

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

July 20, 2017

Wendy A. McCombie Agent for Solvay Chemicals Inc. Solvay Chemicals Inc. 3737 Buffalo Speedway Suite 800 Houston, TX 77098

Subject: Label Amendment – Add uses to label Product Name: Proxitane EQ Liquid Sanitizer EPA Registration Number: 68660-4 Application Date: March 20, 2017 Decision Number: 528837

Dear Ms. McCombie:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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with FIFRA section 6. If you have any questions, you may contact Joe Daniels at (703) 347-8669 or via email at daniels.joseph@epa.gov.

Sincerely,

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Zeno Bain, Acting Product Manager 33 Regulatory Management Branch I Antimicrobials Division (7510P) Office of Pesticide Programs

Enclosure

## ACCEPTED

Jul 20, 2017 Under the Federal Insecticide, Fungicide

and Rodenticide Act as amended, for the

68660-4

pesticide registered under

EPA Reg. No.

## **PROXITANE<sup>®</sup> EQ Liquid Sanitizer**

ACTIVE INGREDIENT:	
Hydrogen Peroxide	23.0%
Peroxyacetic Acid	5.3%
Other Ingredients:	<u>71.7%</u>
TOTAL:	100.00%

## DANGER STRONG OXIDING AGENT KEEP OUT OF REACH OF CHILDREN

## **FIRST AID**

CALL THE POISON CONTROL CENTER OR PHYSICIAN IMMEDIATELY FOR	
	EMERGENCY MEDICAL INFORMATION.
IF IN EYES:	- Hold eyelids open and rinse slowly and gently with water for 15 –
	20 minutes.
	- Remove contact lenses, if present, after the first five minutes,
	then continue rinsing eye.
	- Call a poison control center or doctor for treatment advice.
IF ON SKIN:	- 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 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 treatment advice.
IF	- Call a poison control center or doctor immediately for treatment
SWALLOWED:	advice.
	- Promptly drink large quantities of water.
	- 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.
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate the use of gastric lavage.	
<b></b>	

EPA Reg. No. 68660-4

EPA Est. No. 60156-IL-001

Net Wt:[<u>enter weight here]</u> pounds. Lot No.:[<u>enter lot here]</u> Weight per Gallon: 9.2 lbs.

## PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER: CORROSIVE Causes irreversible eye damage. Causes skin burns. Do not get in eyes, on skin, or clothing. May be fatal if swallowed or inhaled. Do not breathe vapor or spray mist. Wear a respirator with an organic vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P, or HE prefilter. Consult the MSDS for information about respirators and cartridges that have been tested and shown to be effective in removing hydrogen peroxide and peracetic acid from air. Wear chemical goggles, rubber gloves, and protective clothing when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse.

## PHYSICAL AND CHEMICAL HAZARDS

Strong oxidizing agent. Corrosive. Do not use in concentrated form. Mix only with water according to label instructions. Contact of concentrate with other sanitizers, cleaners or other material may cause fire.

## ENVIRONMENTAL HAZARDS

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.

## STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL. **PESTICIDE STORAGE**: Store in original vented container in a dry location away from heat and out of direct sunlight. In case of fire involving product, use water. In case of large quantities of spilled material, dike with sand or earth. Dilute with large quantities of water.

**PESTICIDE DISPOSAL**: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide spray mixture, or rinsate, is a violation of federal law. For additional information, refer to the product Material Safety Data Sheet.

## CONTAINER DISPOSAL:

Triple rinse container (or equivalent) promptly after emptying

<u>For containers less than 5 gallons:</u> Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

<u>For containers 5 to 55 gallons:</u> Empty the remaining contents into application equipment or mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip the 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 Shake for 10 seconds. Empty rinsate into application equipment or mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

<u>For containers greater than 55 gallons:</u> 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 or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

<u>Stainless Steel Containers (300 gallon tote, 4,500 gallon tank trucks, and 20,000 gallon railcars)</u>: Return for reuse. Refill the container with pesticide only. Do not reuse this container for other purposes.

<u>Plastic Containers (300 gallon tote, 30, and 55 gallon drums)</u>: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent). Offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. <u>Plastic containers (1 pint, 1 quart, and 1, 5, Nonrefillable container</u>. Do not reuse or refill this container. Triple rinse (or equivalent). Offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

<u>Glass Containers (1 pint, 1 quart, and 1 gallon)</u>: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent). Then dispose of in a sanitary landfill or by other approved state and local procedures.

## **DIRECTIONS FOR USE**

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

## **SANITIZATION**

Proxitane® EQ Liquid Sanitizer is for use in circulation cleaning and institutional/ industrial sanitizing of pre-cleaned hard nonporous food contact surfaces and equipment such as tanks, pipelines, evaporators, fillers, pasteurizers and aseptic equipment.

The main areas of use include:

-Dairies, wineries, breweries and beverage plants

-Meat and meat products processing/packing plants

- -Milk and dairy processing/packing plants
- -Egg processing/packing plants

-Seafood and poultry processing/packing plants

-Vegetable processing plants

-Eating establishments

This product has demonstrated greater than 99.999% reduction of *Staphylococcus aureus* and *Escherichia coli* in the AOAC Germicidal and Detergent Sanitizing Action of

Disinfectants study.

