaces.

**For Hatchery Rooms:** Thoroughly clean all surfaces with soap or detergent and rinse with water. Calculate the volume of the room to determine volume of solution needed to fog the room <del>Fog desired</del> areas using (one quart per 1000 cu. ft. of room area). Prepare with a solution containing 4 fl. oz. per 1 gal. of water (in up to 200 ppm hard water) and fog desired areas using a mechanical fogging apparatus. Thoroughly scrub all treated surfaces with soap or detergent and rinse with potable water before reuse. **For Device Incubators and Hatchers:** 

Calculate the volume of the room to determine volume of solution needed to fog the room Fog desired areas using (one quart per 1000 cu. ft. of room area). Prepare with a solution containing 4 fl. oz. per 1 gal. of water (in up to 200 ppm hard water) and fog desired areas using a mechanical fogging apparatus. Saturate by dipping, soaking, fogging or spraying (as appropriate) this mixture into setters and hatchers immediately after transfer. Repeat daily in setters and every 12 hours in hatchers. Discontinue hatcher treatments at least 24 hours prior to pulling the hatch. It is acceptable to saturate setters and hatchers with a 4 fl. oz. per gallon solution of *Multi-Quat* on an hourly or every other hour basis. If this is done, saturate for 30-90 seconds once per hour or once every two hours. When the saturation process is completed, ventilate buildings and other closed spaces. Thoroughly scrub all treated surfaces with soap or detergent and rinse with potable water before reuse.

#### **STORAGE & DISPOSAL**

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL. **Pesticide Storage:** Store in original container in areas inaccessible to children. Do not store on side. Avoid creasing or impacting of side walls.

**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 Handling and Disposal:**

(2.5 gal. bladder in box) Nonrefillable container. Do not reuse or refill this container. Remove empty bladder from outer corrugated box. Triple rinse as follows: Fill container ¼ full with water and recap. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat procedure two more times. Then offer box and bladder for recycling or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

(For containers 5 gallons or less.) Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Fill container ¼ full with water and recap. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat procedure two more times. Then offer for recycling or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

(For containers >5-55 gallons.) Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Fill the container ¼ full with water. Replace and tighten closures. 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 onto its other end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Then offer for recycling or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

(Bulk containers/totes) Verify that the tote is empty. Do not rinse or clean. Seal tote and contact Ecolab for return.

(Returnable containers/drums/totes) Verify that the returnable (container)(drum)(tote) is empty. Do not rinse or clean. Seal and contact Ecolab for return.

(Sealed Container): (Non-refillable sealed container is designed to reduce worker exposure to the concentrate. This container cannot be triple rinsed because it is a closed container. The following text will be used on this container.) Non-refillable sealed container. Do not reuse or refill this container. Wrap empty container and put in trash.

### (Note to reviewer: The following can be used for plastic or metal 55 gallon sizes and smaller – to be refilled only by customer for reuse of Multi-Quat)

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before refilling is the responsibility of the refiller. Cleaning the container before final disposal is the responsibility of the person disposing of the container.

(Plastic or Metal Containers) To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously, and dispose of rinsate consistent with pesticide disposal instructions. Repeat this rinsing procedure two more times. Then offer for recycling or reconditioning. If not available, puncture and dispose in sanitary landfill. If not triple rinsed, these containers are acute hazardous wastes and must be disposed in accordance with local, state, and federal regulations.

EPA Reg. No. 1677-198 EPA Est. 303-IN-1 (L), 1677-CA-2 (R), 1677-GA-1 (M), 1677-IL-2 (J), 1677-MN-1 (P), 1677-TX-1 (D), 1677-WV-1 (V), 5389-NC-1 (G) The superscript refers to the first letter of the date code.

(Made in United States of America) (Made in USA)

Ecolab Inc. 1 Ecolab Place St. Paul, MN 55102

Net Contents:	1 gal (3.78 L)
	2.5 gal (9.45 L)
	5 gal (18.9 L)
	55 gal (208.8 L)
	300 gal tote

This product may be patented | Ce produit peut être breveté | Este producto puede ser patentado: www.ecolab.com/patents

(Optional marketing graphic & language: )





Disinfectant/Sanitizer Desinfectante

- <product name> is a blend of quaternary ammonium compounds
- 5<sup>th</sup> generation quaternary ammonium food contact hard surface sanitizer
- Convenient to use easily proportioned through sprayers or injection meters
- Effective against bacteria listed on product label that may cause odor or spoilage problems within meat and poultry processing plants
- Effective against organisms listed on product label typically encountered in the processing of readyto-eat meats
- Effectively controls odors.
- EPA registered as a no-rinse sanitizer for use on hard food contact surfaces at a concentration of 150
  - 400 ppm active quaternary
- Fifth generation quat is low foaming and has increased tolerance to soil loading and hard water conditions
- Formula ingredients contain no phosphorus
- Formulated for use in dairy processing facilities
- Formulated for use in food processing facilities
- Formulated for use in meat and poultry processing facilities
- Helps enhance food safety when used in a total Ecolab product and professional services program
- Non-corrosive to hard surfaces at recommended use dilution
- Promotes quality assurance
- Saves money
- Saves time and labor
- The non-corrosive formula enables its use on hard, non-porous food contact surfaces as a sanitizer
- Useful for a wide variety of applications as listed on the product label
- Wide range of use in both raw and ready-to-eat processing facilities

#### SECONDARY/USE DILUTION CONTAINER LABEL

(Note to reviewer: This secondary/use dilution container label will be used when the product is diluted at 4 fl. oz. or less per gallon of water. Use dilution is to be prepared by end user. This secondary/use dilution label will only be used by the end user and will not be sold or distributed. When this product is diluted in accordance with the directions on this label, the dilutions container must bear the following statements: )

Multi-Quat (Concentrate Ingredient Statement)	
ACTIVE INGREDIENTS: Alkyl (C <sub>14</sub> , 50%; C <sub>12</sub> , 40%; C <sub>16</sub> , 10%) dimethyl benzyl ammonium chloride	
The product in this container must be diluted at the use rate of 4 fl. oz. or less per gallon of water as directed on the pesticide product label.	
(Diluted product in this container is fl. oz. per gallon of water)	
KEEP OUT OF REACH OF CHILDREN	
PRECAUTIONARY STATEMENTS	
<b>HAZARDS TO HUMANS AND DOMESTIC ANIMALS</b> Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. After product has been diluted according to label directions, PPE is not required.	
(FIRST AID 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. Call a poison control center or doctor for treatment advice.)	
FOR EMERGENCY MEDICAL INFORMATION, CALL TOLL-FREE 1-800-328-0026 OUTSIDE NORTH AMERICA, CALL 1-651-222-5352 Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
Follow the directions for use listed on the pesticide label when applying this product.	
Use solution prepared by end user Not for sale or distribution [Do Not Drink]	
EPA Reg. No. 1677-198	