STATE OF HAWAII
Department of Agriculture
ACCEPTED
LICENSE NO. 7036.12

Clarity

EPA Registration No. 65402-3
EPA Est. No. 65402-NY-001

ACTIVE INGREDIENTS:

Peroxyacetic Acid	15%
Hydrogen Peroxide	10%
OTHER INGREDIENTS:	75%
TOTAL:	100%

KEEP OUT OF REACH OF CHILDREN
DANGER

Clarity® is for use in aseptic food processing on food packaging materials to achieve commercial sterility.

Clarity® is for use as an antimicrobial rinse of Precleaned or New Returnable or Non-Returnable Containers.

Clarity® can be used with the non-foaming agent, Peradigm™, as an antimicrobial container rinse and for hard, non-porous surface sanitization and disinfection.

Clarity® is for institutional/industrial sanitizing of previously cleaned non-porous food contact surfaces in Dairies, Wineries, Breweries and Beverage Plants, Milk and Dairy Products Processing/Packing Plants, and Food Processing Plants.

Clarity® is for use in the disinfection of hard surfaces in general commercial environments.

For Organic Production. **Clarity®** may be used in rinse or wash water on products labeled as organic in food processing facilities on commodities that will be further processed. For use as a sanitizer on food contact surfaces in contact with products labeled as organic.

Precautionary Statements
Hazards to Humans and Domestic Animals
DANGER

Corrosive, cause's eye and skin damage. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses), chemical resistant apron or coveralls and chemical resistant gloves when handling concentrate. Wash thoroughly with soap and water after handling. Do not breathe vapor or spray mist. Do not enter an enclosed area without proper respiratory protection.

Physical or Chemical Hazards

Strong oxidizing agent. Mix only with water. Clarity® is not combustible; however, at temperatures exceeding 156°F, decomposition occurs, releasing oxygen. The oxygen released could initiate or promote combustion of other materials.

Environmental Hazards

This pesticide is toxic to birds, mammals, fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with 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.

Any solution released from the system should be diluted with water and tested for residuals to ensure that there is less than 3 ppm peroxygen remaining.

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

If on skin or clothing
- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

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

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

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

PeroxyChem

Manufactured by:
PeroxyChem, LLC
2005 Market St Ste 3200
Philadelphia PA 19103-7014

Net Contents: 55 Gallons (208 L) 495 lbs (224 kg)

STORAGE AND DISPOSAL

STORAGE: NEVER RETURN Clarity® TO THE ORIGINAL CONTAINER AFTER IT HAS BEEN REMOVED. Avoid all contaminants, especially dirt, caustic, reducing agents, and metals. Contamination and impurities will reduce shelf life and can induce decomposition. In case of decomposition, isolate container, douse container with cool water and dilute with large volumes of water.

Avoid damage to containers. Keep container closed at all times when not in use. Keep container out of direct sunlight. To maintain product quality, store at temperatures below 86°F. Do not store on wooden pallets.

Procedure for Leak or Spill

Stop leak if this can be done without risk. Shut off ignition sources; no flames, smoking, flares, or spark producing tools. Keep combustible and organic materials away. Flush spilled material with large quantities of water. Undiluted material should not enter confined spaces.

DISPOSAL

Pesticide Disposal

If material has been spilled, an acceptable method of disposal is to dilute with at least 20 volumes of water followed by discharge into suitable treatment system in accordance with all local, state, and Federal environmental laws, rules, regulations, standards, and other requirements. Because acceptable methods of disposal may vary by location, regulatory agencies should be contacted prior to disposal.

Clarity® which is to be discarded should be disposed of as hazardous waste after contacting the appropriate local, state, or Federal agency to determine proper procedures.

Container Disposal

Nonrefillable containers less than 5 gallons. Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a 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.

Nonrefillable containers greater than or equal to 5 gallons. Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Empty drums are not returnable to PeroxyChem unless special arrangements have been made. Dispose of drums in accordance with local, state, and Federal regulations.

All Refillable containers. Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. 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. 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. Return to PeroxyChem for reuse.

DIRECTIONS FOR USE

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

Aseptic Food Processing Operations

This product may be used to achieve commercial sterility of food packaging prior to fill and of equipment used in aseptic food processing applications.