## SANITIZING PRE-CLEANED HARD NON-POROUS FOOD CONTACT SURFACES SUCH AS TANKS, PIPING SYSTEMS, PUMPS

Clean equipment such as tanks immediately after use:

1. Remove gross food particulate matter and soil by a warm water flush, or pre-flush, or a pre-scrape and, when necessary, pre -soak treatment.

2. Thoroughly wash surfaces or equipment with a good detergent or compatible cleaning solution.

3. Rinse equipment with potable water.

4. Prepare Proxitane® EQ Liquid Sanitizer solution as follows:

Add 1.6 to 2.0 liquid ounces Proxitane® EQ Liquid Sanitizer to 5 gallons of potable water.

This will provide 145 to 181 ppm peroxyacetic acid and 631 to 788 ppm hydrogen peroxide.

5. Fill closed systems with diluted sanitizer solution at a temperature of  $5^{\circ}C$  ( $41^{\circ}F$ ) to  $40^{\circ}C$  ( $104^{\circ}F$ ) and a contact time of one (1) minute.

6. Allow surfaces to drain thoroughly before resuming operation.

## SANITIZING GENERAL ENVIRONMENTAL SURFACES (NON-FOOD CONTACT) SUCH AS FLOORS, WALLS, TABLES, CHAIRS, BENCHES, DRAINS

Proxitane® EQ Liquid Sanitizer is an effective sanitizer against *Escherichia coli* and *Staphylococcus aureus.* 

1. Remove gross filth with a cleaner or other suitable detergent.

Add 1.6 to 2.0 fluid ounces Proxitane® EQ to 5 gallons of potable water. This will provide 181 to 154 ppm peroxyacetic acid and 631 to 788 ppm hydrogen peroxide.
Soak items in/with diluted solution using mop/wipe, coarse spray or flood techniques

and allow contact for at least one (1) minute.

4. Allow items and/or surfaces to air dry.

## SANITIZING OF EATING ESTABLISHMENT EQUIPMENT SUCH AS PLATES, UTENSILS, CUPS, GLASSES

Proxitane® EQ Liquid Sanitizer is an effective sanitizer against *Escherichia coli* and *Staphylococcus aureus.* 

1. Scrape/prewash plates, utensils, cups, glasses, etc. whenever possible.

- 2. Wash all items with a detergent.
- 3. Rinse thoroughly with potable water.

4. Prepare Proxitane® EQ Liquid Sanitizer solution as follows:

Add 1.6 to 2.0 fluid ounces Proxitane® EQ to 5 gallons of potable water. This will provide 145 to 181 ppm peroxyacetic acid and 631 to 788 ppm hydrogen peroxide.

5. Immerse all items for at least one (1) minute or for a contact time as specified a local governing sanitizing code.

6. Place all sanitized items on a rack or drainboard to air dry.

## SANITIZING TABLEWARE

For sanitizing tableware in low to ambient temperature warewashing machines, inject the diluted Proxitane® EQ Liquid Sanitizer solution (To prepare dilute solution, add 1.6 to 2.0 fluid ounces Proxitane® EQ Liquid Sanitizer to 5 gallons of potable water. This will provide 145 to 181 ppm peroxyacetic acid and 631 to 788 ppm hydrogen peroxide.) into the final rinse water. Solution must contact tableware for a minimum of one (1) minute. Allow treated surfaces to air dry.

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

Proxitane® EQ Liquid Sanitizer may be used as a final sanitizing rinse for hard, nonporous non-edible outside surfaces of airtight, sealed packages containing food or nonfood products. Rinse packages with a solution prepared by mixing 1.6 to 2.0 fluid ounces of Proxitane® EQ Liquid Sanitizer to 5 gallons of potable water. Solution must contact packaging for a minimum of one (1) minute. The treated hard, non-porous, nonedible 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. Do not rinse. This is not to be used on porous surfaces.

## SANITIZE PRE-CLEANED OR NEW RETURNABLE OR NON-RETURNABLE BOTTLED WATER CONTAINERS

To sanitize pre-cleaned or new returnable or non-returnable containers for bottled water processing, rinse bottles with a solution prepared by mixing 1.6 to 2.0 fluid ounces of Proxitane® EQ Liquid Sanitizer to 5 gallons of potable water. Solution must contact bottles for a minimum of 60 seconds. At these conditions, this product is effective against *Escherichia coli and Staphylococcus aureus*. After thorough draining, rinse interior container surfaces with a disinfected water rinse free of pathogenic bacteria.

## FINAL SANITIZING BOTTLE RINSE FOR PLASTIC, GLASS OR METAL RETURNABLE AND NON -RETURNABLE BOTTLES/CANS

 Wash bottles with detergent or cleaning solution and rinse with potable water.
Rinse bottles/cans with a solution prepared by mixing 1.6 to 2.0 fluid ounces of Proxitane® EQ Liquid Sanitizer to 5 gallons of potable water. Solution must contact bottles/cans for a minimum of one (1) minute.
Allow to drain dry.

## SANITIZING MILKING EQUIPMENT BY CLUSTER DIPPING

1. Clean external surfaces of milking systems after each use.

2. Manually or automatically rinse and sanitize all system components using a sanitizing solution prepared by mixing 1.6 to 2.0 fluid ounces of Proxitane® EQ Liquid Sanitizer in 5 gallons of potable water. Ensure solution fills clusters.

