

1677-144

3-21-2003

1/7



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

MAR 21 2003

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Brian Brosdahl
Ecolab Inc.
370 Wabasha Street N.
St. Paul, MN. 55102

SUBJECT: December 19, 2002 Amendment
Quorum Green/Verde
EPA Registration 1677-144

Dear Mr. Brosdahl:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. Please change Inert Ingredients to read Other Ingredients. In summary, your request to add directions for Sanitization of Utensils and a duplicate Note are acceptable.

Two copies of the finished labeling must be submitted for the file. A copy of your label is enclosed. If you have any questions regarding this letter, please contact Tom Luminello of my staff at (703) 308-8075.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Tom Luminello".

Robert S. Brennis
Product Manager (32)
Regulatory Management Branch II
Antimicrobial Division (7510-C)

Enclosure

2/17

QUORUM GREEN/VERDE

CHLORINATING BACTERICIDE, DISINFECTANT & DEODORANT

LIQUID SANITIZER FOR UTENSILS, LAUNDRY, AND SHAKE/SOFT SERVE MACHINES

Active Ingredient:

Sodium Hypochlorite 5.25%

Other

Inert Ingredients: 94.75%

Total: 100.00%

KEEP OUT OF REACH OF CHILDREN WARNING

ACCEPTED
WITH COMMENTS
IN EPA Letter dated

FOR INDUSTRIAL AND INSTITUTIONAL USE ONLY
DO NOT SPILL Quorum Green/Verde ON CLOTHING

MAR 21 2003

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: Causes eye and skin irritation. Do not get in eyes, on skin, or on clothing.
Harmful if swallowed.

1677-144

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 a 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

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

PHYSICAL AND CHEMICAL HAZARDS:

Strong oxidizing agent: Mix only with water according to label directions. Mixing this product with gross filth such as feces, urine, etc., or with ammonia, acids, detergents or other chemicals may release hazardous gases irritating to eyes, lungs and mucous membranes.

ENVIRONMENTAL HAZARDS

(5 gallons and larger): This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public 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

3/7

local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

DIRECTIONS FOR USE

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

To sanitize using SmartShape™ dispenser for sink sanitizing and spray bottles, have dispenser adjusted to provide 100 ppm available chlorine. Sanitizing solution can be prepared by mixing a solution of ¼ fl. oz. Quorum Green/Verde per 1 gallon of water to provide 100 ppm available chlorine.

Note: This product degrades with age. Use a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES (MEAT & FOOD PLANTS)

Before treating utensils and equipment to kill many (or most) bacteria, rinse thoroughly with cold water, and then wash with warm solution of cleanser followed by a thorough potable water rinse. Apply Quorum Green/Verde to all utensils just before using. Allow 2 minutes exposure time.

FOOD PLANT EQUIPMENT: Flow Method: Prepare 100 ppm in weight vat and pump through filler. Drain solution through valves. Test solution to maintain strength above 50 ppm. Coarse Spray Method: Prepare 200 ppm solution and coarse spray surfaces.

BOTTLES: To treat to kill many (or most) bacteria. Hand Washed: Wash using hand or motor driven brush, rinse thoroughly with potable water, and then immerse in 200 ppm. Remove, invert in cases to drain and dry. Machine Washed: Use Quorum Green/Verde for chlorinating device and adjust dispensing mechanism so that the final rinse water contains greater than 50 ppm available chlorine. Test rinse water frequently to determine if this strength is maintained. Allow 2 minutes exposure time.

DISINFECTION OF EMERGENCY DRINKING WATER

Farms, Institutions, Camps, Home Water Supplies: To disinfect water whose source is from unprotected supplies, such as cisterns, wells, springs and lakes, add 1/4 ounce Quorum Green/Verde to each 100 gallons of water or two drops to each gallon of water and let it stand for 15 to 30 minutes. This is a strength of about 1 part available chlorine per million parts water. The water may be kept in the refrigerator for cooling at the same time if desired.

POULTRY USES

Drinking Water: For founts, use 25 ppm. For open vessels, use 25 ppm. Change water daily. Place founts where they will not be contaminated with droppings.

