Paracetic Acid Sanitizer

Active Ingredients:

Hydrogen Peroxide 23.0%

Peroxyacetic Acid.....5.3%

Other Ingredients: 71.7%
TOTAL:.....100.00%

DANGER

STRONG OXIDIZING AGENT

KEEP OUT OF REACH OF CHILDREN

[Note to Reviewer: In accordance with 40 CFR 156.68(d), all first aid statements, as prescribed, will appear on the front panel of the product]

FIRST AID Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
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 SWALLOWED:	- Call a poison control center or doctor immediately for treatment 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.
CALL THE POISON CONTROL CENTER OR PHYSICIAN IMMEDIATELY FOR EMERGENCY MEDICAL INFORMATION.	
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage.	

EPA Reg. 94865-2 EPA Est. No. 94865

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

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 SDS 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

This product is toxic to birds, fish, aquatic invertebrates, shrimp, clams and oysters. 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.

DIRECTIONS FOR USE

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

See booklet for Directions for Use.

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 Safety Data Sheet.

CONTAINER DISPOSAL: Triple rinse container (or equivalent) promptly after emptying

For containers less than 5 gallons: 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.

For containers 5 to 55 gallons: 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.

For containers greater than 55 gallons: 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.

Stainless steel containers (300 gallon tote and 4,500 gallon tank trucks): Return for reuse. Refill the container with pesticide only. Do not reuse this container for other purposes.

Plastic containers (1 pint, 1 quart, and 1, 5, 30, 55 gallon drums, and 300 gallon tote): 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.

Glass Containers (1 pint, 1 quart, and 1 gallon): 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.

Paracetic Acid Sanitizer

EPA Reg. No. 94865
EPA Est. No. 94865-1
DIRECTIONS FOR USE BOOKLET
Version Date [Insert Date]

DANGER

STRONG OXIDIZING AGENT
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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.

NOTE TO REVIEWER: The Agricultural Use Requirements box is only applicable to Greenhouse and Ag Uses covered by WPS. It will not appear on labels that do not include these uses.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE) and Restricted-Entry Interval (REI). The requirements in this box apply to the uses of this product that are covered by the Worker Protection Standard.

There is a restricted entry interval (REI) of zero (0) hours for the application methods on this label. PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water), is:
- Chemical-resistant suit;
- Chemical-resistant headgear (if applied by fogging);
and
- Dust/mist filtering respirator (if applied by fogging).

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

Personal Protective Equipment (PPE) - Applicators and handlers must wear coveralls over long-sleeved shirt, long pants, and chemical resistant footwear plus socks. When mixing and loading wear a chemical resistant apron. For overhead exposure wear chemical-resistant headgear. Wear protective eyewear (goggles, face shield, or safety glasses), and chemical resistant gloves. When cleaning equipment wear a chemical resistant apron. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instruction exists for washables, use detergent and hot water.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Act Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

DIRECTIONS FOR USE

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

[NOTE TO REVIEWER: The parenthetical statement (Not Approved For Use In California) may be added to or removed from any uses on the market label depending on feedback from the California Department of Pesticide Regulation.]

SANITIZATION*

Paracetic Acid 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* (ATCC 6538) and *Escherichia coli* (ATCC 11229) in the AOAC Germicidal and Detergent Sanitizing Action of Disinfectants study when applied to pre-cleaned surfaces at a dosing rate of 1.6 to 2.0 fl. oz. of Paracetic Acid Sanitizer per 5 gallons of water (145-181 ppm of peroxyacetic acid and 631-788 ppm of hydrogen peroxide).

*This product has demonstrated greater than 99.999% reduction of *Listeria monocytogenes* (ATCC 19117) and *Salmonella enterica* (ATCC 10708)in the AOAC Germicidal and Detergent Sanitizing Action of Disinfectants study when applied to pre-cleaned surfaces at a dosing rate of 1.7 to 2.0 fl. oz. of Paracetic Acid Sanitizer per 5 gallons of water (154 -181 ppm of peroxyacetic acid and 670-788 ppm of hydrogen peroxide).