3. Allow surfaces to remain wet for at least 60 seconds. Shake solution off after dipping and allow to air dry. Do not rinse.

## FOR SANITIZING OF CASING, SHELL OR HATCHING EGGS

Proxitane® EQ Liquid Sanitizer can be used in Federally Inspected Meat and Poultry facilities as a sanitizer. Eggs that have been sanitized with this product may be broken for use in the manufacture of egg products without a prior potable water rinse.

## Sanitization of Casing and Shell Eggs

To sanitize clean shell eggs intended for food or food products:

1. Prepare a dilute solution by adding 1.6 to 5.4 fluid ounces of Proxitane® EQ Liquid Sanitizer to 5 gallons of potable water. This provides 147 to 500 ppm peroxyacetic acid and 57 to 82 ppm of hydrogen peroxide.

2. The dilute solution must be equal to or warmer than the eggs, but not to exceed 130 °F.

3. Apply dilute solution as eggs are gathered as a coarse spray or flood. Wet eggs thoroughly for at least one (1) minute.

4. Allow to drain.

5. Eggs should be reasonably dry before casing or breaking.

6. The solution must **not** be reused for sanitizing eggs.

## Sanitization of Hatching Eggs

1. Prepare a dilute solution by adding 1.6 to 5.4 fluid ounces of Proxitane® EQ Liquid Sanitizer to 5 gallons of potable water. This provides 147 to 500 ppm peroxyacetic acid and 57 to 82 ppm of hydrogen peroxide.

 Apply dilute solution as eggs are gathered or prior to setting as a coarse spray or flood so as to lightly wet all egg shell surfaces for at least one (1) minute.
Allow to drain dry.

## SANITIZING FOOD STORAGE AREAS

1. Remove all food prior to sanitization of food storage areas.

2. Prior to use of this product, remove gross soil particles from surfaces to be treated. For heavily soiled surfaces, a pre-wash is required.

3. Apply 1.6 to 2.0 fluid ounces of Proxitane® EQ Liquid Sanitizer to 5 gallons of potable water with a mop, cloth, sponge, or hand trigger spray so as to wet all surfaces thoroughly.

4. Allow to remain wet with solution for one (1) minute.

5. Allow items and/or surfaces to air dry. No potable water rinse is required.

## SANITIZING HATCHERY ROOMS, POULTRY HOUSES, AND LIVESTOCK BUILDINGS

1. Remove all animals and feed from premises, coops, crates and enclosures.

2. Remove all litter, droppings and manure from floors, walls and surfaces of barns,

pens, stalls, chutes, and other facilities occupied or traversed by animals.

3. Empty all troughs, racks and other feeding and watering appliances.

4. Thoroughly clean all surfaces with soap or detergent and rinse with water.

5. Saturate all surfaces with a solution of Proxitane® EQ Liquid Sanitizer by adding 1.6 to 2.0 fluid ounces to 5 gallons potable water.

6. Allow a contact time of one (1) minute.

7. Immerse all types of equipment used in handling and restraining animals, as well as forks, shovels and scrapers used for removing litter and manure.

8. Ventilate buildings, coops and other closed spaces. Do not house poultry, livestock or employ equipment until treatment has been absorbed, set or dried.

## SANITIZING CONVEYORS PEELERS, SLICERS, SAWS AND OTHER EQUIPMENT FOR MEAT, POULTRY, SEAFOOD, FRUIT, NUTS AND VEGETABLES

Proxitane® EQ Liquid Sanitizer is an effective sanitizer against *Staphylococcus aureus and Escherichia coli.* For use in the static or continuous washing, rinsing and sanitizing of conveyor equipment, peelers, collators, slicers, saws etc.

1. Prepare a sanitizing solution by adding 1.6 to 2.0 fluid ounces of Proxitane® EQ Liquid Sanitizer per 5 gallons of water.

2. Apply sanitizer solution to the return portion of the conveyor or to the equipment using a coarse spray or other means of wetting the surfaces. Control the volume of solution to prevent puddles. Allow sanitizer to thoroughly wet surface for a minimum of one (1) minute.

3. Allow equipment to drain adequately before reusing; a dry surface is not required. No rinse is needed. The conveyor surface may still be damp when food contact occurs.

# SANITIZING CONVEYORS FOR MEAT, POULTRY, SEAFOOD, FRUITS, AND VEGETABLES

Proxitane® EQ Liquid Sanitizer is an effective sanitizer against *Escherichia coli* and *Staphylococcus aureus.* 

1. Remove all products from equipment.

2. Prepare Proxitane® EQ Liquid Sanitizer solution by adding 1.6 to 2.0 fluid ounces to 5 gallons of potable water.

3. Apply sanitizer solution to the return portion of the conveyor or to the equipment using a coarse spray or other means of wetting the surfaces for a minimum of one (1) minute contact time. Control the volume of solution so as to permit maximum drainage and to prevent puddles.

4. Allow equipment to drain dry before reusing.

## ELEVATED TEMPERATURE SANITIZING

At a temperature of 120 °F, this product is an effective sanitizer for food contact surfaces at a concentration of 1 fluid ounce per 8 gallons of water against *Staphylococcus aureus* and *Escherichia coli*. Prior to sanitization thoroughly clean and rinse all equipment. Expose all surfaces to the sanitizing solution for at least one (1) minute. Allow equipment to drain thoroughly and air dry. Do not rinse.