Food Packaging Materials

Apply Clarity® on the exterior and interior of food containers and closure systems (caps, seals, etc.). Apply 4000 ppm peroxyacetic acid at a minimum temperature of 65°C. The solution must remain in contact with the packaging surface for a minimum of 20 seconds. Rinse containers with sterile water prior to filling with processed food; in lieu of a rinse, films may be mechanically stripped of excess sanitizing solution.

For a fine mist or vapor application, no rinse of treatment solution is required: (1) solution application does not exceed 0.0175 mL treatment solution per ounce container capacity; (2) treatment solution has not been recycled; and (3) no treatment solution with a concentration of higher than 4000 ppm peracetic acid has been added to the treatment solution reservoir.

This product may be used on food packaging as an aseptic packaging antimicrobial rinse in food packaging processing operation that has a scheduled process accepted by FDA. The aseptic food processing operation must comply with all applicable FDA regulations, including but not limited to 21 CFR parts 108, 110, 113, and/or 114. Use in an aseptic food processing operation includes testing required for the process validation.

Food Processing Equipment

This product may be used to achieve commercial sterility of non-porous food manufacturing, packaging and filling equipment.

Clarity® may be used as a manufacturing, filling (including rotary fillers) and packaging equipment.

1. Remove gross soil particles from equipment surfaces.
2. Clean surfaces thoroughly.
3. Rinse thoroughly with potable water.
4. Apply 4000 ppm peroxyacetic acid at a minimum temperature of 65 °C.
5. Use immersion, coarse spray or circulation techniques to apply Clarity®. Automated application by fine mist or vapor deposition may be used within enclosed spaces.
6. Allow contact time of at least 20 seconds.
7. Allow to drain dry.
8. A final rinse with sterile water is optional.

This product may be used on equipment used in aseptic packaging antimicrobial rinse in food processing operation that has a scheduled process accepted by FDA. The aseptic food processing operation must comply with all applicable FDA regulations, including but not limited to 21 CFR parts 108, 110, 113, and/or 114. Use in an aseptic food processing operation includes testing required for the process validation.

Antimicrobial Rinse of Precleaned or New Returnable or Non-Returnable Containers

To reduce the number of nonpathogenic beverage spoilage organisms: *Aspergillus versicolor, Byssochlamys fulva, Pediococcus damnosus, Lactobacillus buchneri*, and *Saccharomyces cerevisiae*, use 1 to 10 fluid ounces of product per 5 gallons of water. This provides 265 to 2700 ppm peroxyacetic acid and 175 to1800 ppm hydrogen peroxide.
After applying the antimicrobial rinse, allow containers to drain thoroughly. Optional rinse with sterile or potable water.

Clarity® may be mixed with the non-foaming agent, Peradigm™ and applied at room temperature or at a minimum of 25 °C.

1. Mix a minimum of 0.5 fluid ounce Clarity® with Peradigm in 4.5 gallons of water.
2. Add a maximum of 43 fluid ounces of Peradigm to the dilute solution, and bring total volume to 5 gallons. This provides 125 ppm peroxyacetic acid and 85 ppm hydrogen peroxide.
3. Apply solution, allowing a minimum contact time of 30 seconds.
4. Rinse with sterile or potable water.

Sanitization of Non-Porous Food Contact Surfaces

For use in circulation cleaning and institutional/industrial sanitizing of previously cleaned non-porous food contact surfaces and equipment, such as pipelines, tanks, vats, fillers, evaporators, pasteurizers, and aseptic equipment in:

- Dairies, Wineries, Breweries and Beverage Plants
- Milk and Dairy Products Processing/Packing Plants
- Food Processing Plants

Pathogenic Organisms

Clarity® is an effective sanitizer against *Staphylococcus aureus, Escherichia coli, Listeria monocytogenes and Salmonella typhimurium.*
Clean equipment immediately after use:

1. Remove gross particulate matter with a warm water flush.
2. Wash equipment with detergent or cleaning solution.
3. Rinse equipment with potable water.
4. Prepare Clarity® solution by adding 0.31 to 0.45 fluid ounces to 5 gallons potable water. This provides 85 to 123 ppm peroxyacetic acid and 57 to 82 ppm of hydrogen peroxide.
5. If sanitizing against *Listeria monocytogenes* use 0.4 to 0.45 fluid ounces (109 to 123 ppm peroxyacetic acid and 73 to 82 ppm hydrogen peroxide) of product to 5 gallons of potable water.
6. Fill closed systems with diluted sanitizer solution for a contact time of one (1) minute.
7. For open or not completely closed systems, use a coarse spray, mop/wipe or flood technique to apply the solution to the surface for a contact time of one (1) minute.
8. Allow surfaces to drain thoroughly before resuming operation.