This product is also effective against non-public health beverage spoilage organisms.

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 water.
4. Prepare a use-solution of Paracetic Acid Sanitizer by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of water.
5. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708), add 1.7 to 2.0 fl. oz. of this product per 5 gallons of water.
6. Fill closed systems with diluted sanitizer solution and allow a contact time of one (1) minute.
7. Allow surfaces to drain thoroughly before resuming operation.

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

1. Remove gross filth with a cleaner or other suitable detergent.
2. Prepare a use-solution of Paracetic Acid Sanitizer by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of water.
3. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708), add 1.7 to 2.0 fl. oz. of this product per 5 gallons of water.
4. Soak items in/with diluted solution using mop/wipe, coarse spray or flood techniques and allow contact for at least one (1) minute.
5. Allow items and/or surfaces to air dry.

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

1. Scrape/prewash plates, utensils, cups, glasses, etc. whenever possible.
2. Wash all items with a detergent.
3. Rinse thoroughly with water.
4. Prepare a use-solution of Paracetic Acid Sanitizer by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of water.
5. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708), add 1.7 to 2.0 fl. oz. of this product per 5 gallons of water.
6. Immerse all items for at least one (1) minute or for a contact time as specified a local governing sanitizing code.
7. Place all sanitized items on a rack or drainboard to air dry.

SANITIZING TABLEWARE

For sanitizing tableware in low to ambient temperature warewashing machines, prepare a use-solution of Paracetic Acid Sanitizer containing 1.6 to 2.0 fl. oz. of this product per 5 gallons of water. For *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708)prepare a use-solution containing 1.7 to 2.0 fl. oz. of this product per 5 gallons of water. Inject the use-solution into the final rinse water. The use-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

Paracetic Acid Sanitizer 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.

Prior to use of this product, remove gross soil particles from surfaces to be treated. For heavily soiled surfaces, pre-clean surface with a detergent or cleaner, and rinse prior to sanitization.

Rinse packages with a use-solution of Paracetic Acid Sanitizer prepared by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of water. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708)add 1.7 to 2.0 fl. oz. of this product per 5 gallons of water. The use-solution must contact packaging for a minimum of one (1) minute. 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 use-solution for a period of not less than one (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 use-solution of Paracetic Acid Sanitizer prepared by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of water. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708)add 1.7 to 2.0 fl. oz. of this product per 5 gallons of potable water. The use-solution must contact bottles for a minimum of one (1) minute.

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

1. Wash bottles with detergent or cleaning solution and rinse with potable water.
2. Rinse bottles/cans with a solution prepared by mixing 1.6 to 2.0 fl. oz. of Paracetic Acid Sanitizer per 5 gallons of water. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708)add 1.7 to 2.0 fl. oz. of this product per 5 gallons of potable water. The use-solution must contact bottles/cans for a minimum of one (1) minute.
3. 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 adding 1.6 to 2.0 fl. oz. of Paracetic Acid Sanitizer per 5 gallons of water. If sanitizing against *Listeria monocytogenes* (ATCC 19117) or

Salmonella enterica (ATCC 10708)add 1.7 to 2.0 fl. oz. of this product per 5 gallons of water. Ensure the use-solution fills clusters.
3. Allow surfaces to remain wet for at least one (1) minute. Shake solution off after dipping and allow to air dry. Do not rinse.

FOR SANITIZING OF CASING, SHELL OR HATCHING EGGS

Paracetic Acid 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 of Paracetic Acid Sanitizer by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of water. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708)add 1.7 to 2.0 fl. oz. of this product per 5 gallons of potable water.
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 of Paracetic Acid Sanitizer by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of water. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708), add 1.7 to 2.0 fl. oz. of this product per 5 gallons of water.
2. 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.
3. 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. Add 1.6 to 2.0 fl. oz. of Paracetic Acid Sanitizer per 5 gallons of potable water and then apply the use-solution with a mop, cloth, sponge, or hand trigger spray so as to wet all surfaces thoroughly. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708)use 1.7 to 2.0 fl. oz. of this product per 5 gallons of water.
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 use-solution of Paracetic Acid Sanitizer by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of water. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708), use 1.7 to 2.0 fl. oz. of this product per 5 gallons of 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

For use in the static or continuous washing, rinsing and sanitizing of conveyor equipment, peelers, collators, slicers, saws etc.