#### SANITIZING NON-FOOD CONTACT PACKAGING EQUIPMENT

Prior to use of this product, remove gross soil particles from surfaces. Wash with a recommended detergent solution, rinse thoroughly with potable water. For sanitization against *Staphylococcus aureus* and *Escherichia coli* prepare a Proxitane® EQ Liquid Sanitizer solution by adding 1.6 to 2.0 fluid ounces to 5 gallons of potable water. Apply to surfaces at a temperature of 25° to 45°C and allow to remain wet for at least one (1) minute. Allow surfaces to drain thoroughly before operations are resumed. Drainage may be followed by a potable or sterile water rinse.

Effective against spoilage and decay causing non-public health organisms that can adversely affect product quality. Also effective against beverage spoilage organisms *Saccharomyces cerevisiae, Pediococcus damnosus* and *Lactobacillus malefermentans*.

#### FOAM SANITIZING NON-FOOD CONTACT SURFACES (Not approved in California)

Proxitane® EQ Liquid Sanitizer is an effective foam sanitizer of pre-cleaned non-food contact surfaces, such as boots, floors, walls, and drains, and equipment surfaces. For this application, prepare a solution of 1.6 to 2.0 fluid ounces per 4.5 gallons water of Proxitane® EQ Liquid Sanitizer and add 1.6 to 2.0 fluid ounces of foaming agent. Apply solution as a foam using recommended equipment. Wet surfaces thoroughly. At this concentration, the product is effective against *Staphylococcus aureus*. Surfaces must be exposed to the sanitizing foam for a period of not less than five (5) minutes. No rinse is necessary. Contact your Solvay representative for information on foaming agents and a recommended foam generation device.

Can be used for CIP, spray, and soak sanitizing applications. Can be used in foam sanitizing applications with approved foaming agent.

#### ENTRYWAY SANITIZING SYSTEMS:

To help prevent cross-contamination from treated area to treated area, apply (spray) a sanitizing foam to the entryway. The foam must cover the entire path of the doorway. For effective coverage of footwear and forklift tires, etc., apply a foam layer 0.5 to 2 inches in depth. Set the system to deliver 1 to 6.1 fluid ounces (82-500 ppm active PAA) of Proxitane® EQ Liquid Sanitizer and 3 to12 fluid ounces of foam additive per 6 gallons of water. Adjust the PAA concentration by testing the collapsed foam solution using a peroxyacetic acid test kit.

## SANITIZING SURFACES TO CONTROL THE SPREAD OF CITRUS CANKER

Proxitane® EQ Liquid Sanitizer can be used to control the spread of citrus canker between inanimate surfaces and inanimate surfaces to plants. This product is for sanitizing surfaces such as packinghouse conveyers and harvesting equipment and containers. This product is not for treatment of infected plants.

#### Packinghouse Sanitization

Proxitane® EQ Liquid Sanitizer is an effective sanitizer against *Xanthomonas campestris (axonopodis)* pathovars citrumelo (citrus canker surrogate), as well as *Staphylococcus aureus* and *Escherichia coli*.

1. Remove gross contamination with a cleaner or other suitable detergent and rinse with potable water.

2. Prepare Proxitane® EQ Liquid Sanitizer solution by adding 1.6 to 2.0 fluid ounces per 5 gallons of potable water.

3. Use as a general sanitizing coarse spray to reduce bacterial contamination of walls, floors, conveyers and harvesting containers.

- 4. Allow sanitizer to contact surface for at least one (1) minute.
- 5. Allow to air dry, do not rinse.

For direct injection into spray waters used in packinghouse process lines and humidification systems, treat water to control pathogens by injecting this product directly into spray system water with 1.25 fluid ounces. for every gallon of water. Applicable for use on all types of post-harvest commodities.

#### Harvesting and Field Equipment and Transportation Vehicle Sanitization

Use Proxitane® EQ Liquid Sanitizer to sanitize harvest equipment such as harvesters, pickers, trailers, trucks (including truck body parts and tires), bins, packing crates, ladders, power tools, hand tools, gloves, rubber boots, pruning shears or other equipment that may transfer *Xanthomonas campestris* (axonopodis) pathovars citrumelo (citrus canker surrogate). This product can also be used to sanitize surfaces contaminated with *Escherichia coli* and *Staphylococcus aureus*.

1. Before sanitization, move the field equipment into an area with an impervious surface and with controlled drainage. Ensure that no sanitization solution will be released into the environment.

2. Remove gross contamination with a cleaner or other suitable detergent and rinse with water.

3. Prepare Proxitane® EQ Liquid Sanitizer solution by adding 1.6 to 2.0 fluid ounces per 5 gallons of potable water. T

- 4. Apply as a general sanitizing coarse spray.
- 5. Allow sanitizer to contact surface for at least one (1) minute.
- 6. Allow to air dry, do not rinse.

## TRACTOR TRAILER SANITIZATION

Proxitane® EQ Liquid Sanitizer may be used to sanitize and deodorize vehicles such as trucks, trailers, cabs, crates, (including truck body parts and tires, mats, wheels) between loads. Use Proxitane® EQ Liquid Sanitizer to prevent cross contamination between loads.