Non-Pathogenic Spoilage Organisms

Clarity® is an effective sanitizer against non-pathogenic spoilage organisms: yeasts, molds.
Clean equipment immediately after use:

1. Remove gross particulate matter with a warm water flush.
2. Wash equipment with detergent or cleaning solution.
3. Rinse equipment with potable water.
4. To control non-pathogenic organisms, a rate of up to 1.8 fluid ounces to 5 gallons potable water may be used. This will provide 500 ppm peroxyacetic acid and 325 ppm hydrogen peroxide.
5. Fill closed systems with diluted sanitizer solution for a contact time of one (1) minute or more.
6. For open or not completely closed systems, use a coarse spray, mop/wipe or flood technique to apply the solution to the surface for a contact time of one (1) minute or more.
7. Allow surfaces to drain thoroughly before resuming operation.

For use with the non-foaming agent, Peradigm™

Clarity® may be mixed with the non-foaming agent, Peradigm™ and applied at room temperature or at a minimum of 25 °C.

1. Mix 0.5 fluid ounce Clarity® with Peradigm in 4.5 gallons of water.
2. Add a maximum of 43 fluid ounces of Peradigm to the dilute solution, and bring total volume to 5 gallons. This provides 125 ppm peroxyacetic acid and 85 ppm hydrogen peroxide.
3. Apply solution, allowing a minimum contact time of 30 seconds.
4. Rinse with sterile or potable water.

Surface Disinfection

Clarity® is an effective one-step cleaner and disinfectant against gram positive and negative bacteria (vegetative forms): *Staphylococcus aureus, Salmonella enterica, Pseudomonas.* It is effective in hard water (up to 400 ppm as calcium carbonate equivalent), and in the presence of moderate organic soil. It may be used in general commercial and medical environments to clean, disinfect, and deodorize inanimate surfaces, such as:

- Floors, walls, and other non-porous surfaces such as tables, chairs, counter tops, garbage cans/bins, bathroom fixtures, sinks, bed frames, shelves, racks, carts, refrigerators, coolers, glazed tile, linoleum, vinyl, sealed asphalt, glazed porcelain, plastic (such as polypropylene and polyethylene), stainless steel or glass.

To Control Bacteria listed above: Prepare Clarity® disinfecting solution by adding 1.1 to 9.5 fluid ounces of the product to 5 gallons of potable water. This will provide 300 to 2600 ppm peroxyacetic acid and 200 to 1730 ppm hydrogen peroxide. For visibly soiled surfaces, remove filth from surfaces to be disinfected by cleaning with a detergent or suitable cleaning product. Rinse with clean water. To disinfect, apply Clarity® by wiping, mopping, or as a coarse spray. Allow to soak for at least 10 minutes, then air dry.

Clarity® may be mixed with the non-foaming agent, Peradigm™.

1. Prepare a diluted solution of Clarity® by adding a minimum of 1.0 fluid ounce to 4.5 gallons of water.
2. Add a maximum of 43 fluid ounces of Peradigm to the dilute solution, and bring total volume to 5 gallons.
3. Apply solution as previously described, allowing a minimum contact time of 10 minutes.

In all applications always prepare a new solution daily to ensure effectiveness. Do not re-use solutions. Dispose of unused solution.

Note: May cause bleaching of treated surfaces; test commodity if unsure.

Note: Before using VigorOx® SP-15 Antimicrobial Agent to sanitize or clean metal surfaces, it is recommended that the diluted solution be tested on a small area to determine compatibility.

EMERGENCY TELEPHONE NUMBERS (24 HOURS)
MEDICAL: COLLECT 303-595-1409
TRANSPORTATION: 800-424-9300
OTHER: COLLECT 716-879-0400