1. Prepare a use-solution of Paracetic Acid Sanitizer by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of potable water. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708), use 1.7 to 2.0 fl. oz. of this product per 5 gallons of water.
2. Apply the use-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

1. Remove all products from equipment.
2. Prepare a use-solution of Paracetic Acid Sanitizer by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of water. If sanitizing against *Listeria monocytogenes* (ATCC 19117) and/or *Salmonella enterica* (ATCC 10708), add 1.7 to 2.0 fl. oz. of this product per 5 gallons of water.
3. Apply the use-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.

SANITIZING SURFACES TO CONTROL THE SPREAD OF CITRUS CANKER

Paracetic Acid 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

Paracetic Acid Sanitizer is an effective sanitizer against *Xanthomonas campestris (axonopodis)* pathovars citrumelo (citrus canker surrogate), as well as *Staphylococcus aureus* (ATCC 6538)and *Escherichia coli* (ATCC 11229).

1. Remove gross contamination with a cleaner or other suitable detergent and rinse with potable water.
2. Prepare a use-solution of Paracetic Acid Sanitizer by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of 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 citrus canker by injecting this product directly into spray system water with 1.25 fl. oz. for every gallon of water. Applicable for use on all types of post-harvest commodities.

Harvesting and Field Equipment and Transportation Vehicle Sanitization

Use Paracetic Acid 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).

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 a use-solution of Paracetic Acid Sanitizer by adding 1.6 to 2.0 fl. oz. of this product per 5 gallons of water.
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.

MICROBIAL CONTROL OF REVERSE OSMOSIS (RO), ULTRA FILTRATION (UF) AND OTHER MEMBRANES

Paracetic Acid Sanitizer may be used for microbial control 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 Treatment 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 (530 ppm peroxyacetic acid) for heavily fouled systems. Recirculate the sanitizing solution through the piping and membrane system at 20º 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, use a treatment rate of 1 fl. oz. 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, apply 1.8 to 4.5 fl. oz. of product per 430 gallons of process water. For occasional intermittent feed, apply 1 fl. oz. of 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.

TREATMENT OF GRANULAR ACTIVATED CARBON BEDS AND DEIONIZING (DI) SYSTEM RESIN BEDS

This product can be used to reduce or eliminate most microbial 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 use-solution by mixing 9.5 to 29 fl. oz. 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 to 30 minutes. Stop the backwash process and allow system to stand for 60 minutes. Drain system. Refill with fresh water and soak for 1 to 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.

DISINFECTION**

Paracetic Acid Sanitizer can be used to disinfect hard, non-porous surfaces in the following areas: institutional and industrial facilities, laboratories, zoos, animal rearing and confinement facilities, farms, packing facilities, aquaculture facilities, food processing, handling and packaging facilities, transportation equipment and facilities, salons and barber shops.

** Paracetic Acid Sanitizer has demonstrated efficacy as a disinfectant against *Staphylococcus aureus* (ATCC 6538), *Salmonella enterica* (ATCC 10708), and *Escherichia coli* (ATCC 11229) when applied to pre-cleaned hard, nonporous surfaces, at a dosing rate of 0.55 to 0.75 fl. oz. per gallon of water (250-340 ppm of peroxyacetic acid and 1084-1478 ppm of hydrogen peroxide) for ten (10) minutes.