1. Before sanitization, move the vehicle into an area with an impervious surface and with controlled drainage. Ensure that no sanitization solution will be released into the environment.

2. Remove gross contamination with high pressure water and cleaner or other suitable detergent and rinse with water.

3. Apply Proxitane® EQ Liquid Sanitizer using a coarse spray device at a rate of 1.6 to 2.0 fluid ounces per 5 gallons of potable water.

4. Allow sanitizer to contact surface for at least one (1) minute.

Allow equipment to drain dry before using. Do not rinse.

## SANITIZING REVERSE OSMOSIS (RO), ULTRA FILTRATION (UF) AND OTHER MEMBRANES

Proxitane® EQ Liquid Sanitizer may be used in the sanitization of ultra filtration (UF) and reverse osmosis (RO) membranes and other similar type membranes and their associated piping systems. This product may be added continuously in food, beverage, and drinking water systems for RO (reverse osmosis) systems only and in accordance with the instructions below. This product is not for use in kidney dialysis equipment. This product may not totally eliminate all vegetative microorganisms in RO or NF or UF membranes and their associated piping systems due to their construction or assembly, but can be relied upon to reduce the number of microorganisms to acceptable levels when used as directed. Prior to using this product check with membrane manufacturer to confirm compatibility of membranes with various types or concentration of peroxyacetic acid solutions.

#### Batch Sanitation of NF, UF and RO Systems:

Isolate incompatible equipment, such as carbon filters and ion exchangers. Clean system with an appropriate cleaner and follow with RO permeate water or potable water. Remove mineral deposits if necessary with an acidic cleaner, and rinse as before. Fill entire system with water and add up to 1% of this product by volume (620 ppm peroxyacetic acid) for heavily fouled systems. The typical sanitation use solution dosing of this product is 1 to 2 fluid ounces per 5 gallons of water (98-195 ppm peroxyacetic acid). Recirculate the sanitizing solution through the piping and membrane system at 20° C for ten (10) minutes minimum, or up to four (4) hours, depending on the severity of cleaning to be done. Open and close process valves and solenoids to be sure all parts are in contact with the solution. For occasional intermittent feed, do not exceed 98 ppm active peroxyacetic acid, which equals 1 fluid ounce of this product per 5 gallons of feed water. Do not use the intermittent feed method for on-line use for potable water or

direct food contact systems. Rinse the system with RO permeate or potable water until residual peroxygen concentration is below 1 ppm.

### RO Continuous or Intermittent Addition:

For continuous addition methods for RO systems, use 2-5 ppm active peroxyacetic acid (36-90 ppm as product), which equals 1.8 to 4.5 fluid ounces of this product per 430 gallons of process water. For occasional intermittent feed, do not exceed 98 ppm active peroxyacetic acid, which equals 1 fluid ounce of this product per 5 gallons of feed water. Do not use the intermittent feed method for on-line use in potable water or direct food contact systems.

## SANITIZATION OF GRANULAR ACTIVATED CARBON BEDS AND DEIONIZING (DI) SYSTEM RESIN BEDS (Not for use in California)

This product can be used to reduce or eliminate most microbiological contamination of Granular Activated Carbon (GAC) beds and Dionizing (DI) Systems without negatively affecting the GAC or DI resin if used as directed. All new systems must be soaked in process water for at least 12 hours before sanitizing. Drain and refill system with a solution containing 150-450 ppm (as peroxyacetic acid) by mixing 9.5 to 29 fluid ounces of this product in 10 gallons of water. Typically, the system would be backwashed and circulated through the GAC or resin beds during and/or after adding this product. Add this product as quickly as possible to the backwash process if a metering pump is used. Backwash and circulate for 20-30 minutes. Stop the backwash process and allow system to stand for 60 minutes. Drain system. Refill with fresh water and soak for 1-4 hours or more, which should be a long enough period for all residual peroxygen to dissipate. Small amounts of sodium metabisulfite may be used to neutralize any trace amounts of peroxygen. For potable water systems, total residual peroxide must be less than 0.5 ppm before operations resume.

## ANTIMICROBIAL

## ANTIMICROBIAL RINSE FOR PRE-CLEANED FOOD-CONTACT SURFACES

Prior to antimicrobial rinsing, remove gross food particles, then wash with a detergent solution, followed by a potable water rinse. To reduce the number of food spoilage non-public health microorganisms *Bacillus coagulans, Bacillus sporothermodurans, Clostridium butyricum, Alicyclobacillus acidoterrestris* and *Geobacillus stearothermophilus*, apply Proxitane® EQ Liquid Sanitizer at a concentration of 1 to 2 fluid ounces per 6 gallons of water (0.13 – 0.26% v/v concentration) at a temperature of 120 to 160 °F for at least 5 minutes. Drain thoroughly. Do not rinse.

Effective against spoilage and decay causing non-public health organisms that can adversely affect product quality. Also effective against beverage spoilage organisms *Saccharomyces cerevisiae, Pediococcus damnosus* and *Lactobacillus malefermentans*.