FOOD EGG SANITIZATION

Thoroughly clean all eggs. Thoroughly mix 5 ounces of this product with 10 gallons of warm water to produce 200 ppm available chlorine solution. The sanitizer temperature should not exceed 130°F. Coarse spray the warm sanitizer so that the eggs are thoroughly wetted. Allow

4/7

the eggs to thoroughly dry before casing or breaking. Do not apply potable water rinse. The solution should not be re-used to sanitize eggs.

FRUIT AND VEGETABLE WASHING

Thoroughly clean all fruits and vegetables in a wash tank. Thoroughly mix 10 ounces of this product in 200 gallons of water to make a sanitizing solution of 25 ppm available chlorine. After draining the tank, submerge fruits or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution. Coarse spray rinse fruits or vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging.

SANITIZING CIP MILK LINES

After proper cleaning and in morning before use, circulate 200 ppm for at least 10 minutes. Use enough solution to completely fill all pipe lines in the circuit. Allow equipment to drain thoroughly. No potable water rinse required. Do not re-use solutions for sanitizing.

TREATMENT OF POTABLE WATER IN MEAT PROCESSING PLANTS

For processing water in meat plants, use chlorine level up to 5 ppm available chlorine (1/4 oz. product/25 gal. water) and for processing water in poultry plants, use chlorine level up to 20 ppm available chlorine (1/4 oz. product/7-1/2 gal. water).

BEVERAGE PLANT USES

Syrup System: First clean thoroughly as recommended, with warm water, then just before use, treat with Quorum Green/Verde. Prepare 200 ppm in syrup jars and flow through equipment to bottler for at least 1 minute. Allow equipment to drain thoroughly before use. No potable water rinse is required.

TAVERNS AND RESTAURANTS

1. Scrape and pre-wash utensils and glasses.
2. Wash with good detergent or compatible cleaner.
3. Rinse with clean water.
4. Sanitize in a solution of 1 oz. of this product per 2 gallons water (200 ppm). Immerse all utensils for at least 2 minutes or for contact time specified by governing sanitary code.
5. Place sanitized utensils on a rack or drainboard to air dry.

Approved under the regulation of Wisconsin State Board of Health.

SANITIZING HANDS

A 50 ppm available chlorine hypochlorite solution may be used for sanitizing hands. Hands must be washed and thoroughly rinsed prior to sanitizing with this compound. Hands need not be rinsed following sanitizing.

LIQUID SANITIZER FOR UTENSILS

Sanitizing solution can be prepared by mixing a solution of 1/4 fl. oz. Quorum Green/Verde per 1 gallon of water to provide 100 ppm available chlorine.

DILUTION TABLE

PPM AVAILABLE
CHLORINE

AMOUNT OF Quorum Green/Verde

100

1/2 ounce Quorum Green/Verde per 2 gallons water

5/7

200

1 ounce Quorum Green/Verde per 2 gallons water

KITCHEN UTENSILS AND EQUIPMENT

Scrape or rinse all loose food soils, then brush wash with a suitable detergent. Rinse thoroughly with clean, hot water. Fill a clean sink approximately half full with sanitizing solution. Immerse utensils or equipment for 1-2 minutes. Remove and drain. **DO NOT RINSE.** Place on a clean surface to dry. Follow local health ordinances.

Note: To sanitize previously cleaned stationary equipment and other hard, non-porous food-contact surfaces, flood surface with sanitizing solution, or apply with a clean cloth, sponge or spray, making sure to completely wet all surfaces for at least 1 minute. Let air dry. Follow local health ordinances.

Note: Store clean wiping cloths in a freshly made Quorum Green/Verde solution to keep them in a sanitary condition between uses.

LAUNDRY:

To bleach and sanitize white and colorfast fabrics in washing machine: 1 cup Quorum Green/Verde per load for conventional washing machine; ½ cup for front-load automatic. Add to pre-soak, wash water or first rinse. If clothes are in machine, dilute Quorum Green/Verde in 1 quart water before adding.

Note: Store clean wiping cloths in a freshly made Quorum Green/Verde solution to keep them in a sanitary condition between uses.

CHEMICAL SANITIZING WAREWASHING:

Utensil Sanitizer and Destainer for Mechanical Warewash Machines

For sanitizing in low-temperature warewashing machines, inject Quorum Green/Verde into the final rinse water at a concentration of 100 ppm available chlorine. Do not exceed 200 ppm. Air dry. To insure that available chlorine concentration does not fall below 50 ppm, periodically test the rinse solution with a suitable test kit and adjust the dispensing rate accordingly.