INSTITUTIONAL AND INDUSTRIAL FACILITIES, LABORATORIES, RESEARCH FACILITIES, PACKAGING FACILITIES, PRODUCTION PLANTS

Use Paracetic Acid Sanitizer to disinfectant pre-cleaned surfaces in institutional and industrial facilities, laboratories, pharmaceutical, and cosmetic production facilities and research facilities. Prepare a use-solution of Paracetic Acid Sanitizer by adding 0.55 to 0.75 fl. oz. of this product per 1 gallon of water. Apply the use-solution to hard, non-porous surfaces with a cloth, mop, sponge or sprayer or by immersion. Treated surfaces must remain wet for ten (10) minutes. Wipe dry with a cloth, sponge or mop or allow to air dry. For sprayer applications, use a coarse spray device. Spray 6 to 8 inches from the surface and spray until totally wet. Do not breathe spray. A potable water rinse is required for any surface that may come into contact with food.

PACKINGHOUSES, FOOD-HANDLING ESTABLISHMENTS, FOOD STORAGE FACILITIES, FOOD PROCESSING PLANTS AND RENDERING PLANTS

Use Paracetic Acid Sanitizer to disinfect pre-cleaned, hard, non-porous surfaces and equipment, such as crates, containers, dump tanks, drenches, conveyors, storage, floors, walls, and process lines.

Prior to disinfection, cover or remove all food and packaging materials. Prepare a use-solution of Paracetic Acid Sanitizer by adding 0.55 to 0.75 fl. oz. of this product per 1 gallon of water. Apply the use-solution to hard, non-porous surfaces with a cloth, mop, sponge or sprayer or by immersion. Treated surfaces must remain wet for ten (10) minutes. Wipe dry with a cloth, sponge or mop or allow to air dry. For sprayer applications, use a coarse spray device. Spray 6 to 8 inches from the surface and

spray until totally wet. Do not breathe spray. A potable water rinse is required for any surface that may come into contact with food.

Foaming Directions

To enhance contact on hard, nonporous surfaces, vertical surfaces and irregular surfaces such as metal grating and structural steel where contact is difficult to maintain with coarse spray treatments, apply the use-solution as a foam treatment. Add a foaming agent to the spray tank that contains the use-solution and then apply the foam until the surface treated is completely covered. Allow foam treated surface to air dry. Any food contact surfaces must be rinsed with potable water prior to re-use.

DISINFECTION OF HARD, NON-POROUS NON-FOOD CONTACT PACKAGING EQUIPMENT

1. Prior to use of this product, remove gross soil particles from surfaces to be treated. For heavily soiled surfaces, a pre-wash is required.
2. For disinfection, apply 0.55 to 0.75 fl. oz. of this product per 1 gallon of water to surfaces at a temperature of 25° to 45° C.
3. Allow to remain wet with solution for ten (10) minutes.
4. Rinse surfaces thoroughly with potable water before operations are resumed.

HARVESTING AND FIELD EQUIPMENT

Use Paracetic Acid Sanitizer to disinfect pre-cleaned hard, non-porous harvest equipment such as pickers, harvesters, trailers, trucks (including truck body parts and tires), bins, packing crates, ladders, power tools, hand tools, gloves, rubber boots, pruning shears or other equipment.

Prepare a use-solution of Paracetic Acid Sanitizer by adding 0.55 to 0.75 fl. oz. of this product per 1 gallon of water. Apply the use-solution to hard, non-porous surfaces with a cloth, mop, sponge or sprayer or by immersion. Treated surfaces must remain wet for ten (10) minutes. Wipe dry with a cloth, sponge or mop or allow to air dry. For sprayer applications, use a coarse spray device. Spray 6 to 8 inches from the surface and spray until totally wet. Do not breathe spray.

TRACTOR TRAILERS, TRANSPORTATION VEHICLES, AND EQUIPMENT

Paracetic Acid Sanitizer may be used to disinfect and deodorize pre-cleaned, hard, non-porous surfaces such as trucks (including truck body parts and tires, mats, wheels), trailers, cabs, and crates. Use Paracetic Acid Sanitizer to prevent cross contamination between loads.