## ANTIMICROBIAL RINSE OF PRECLEANED OR NEW RETURNABLE OR NON-RETURNABLE CONTAINERS:

To reduce the number of beverage spoilage organisms, *Pediococcus damnosus*, *Lactobacillus malefermentans*, and *Saccharomyces cerevisiae* apply Proxitane® EQ Liquid Sanitizer at a concentration of 0.75 to 2.2% (9 to 26 fluid ounces per 10 gallons of water) at a temperature of 40° to 60° C for at least 7 seconds. After thorough draining, rinse interior container surfaces with a disinfected water rinse free of pathogenic bacteria.

To reduce the number of beverage spoilage organisms, *Pediococcus damnosus*, *Lactobacillus malefermentans*, *Saccharomyces cerevisiae* and *Penicillium digitatum*, apply Proxitane® EQ Liquid Sanitizer at a concentration of 0.75 to 2.2% (9 to 26 fluid ounces per 10 gallons of water) at a temperature of 15° to 60° C for at least 15 seconds. After thorough draining, rinse interior container surfaces with a disinfected water rinse free of pathogenic bacteria.

Effective against spoilage and decay causing non-public health organisms that can adversely affect product quality.

## **CLEANER**

## BOOSTER FOR ALKALINE DETERGENTS TO CLEAN FOOD PROCESSING EQUIPMENT

Proxitane® EQ Liquid Sanitizer is an effective oxygen bleach cleaning booster for use with alkaline detergents. It may be used as a cleaning additive for Clean-In-Place (CIP) operations involving the circulation cleaning of pipelines, tanks, vessels, evaporators, HTSTs, and other food processing equipment. For cleaning applications as a detergent booster, use 0.5 - 2.5% v/v total product (0.64 to 3.2 fluid ounces per gallon of detergent use solution) to aid in the removal of organic soils. All hard non-porous food contact surfaces treated with this boosted detergent must be rinsed thoroughly with a potable water rinse followed by sanitizing with an approved food contact surface sanitizer.

## BOOSTER FOR ACID DETERGENTS TO CLEAN FOOD PROCESSING EQUIPMENT

Proxitane® EQ Liquid Sanitizer is an effective oxygen bleach cleaning booster for use with acidic detergents. It may be used as a cleaning additive for Clean-In-Place (CIP) operations involving the circulation cleaning of pipelines, tanks, vessels, evaporators, HTSTs, and other food processing equipment. For cleaning applications as a detergent booster, use 0.5 - 2.5% v/v total product (0.64 to 3.2 fluid ounces per gallon of detergent use solution) to aid in the removal of organic soils. All hard non-porous food contact surfaces treated with this boosted detergent must be rinsed thoroughly with a potable water rinse followed by sanitizing with an approved food contact surface sanitizer.

## FOR TREATMENT OF (INDUSTRIAL) PROCESS WATERS IN FOOD FACILITIES

This product is not intended for control of public health organisms. Mix Proxitane® EQ Liquid Sanitizer with water either batch wise or continuously to produce about 36-575 ppm total product and about 5-80 ppm peroxyacetic acid in use solution. This can be accomplished by initially adding Proxitane® EQ Liquid Sanitizer at a rate from 0.42 to 6.7 fluid ounces per 100 gallons of process water. At this dilution, Proxitane® EQ Liquid Sanitizer will control the growth of spoilage and decay causing non-public health organisms, including odor-causing organisms, in process waters.

## AGRICULTURAL OR HORTICULTURAL USES

There is a Restricted-Entry Interval of zero (0) hours after the use of Proxitane® EQ Liquid Sanitizer t. This product must never be mixed or combined with any other pesticide or fertilizer. Upon soil contact, this product decomposes rapidly to oxygen, carbon dioxide and water. This product may be harmful to fish if exposed on a continuous basis at concentrations of 1 ppm or more of active peroxyacetic acid. Meter this product into pressurized pipes using a plastic or stainless steel injection/backflow device installed far enough upstream from the target equipment to ensure thorough mixing. For open flowing bodies of water, apply this product as far upstream as possible to allow adequate mixing prior to the flow entering any larger body of water. If open pouring of this product is required pour product as close to the surface of the water as possible to reduce odor exposure.

Spray lines, hoses and tank must be clean before using this product. Make sure no iron or yellow metals are in contact with the spray solution at any time. Only stainless steel or plastic contact materials may be used in your spray rig.

<u>Treatment of Irrigation Water Systems (sand filters, humidification systems, storage tanks, ponds, reservoirs, canals)</u>: For the control of odor, sulfides, slime and algae in water systems, apply Proxitane® EQ Liquid Sanitizer at 2-10 ppm peroxyacetic acid. This feed rate equals 4.8 to 24 fluid ounce per 1,000 gallons of water. Repeat dose as necessary to maintain control, which will vary with seasonal conditions. For prevention of algae some systems may require continuous low level dosing (2-5 ppm peroxyacetic acid) during warm sunny periods.

<u>Drip Irrigation Systems:</u> To clean slime and algae from drip system tapes and emitters, meter Proxitane® EQ Liquid Sanitizer upstream at the rate of 7.5 to 15 fluid ounces per 1,000 gallons of water (10-20 ppm peroxyacetic acid). When required, during normal irrigation cycles, use this product at the recommended dose for a minimum of 30 minutes. After an irrigation cycle do not flush the lines.