TABLE WARE SANITIZER AND DESTAINER FOR MECHANICAL SPRAY WAREWASHING MACHINES:

For sanitizing tableware in low-temperature warewashing machines, inject Quorum Green/Verde into the final rinse water at a concentration of 100 ppm available chlorine. Do not exceed 200 ppm. Air dry.

To insure that available chlorine concentration does not fall below 50 ppm, periodically test the rinse solution with a suitable test kit and adjust the dispensing rate accordingly. Consult your local Ecolab Specialist for technical assistance and further information on sanitizing tableware in warewashing machines.

FORMULATED FOR USE WITH ECOLAB AUTOMATIC DISPENSING SYSTEMS.
DO NOT USE ON SILVER AND SILVER PLATE.

6/7

Note: FOR MECHANICAL OPERATIONS prepared use solutions may not be re-used for sanitizing but may be re-used for other purposes such as cleaning.

SHAKE AND SOFT SERVE MACHINES CLEANING PROCEDURE:

1. Remove mix from the machine. If local health codes permit rerun, place mix in a sanitized rerun container and store in refrigerated cooler.
2. Rinse interior of machine by activating the "Wash" cycle and drawing through 2 gal. (7.6 L) of cool water. Repeat the rinsing procedure with lukewarm water until the water runs clear. Turn the machine to the "Off" position.
3. Prepare a suitable cleaning solution.
4. Clean the interior of the machine by activating the "Wash" cycle and filling the cylinder and feed tubes with the cleaning solution. Turn machine to the "Off" position. Brush clean the feed tube and inlet hole. With the cleaning solution in the cylinder, reactivate "Wash" cycle and allow to remain in for 5 minutes.
5. Drain the solution from the machine. Turn machine to the "Off" position.
6. Rinse by repeating Step #2 with Quorum Green/Verde solution.
7. Remove and completely disassemble all machine parts.
8. Brush wash all disassembled parts in a suitable detergent in a clean sink.
9. Rinse thoroughly under clean running water.
10. Sanitize parts by immersing in a fresh Quorum Green/Verde solution for 1-2 minutes.
11. Remove parts and allow to air dry.
12. Repeat the cleaning procedure for machines with two freezing cylinders.

SHAKE AND SOFT SERVE MACHINES SANITIZING PROCEDURE:

1. Following manufacturer's instructions, reassemble the machine.
2. Sanitize the interior of the machine by activating the "Wash" cycle and filling the cylinder and feed tubes with Quorum Green/Verde solution. Allow the "Wash" cycle to run for 5 minutes.
3. Drain the solution from the machine. Turn machine to the "Off" position.
4. Repeat the sanitizing procedure for machines with two cylinders. **DO NOT RINSE.**

Note: Consult local ordinances for possible variation in procedures.

7/7

STORAGE & DISPOSAL

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.

Pesticide Storage: Store this product in a cool, dry area, away from direct sunlight and heat to avoid deterioration. In case of spill, flood the area with large quantities of water.

Pesticide Disposal: Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer.

Container Disposal:

(1 gal.): Do not reuse empty containers. Wrap container and put in trash.

(greater than 1 gallon): Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Tote): Verify that the tote is empty. Do not rinse or clean. Seal tote and contact Ecolab for return.

(sealed container): Dispense product through the appropriate Ecolab equipment until container is empty. Dispose of empty container in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Net Contents:	1 U.S. Gal. (3.78 L)
	5 U.S. Gals. (18.9 L)
	50 U.S. Gals. (189 L)
	300 U.S. Gals. (1134 L) - tote

EPA Reg. No. 1677-144

EPA Est.: 1677-IL-2 (J), 1677-NJ-1 (W), 1677-TX-1 (D), 1677-GA-1 (M), 1677-CA-1 (S), 1677-MN-1 (P), 1677-PR-1 (B), 11321-CA-1 (C), 1677-OH-1 (H), 1677-CA-2 (R), 1677-MO-1 (K), 1677-WV-1 (V).

Superscript refers to first letter of date code

Manufactured by:
Ecolab Inc.
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St. Paul, MN 55102