1. Move the vehicle into an area with an impervious surface and with controlled drainage. Ensure that no disinfection solution will be released into the environment.
2. Prepare a use-solution of Paracetic Acid Sanitizer by adding 0.55 to 0.75 fl. oz. of this product per 1 gallon of water. Apply the use-solution to hard, non-porous surfaces with a cloth, mop, sponge or sprayer or by immersion. Treated surfaces must remain wet for ten (10) minutes. Wipe dry with a cloth, sponge or mop or allow to air

dry. For sprayer applications, use a coarse spray device. Spray 6 to 8 inches from the surface and spray until totally wet. Do not breathe spray

ANIMAL REARING AND HOLDING FACILITIES

Use Paracetic Acid Sanitizer in animal laboratories, kennels, pet shops, zoos, pet animal quarters, poultry premises, poultry hatcheries, livestock and dairy quarters. When used as directed Proxitane® EQ disinfects and deodorizes pre-cleaned, hard, non-porous surfaces such as walls, floors, sink tops, furniture, kennel runs, cages and feeding and watering equipment, as well as bins, cans, and any other hard, non-porous areas that are prone to odors caused by microorganisms.

All treated equipment that will contact feed or drinking water must be rinsed with potable water before reuse. Prepare a fresh solution for each use.

Disinfection Of Poultry Premises, Trucks, Coops, Crates

1. Remove all poultry and feeds from premises, trucks, coops and crates.
2. Remove all litter and droppings from floors, walls and surfaces of facilities occupied or traversed by poultry.
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. Prepare a use-solution of Paracetic Acid Sanitizer by adding 0.55 to 0.75 fl. oz. of this product per 1 gallon of water and then saturate surfaces for ten (10) minutes.
6. Immerse all types of equipment used in handling and restraining poultry, as well as forks, shovels and scrapers used for removing litter and manure.
7. Ventilate buildings, coops and other closed spaces. Do not house poultry or employ equipment until treatment has been absorbed, set or dried.
8. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.

Poultry Hatchery Disinfection

1. Clean out any remaining eggs and chicks. Remove all poultry and feed from premises, coops, crates, and trucks.
2. Remove gross soils, such as droppings, litter, down, shell fragments or other hatching related debris from floors, walls and surfaces of facilities occupied or traversed by poultry.
3. Empty all troughs, racks and other feeding and watering appliances and equipment.
4. Thoroughly clean all surfaces with soap or detergent and rinse thoroughly with water.
5. Prepare a use-solution of Paracetic Acid Sanitizer by adding 0.55 to 0.75 fl. oz. of this product per 1 gallon of water. Then saturate all surfaces with the use-solution for ten (10) minutes.
6. Ventilate buildings, coops, and other closed spaces. Allow to dry before reintroducing eggs or poultry.

7. Thoroughly scrub all treated feed racks, mangers, automatic feeders, troughs, fountains, and waterers with soap or detergent, and rinse with potable water before reuse.

Disinfection And Deodorizing Of Animal Housing Facilities (Barns, Kennels, Hutches)

1. Remove all animals and feed from premises, vehicles and enclosures.
2. Remove all litter 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. Prepare a use-solution of Paracetic Acid Sanitizer by adding 0.55 to 0.75 fl. oz. of this product per 1 gallon of water and then saturate all surfaces for ten (10) minutes.
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.
7. Ventilate buildings, cars, boats and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set or dried.
8. Thoroughly scrub all treated feed racks, mangers, automatic feeders, troughs, waterers, and fountains with soap or detergent, and rinse with potable water before reuse.

Terrarium And Small Animal Cage Disinfection

1. Remove all animals and feed from enclosure or cage to be cleaned.
2. Thoroughly clean all hard, non-porous surfaces with soap or detergent and rinse with water.
3. Prepare a use-solution of Paracetic Acid Sanitizer by adding 0.55 to 0.75 fl. oz. of this product per 1 gallon of water and then saturate surfaces for ten (10) minutes. For smaller surfaces, use a coarse trigger spray bottle to spray all surfaces with solution until wet. Then wipe surfaces dry.
4. Thoroughly scrub all treated surfaces with soap or detergent and rinse with potable water before reuse.
5. Do not return animals to the enclosure or cage until it is dry and ventilated.
6. Clean enclosures and cages at least once weekly or more as needed.