<u>Greenhouses:</u> Proxitane® EQ Liquid Sanitizer can be used to suppress/control algae and slime formations in and around greenhouses for use in various process, irrigation or sprinkler watering systems. Treat contaminated water with a dilution of 1:2200 of Proxitane® EQ Liquid Sanitizer. For maintenance, treat clean water with a dilution of 1:22,000 to 1:44,000 of Proxitane® EQ Liquid Sanitizer as needed, for the control of algae and bacteria.Heavily fouled systems, may need shock doses of up to 1:1,600 dilution.

Treat contaminated surfaces in greenhouse evaporative coolers with a dilution of 1:256 of Proxitane® EQ Liquid Sanitizer or 0.5 fl. oz. per gallon of water. For maintenance, treat cooler water once a week with a dilution of 1:800 of Proxitane® EQ Liquid Sanitizer for every gallon of cooling water For fungal control, increase maintenance rate to 1:5,000 to 1:10,000.

NOTE: This product at its use dilution is compatible with stainless steel and aluminum surfaces. If product is intended to be used on any other surface, it is recommended that you apply product to a small test area to determine compatibility before proceeding with its use.

## FOR TREATMENT OF RAW POST-HARVEST FRUIT, VEGETABLE, AND NUT PROCESSING WATERS TO CONTROL THE GROWTH OF NON-PUBLIC HEALTH MICROORGANISMS THAT CAN CAUSE SPOILAGE

1. Ensure that the water is recirculating or mixing in the processing tank or water line. 2. Prepare solution by diluting 1.5 to 5.2 fluid ounces per 25 gallons of water. Ensure that the solution is thoroughly mixed. This provides 27-96 ppm of peroxyacetic acid and 118-418 ppm of hydrogen peroxide. Allow the solution to circulate at least 45 seconds before adding or treating raw fruits and vegetables.

3. Dose as needed to maintain 27-96 ppm of peroxyacetic acid by adding Proxitane® EQ Liquid Sanitizer to processing water.

- 4. Allow a minimum contact time of 45 seconds.
- 5. Do not rinse.
- 6. Prepare a new solution daily to ensure effectiveness.
- 7. Contact your Solvay representative for specific fruit and vegetable applications.

## FOR TREATMENT OF RAW, UNPROCESSED FRUIT AND VEGETABLE SURFACES

Apply Proxitane® EQ Liquid Sanitizer as a dip or spray to control the growth of nonpublic health microorganisms that may cause decay and/or spoilage on raw, postharvest fruits and vegetables during the washing process. Proxitane® EQ Liquid Sanitizer can be applied during physical cleaning processes, including at the roller spreader, washer manifold, and dip tank, on the brushes or elsewhere in the washing process prior to, simultaneously with or as a final rinse prior to packaging.

1. Prepare solution by diluting 1.5 to 5.2 fluid ounces per 25 gallons of water. Ensure that the solution is thoroughly mixed. This provides 27 - 96 ppm of peroxyacetic acid and 118-418 ppm of hydrogen peroxide.

2. Apply the diluted sanitizing solution using a coarse spray or fog directed at the fruits or vegetables, or by submerging the fruits or vegetables in the prepared solution.

- 3. Allow a minimum contact time of 45 seconds.
- 4. Do not rinse.

5. Contact your Solvay representative for specific fruit and vegetable applications.

## FOR TREATMENT OF FRUIT AND VEGETABLE SURFACES AND PROCESS WATERS IN FOOD FACILITIES:

This product is not intended for control of any public health organisms on fruit and vegetable surfaces. Mix Proxitane® EQ Liquid Sanitizer with water either batch-wise or continuously to produce about 27 - 96 ppm peroxyacetic acid and 118 -418 ppm hydrogen peroxide in use solution. This can be accomplished by initially adding Proxitane® EQ Liquid Sanitizer at a rate of 1.5 to 5.2 fluid ounces per 25 gallons of process water. The fruits and vegetables can be sprayed or submerged in the resulting solution for a minimum contact time of 45 seconds, followed by adequate draining. At this use dilution, Proxitane® EQ Liquid Sanitizer will control the growth of spoilage and decay causing non-public health organisms, including odor causing organisms, in process waters and on the surface of fruits and vegetables.

Proxitane® EQ Liquid Sanitizer can be used on the following types of fresh, postharvest and further processed fruits and vegetables:

#### Vegetables

- Root and tuber vegetables: Carrot, potato, radish, rutabaga, sweet potato, yam, sugar beet

- Leaves of root and tuber vegetables: Turnip greens and sugar beet

- Bulb vegetables: Onion (dry bulb and green), leek, garlic, shallot

- Leafy vegetables: Lettuce (head and leaf), celery, fennel, endive, escarole, parsley, radicchio, rhubarb, spinach

- *Brassica* leafy vegetables: Broccoli, Brussel sprouts, cabbage, cauliflower, mustard greens, mustard spinach

- Legumes [succulent or dried], bean (green, kidney, lima, mung, navy, pinto, snap, wax), pea (chickpea, lentil, dwarf, garden, English, field, edible pea pod), alfalfa, and soybean

- Fruiting vegetables: Pepper (bell, pimento, hot, sweet), tomato, tomatillo, eggplant

- Cucurbits: Cucumber, melon (cantaloupe, crenshaw melon, honeydew, honey ball melon, mango melon, muskmelon, pineapple melon, watermelon), summer squash, pumpkins, winter squash