ENTRYWAY FOOT BATH MATS, PADS, WALK THROUGH TRAYS

Place foot bath mats, pads or trays at the entrances of all rooms and buildings to prevent cross contamination between areas in livestock and dairy quarters, poultry premises, animal containment areas, greenhouses, packing houses, food processing and rendering plants.

1. Prior to use of this product, pre-clean the surface to be treated.
2. Prepare a use-solution of Paracetic Acid Sanitizer by adding 0.55 to 0.75 fl. oz. of this product per 1 gallon of water and then add to foot bath mat, pad or tray, filling to capacity.

3. Place boots and shoes in the foot bath mat, pad or tray containing the use-solution. Allow surface to remain wet for ten (10) minutes prior to entering next area. Change solution daily or as needed.

DISINFECTION OF SALON AND BARBER SHOP INSTRUMENTS AND TOOLS

Immerse pre-cleaned hard, non-porous barber and salon tools (combs, brushes, razors, manicure/pedicure tools, clippers, scissors, trimmer blades) in a use-solution of Paracetic Acid Sanitizer by adding 0.55 to 0.75 fl. oz. of this product per 1 gallon of water. Immerse for at least ten (10) minutes. Rinse instruments thoroughly and dry before reuse. A fresh use-solution should be prepared daily or more often if the use solution becomes cloudy or soiled. Note: Plastics may remain immersed until ready to use. Stainless steel shears and instruments must be removed after ten (10) minutes, rinsed, dried and kept in a clean non-contaminated receptacle. Prolonged immersion may cause damage to stainless steel or metal instruments.

AQUACULTURE EQUIPMENT

Use Paracetic Acid Sanitizerto disinfect pre-cleaned, hard non-porous surfaces of vehicles, boots, waders, dive suits, hoses, brushes and other similar equipment associated with aquaculture.

Disinfect equipment before each new use by preparing a use-solution of Paracetic Acid Sanitizer by adding 0.55 to 0.75 fl. oz. of this product per 1 gallon of water and then soaking the equipment in the use-solution for ten (10) minutes. Rinse equipment with potable water before reuse. The same use-solution can also be used to control odor-causing and fouling microorganisms on nets.

ANTIMICROBIAL RINSE

FOR PRECLEANED 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 non-public health food spoilage microorganisms apply Paracetic Acid Sanitizer at a concentration of 1 to 2 fl. oz. per 6 gallons of water (0.13 – 0.26% v/v concentration) at a temperature of 120 to 160 °F for at least five (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 non-public health beverage spoilage organisms .

PRECLEANED OR NEW RETURNABLE OR NON-RETURNABLE CONTAINERS

To reduce the number of non-public health beverage spoilage organisms, apply Paracetic Acid Sanitizer at a concentration of 0.75 to 2.2% (9 to 26 fl. oz. per 10 gallons of water) at a temperature of 40° to 60° C for at least seven (7) seconds. After

thorough draining, rinse interior container surfaces with a disinfected water rinse free of pathogenic bacteria.

To reduce the number of non-public health beverage spoilage organisms, apply Paracetic Acid Sanitizer at a concentration of 0.75 to 2.2% (9 to 26 fl. oz. of this product per 10 gallons of water) at a temperature of 15° to 60° C for at least fifteen (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.

ENTRYWAY SYSTEMS

To help reduce the spread of non-public health odor-causing bacteria from treated area to treated area, apply (spray) a 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 fl. oz. (82-500 ppm active peroxyacetic acid) of Paracetic Acid Sanitizer and 3 to 12 fl. oz. of foam additive per 6 gallons of water. Adjust the PAA concentration by testing the collapsed foam solution using a peroxyacetic acid test kit.

CLEANER

DETERGENT BOOSTER FOR ALKALINE DETERGENTS TO CLEAN FOOD PROCESSING EQUIPMENT

Paracetic Acid 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 0.64 to 3.2 fl. oz. of this product 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.

DETERGENT BOOSTER FOR ACID DETERGENTS TO CLEAN FOOD PROCESSING EQUIPMENT

Paracetic Acid 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 fl. oz. of this product 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 Paracetic Acid 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 Paracetic Acid Sanitizer at a rate from 0.42 to 6.7 fl. oz. per 100 gallons of process water. At this dilution, Paracetic Acid Sanitizer will control the growth of spoilage and decay causing non-public health organisms, including odor-causing organisms, in process waters.

AGRICULTURAL AND HORTICULTURAL USES

There is a Restricted-Entry Interval of zero (0) hours after the use of Paracetic Acid Sanitizer. 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.

Treatment of Irrigation Water Systems (Sand Filters, Humidification Systems, Storage Tanks, Ponds, Reservoirs, Canals)

For the control of odor, sulfides, slime and algae in water systems, apply Paracetic Acid Sanitizer at 2-10 ppm peroxyacetic acid. This feed rate equals 4.8 to 24 fl. oz. of this product per 1,000 gallons of water. Repeat dose as necessary to maintain control, which will vary with seasonal conditions.

Drip Irrigation Systems

To clean slime and algae from drip system tapes and emitters, meter Paracetic Acid Sanitizer upstream at the rate of 7.5 to 15 fl. oz. 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.

Greenhouses

Paracetic Acid 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 Paracetic Acid Sanitizer. For maintenance, treat clean water with a dilution of 1:22,000 to 1:44,000 of Paracetic Acid 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 Paracetic Acid Sanitizer or 0.5 fl. oz. per 1 gallon of water. For maintenance, treat cooler water once a week with a dilution of 1:800 of Paracetic Acid 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.

POST-HARVEST FRUIT, VEGETABLE, AND NUT PROCESSING

TREATMENT OF RAW POST-HARVEST FRUIT, VEGETABLE, AND NUT PROCESSING WATERS TO CONTROL NON-PUBLIC HEALTH SPOILAGE ORGANISMS

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 fl. oz. of this product 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 Paracetic Acid 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.

TREATMENT OF RAW, UNPROCESSED FRUIT AND VEGETABLE SURFACES

Apply Paracetic Acid Sanitizer as a dip or spray to control the growth of non-public health microorganisms that may cause decay and/or spoilage on raw, post-harvest fruits and vegetables during the washing process. Paracetic Acid 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 fl. oz. of this product 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.

TREATMENT OF [FRUIT AND VEGETABLE][FRUIT, VEGETABLE, AND OTHER LISTED COMMODITY] 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 Paracetic Acid 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 Paracetic Acid Sanitizer at a rate of 1.5 to 5.2 fl. oz. 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, Paracetic Acid 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.

Paracetic Acid Sanitizer can be used on the following types of fresh, post-harvest and further processed [fruits and vegetables][fruits, vegetables, and other listed commodities]:

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
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

LIVESTOCK WATER

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

Paracetic Acid 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 fl. oz. of Paracetic Acid 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 Paracetic Acid Sanitizer over the algae mats. Apply Paracetic Acid 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 Paracetic Acid Sanitizer based upon water flow rates. Pre-dilute Paracetic Acid Sanitizer 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 Paracetic Acid Sanitizer at 1 to 2.5 fl. oz. 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 Paracetic Acid Sanitizer at 0.9 to 1.33 fl. oz. per 100 gallons of water to control algae and bacteria in drinking water and to control mineral build up in watering lines.

AQUACULTURAL USES

Paracetic Acid 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 fl. oz. Paracetic Acid Sanitizer with 100 gallons of water to achieve 5-200 ppm peroxyacetic acid and 23 to 870 ppm hydrogen peroxide. Add more Paracetic Acid 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 fl. oz. of Paracetic Acid 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.

SURFACE COMPATABILITY

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.

TO ENSURE EFFECTIVENESS FOR ALL APPLICATIONS:

- Do not return unused portion of Paracetic Acid Sanitizer solution to original container.
- Dispose of unused Paracetic Acid Sanitizer solution.
- Do not reuseParacetic Acid 5% solution
- Always prepare fresh Paracetic Acid Sanitizer solution daily.