#### Fruits

- Citrus fruits: Sweet and sour orange, lemon, lime, tangelo, tangerine, mandarin, citrus citron, kumquats, grapefruit

- Pome fruits: Apples and pears
- Stone fruits: Sour and sweet cherry, peach, nectarine, plum, and prune
- Small Fruits and berries: Blackberries, blueberries, red and black raspberries

Sprouts and seeds of: vegetables and fruits that are listed on this label including, root & tuber vegetables, bulb vegetables, leafy vegetables, *Brassica* leafy vegetables,

legumes, fruiting vegetables, cucurbits, citrus fruits, pome fruits, stone fruits, small fruits and berries, mustard

Tree nuts: Almond, Brazil, filbert, cashew, pecan, walnut (black & English), macadamia, chestnut

Cereal grains: Corn, barley, oats, rice, wheat, triticale, wild rice, sweet corn

Herbs and Spices: Basil, chives, coriander, dill, lemongrass marjoram, sage, savory, tarragon, thyme

Miscellaneous: Asparagus, avocado, artichoke, banana, cranberry, fig, grape, kiwifruit, mango, mushroom, okra, peanut, persimmon, pineapple, raisins, strawberry, water chestnut, watercress, coffee berry, coffee bean, seaweed

## CONTROL OF ALGAL AND SLIME-FORMING BACTERIAL GROWTH IN LIVESTOCK WATER STOCK TANKS AND LIVESTOCK WATER

Proxitane® EQ Liquid Sanitizer is for suppressing and controlling algae, odor causing and slime-forming bacteria and sulfides in stock tanks, stock watering ponds, tanks and troughs, and livestock water. Apply 1.2 to 6 fluid ounces of Proxitane® EQ Liquid Sanitizer per 250 gallons of water (2 – 11 ppm of 100% peroxyacetic acid) for algae control. Product can be simply added to the body of water. Where existing algae mats are present at time of treatment, the most effective control will be obtained by breaking up mats and/or evenly dispersing diluted Proxitane® EQ Liquid Sanitizer over the algae mats. Apply Proxitane® EQ Liquid Sanitizer as needed to control and prevent algae growth; apply more often in times of higher water temperatures.

Drip system application for livestock watering tanks: Tanks fed by a continuous flow of spring or well water can be equipped with a chemical drip system designed to meter-in Proxitane® EQ based upon water flow rates. Pre-dilute Proxitane® EQ at a 1:265 rate or 4-mL/minute water flow rate. Treat continuously or as needed to control and prevent algae regrowth.

# POULTRY, SWINE, LIVESTOCK WATER LINE CLEANER WHEN SYSTEM IS NOT IN USE

To remove scale, mineral build up and heavy soils from livestock watering systems use Proxitane® EQ Liquid Sanitizer at 1 to 2.5 fluid ounces per gallon of water. Allow system to run for 6 to 24 hours depending on the conditions. Following the cleaning process, rinse with potable water to remove the cleaning solution from the watering line, nipples and cups.

## POULTRY, SWINE, LIVESTOCK WATERING OPERATING SYSTEMS

After water lines have been cleaned, use Proxitane® EQ Liquid Sanitizer at 0.9 to 1.33 fluid ounces per 100 gallons of water to control algae and bacteria in drinking water and to control mineral build up in watering lines.

#### **AQUACULTURAL USES**

Proxitane® EQ Liquid Sanitizer removes and breaks up biofilm containing slime-forming bacteria in fish ponds and on fish pond equipment.

FISH PONDS: Remove fish from ponds prior to treatment. Thoroughly mix 1.2 to 48 fluid ounces Proxitane® EQ Liquid Sanitizer with 100 gallons of water to achieve 5-200 ppm peroxyacetic acid and 23 to 870 ppm hydrogen peroxide. Add more Proxitane® EQ Liquid Sanitizer to the water if the available levels of peroxyacetic acid and hydrogen peroxide fall below 5 ppm after 5 minutes. Return fish to pond after the peroxyacetic acid and hydrogen peroxide levels reach zero. Use an appropriate PAA test kit or analyzer as recommended by Solvay Chemicals Inc. to ensure that this level is not exceeded.

Do not use fish pond water for irrigation purposes.

FISH POND EQUIPMENT: Thoroughly clean all equipment prior to treatment. Thoroughly mix 0.48 to 12.0 fluid ounces of Proxitane® EQ Liquid Sanitizer with 10 gallons of water to achieve 20 to 500 ppm peroxyacetic acid and 87 to 2174 ppm hydrogen peroxide. Porous equipment should soak for one hour.

NOTES: This product in its use concentrations is compatible with stainless steel and aluminum surfaces. If product is intended to be used on any other surface, it is recommended that you apply product to a smaller test area to determine compatibility before proceeding with its use. For all applications, to ensure effectiveness: do not return unused portion of Proxitane® EQ Liquid Sanitizer solution to original container - dispose of unused solution -do not reuse solution - for dilution prior to use, always prepare fresh solution daily.

EPA Reg. No. 68660-4 EPA Est. No. 60156-IL-001

PROXITANE<sup>®</sup> EQ Liquid Sanitizer Manufactured and Distributed by: SOLVAY CHEMICALS, INC. 3737 Buffalo Speedway, Suite 800 Houston TX 77098 USA (713) 525-6500 For emergency, call CHEMTREC® (800) 424-9300