PM33 1677-129 10/5/98 1/6

OXONIA ACTIVE

ACID LIQUID SANITIZER FOR FOOD PROCESSING EQUIPMENT
in Dairies, Dairy Farms, Breweries, Wineries, Beverage and Food Processing Plants

ACID LIQUID SANITIZER FOR SANITIZING TABLEWARE

DISINFECTANT
Hospitals, Health Care Facilities, Animal Care Facilities, Veterinary Facilities, Farms, Livestock Quarters, Poultry Premises, and Poultry Hatcheries

ACCEPTED
WITH COMMENTS
In EPA Letter Dated:
OCT 05 1998
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 1677-129

Active Ingredients:	
Hydrogen Peroxide	27.5%
Peroxyacetic Acid	5.8%
Inert Ingredients	66.7%

KEEP OUT OF REACH OF CHILDREN
DANGER

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER: CORROSIVE: Causes severe eye damage and skin burns. Harmful or fatal if swallowed. Do not get in eyes, on skin or on clothing. Wear chemical goggles, rubber gloves and protective clothing when handling this product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

STATEMENT OF PRACTICAL TREATMENT
IF IN EYES: Flush immediately with cool water. Remove contact lenses. Continue flushing for 15 minutes holding eyelids apart. Get prompt medical attention.
IF ON SKIN: Immediately wash with plenty of soap and water. Get medical attention.
IF SWALLOWED: Drink promptly large quantities of water. Avoid alcohol. DO NOT induce vomiting. Never give anything by mouth to an unconscious person.
CALL A POISON CONTROL CENTER OR PHYSICIAN IMMEDIATELY
FOR EMERGENCY MEDICAL INFORMATION, CALL TOLL-FREE 1-800-328-0026
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

PHYSICAL AND CHEMICAL HAZARDS: Strong oxidizing agent. Corrosive. Do not use in concentrated form. Mix only with water according to label instructions. Never bring concentrate in contact with other sanitizers, cleaners or organic substances.

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 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.

FOR AGRICULTURE OR COMMERCIAL USE ONLY
STRONG OXIDIZING AGENT

EPA Reg. No. 1677-129

EPA Est. 1677-MN-1 (P), 60156-IL-1 (SI)
Superscript refers to first letter of date code

Net Contents: 50 U.S. Gals. (189 L) 4 U.S. Gals. (15.1 L) 15 U.S. Gals. (56.8 L)
30 U.S. Gals. (113.5 L) 2.5 U.S. Gals. 1 U.S. Gal. (3.78 L)

Ecolab Food and Beverage Division
Ecolab Inc.
Ecolab Center
St. Paul MN 55102

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

SANITIZATION

Oxonia Active acid sanitizer is recommended for use on pre-cleaned surfaces such as equipment, pipelines, tanks, vats, fillers, evaporators, pasteurizers and aseptic equipment in dairies, breweries, wineries, beverage and food processing plants. This product is effective as a sanitizer when solution is prepared in water of up to 500 ppm hardness as $CaCo_3$.

SANITIZING FOOD CONTACT SURFACES
Prior to sanitizing, remove gross food particles, then wash with a detergent solution, followed by a potable water rinse. Sanitize with a concentration of 1 to 1.4 ounces **Oxonia Active** concentrate per 4 gallons of water (0.20 - 0.28% v/v concentration). At this dilution **Oxonia Active** is effective against *Staphylococcus aureus, Escherichia coli, Escherichia coli* O157:H7, *Listeria monocytogenes, Salmonella typhimurium, Pseudomonas aeruginosa* and *Vibrio cholerae*. Also effective against organisms found in the brewing industry such as *Saccharomyces cerevisiae, Pediococcus damnosus* and *Lactobacillus buchneri*. Use immersion, coarse spray or circulation techniques as appropriate to the equipment. All surfaces should be exposed to the sanitizing solution for a period of not less than two minutes unless otherwise specified by governing sanitary code. Drain thoroughly and allow to air dry. Do not rinse.

SANITIZING EATING, DRINKING, AND FOOD PREP UTENSILS
1. Remove gross food particles by a prescrape, preflush and, when necessary, a presoak treatment.
2. Wash with a recommended detergent.
3. Rinse with clean water.
4. Sanitize in a solution of 1 to 1.4 oz **Oxonia Active** to 4 gallon of water. Immerse all utensils for at least 1 minute or contact time specified by governing sanitary code.
5. Drain and air dry.

ELEVATED TEMPERATURE SANITIZING
For sanitization of equipment in food processing plants, restaurants, etc., clean and rinse equipment thoroughly. At a temperature of 120 deg F, **Oxonia Active** is an effective sanitizer for food contact surfaces at a concentration of 0.1% to 0.28% v/v (1 to 2.8 oz. **Oxonia Active** to 8 gallons water) against *Staphylococcus aureus* and *Escherichia coli*. All surfaces should be exposed to the sanitizing solution for a period of not less than 1 minute. Allow equipment to drain thoroughly.

SANITIZING TABLEWARE
For sanitizing tableware in low-temperature warewashing machines, inject **Oxonia Active** into the final rinse water at a concentration of 0.1 - 0.28% v/v (1 to 2.8 oz. per 8 gallons of water). Do not exceed 0.28% v/v. Air dry.

To insure that the **Oxonia Active** sanitizer concentration does not fall below 0.1%, periodically test the rinse solution with a suitable test kit and adjust the dispensing rate accordingly. Consult your local Ecolab Specialist for technical assistance and further information on sanitizing tableware in warewashing machines.

FINAL SANITIZING BOTTLE RINSE
Oxonia Active may be used as a final sanitizing rinse for returnable and non-returnable bottles at a 0.2% dilution (1 oz to 4 gallons).

NOTE: FOR MECHANICAL OPERATIONS prepared use solution may not be reused for sanitizing but may be reused for other purposes such as cleaning.
FOR MANUAL OPERATIONS fresh sanitizing solutions should be prepared at least daily or more often if the solution becomes diluted or soiled.

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SANITIZING NON-FOOD CONTACT SURFACES

Preclean surfaces as directed above. **Sanitize non-food contact surfaces such as floors, walls, tables, chairs, benches, drains, troughs, drip pans with 1 oz Oxonia Active per 8 gl water.** At this concentration the product is effective against *Staphylococcus aureus*, *Enterobacter aerogenes*, *Escherichia coli*, *Listeria monocytogenes*,*Salmonella typhimurium*, *Pseudomonas aeruginosa*, and *Saccharomyces cerevisiae*. Also effective against organisms found in the brewing industry such as *Pediococcus damnosus* and *Lactobacillus buchneri*. All surfaces should be exposed to the sanitizing solution for a period of not less than 5 minutes. Drain thoroughly and allow to air dry. No rinse necessary.

FOAM SANITIZING NON-FOOD CONTACT SURFACES

Oxonia Active is an effective foam sanitizer of precleaned non-food contact surfaces, such as boots, floors, walls, drains, and associated equipment. For this application, prepare a solution of 0.2% v/v (1 oz per 4 gallons water) **Oxonia Active** and 0.13% v/v (0.8 oz per 4 gallons water) **Liquid K**. For example, in four gallons of water, add 1 ounce of **Oxonia Active** and 0.8 ounces of **Liquid K**). **Liquid K** is the only approved foam generator. Apply solution as a foam using recommended equipment such as a Super Foamer. Wet surfaces thoroughly. At this concentration, the product is effective against *Staphylococcus aureus*, *Enterobacter aerogenes*, and *Listeria monocytogenes*. Surfaces should be exposed to the sanitizing foam for a period of not less than 5 minutes. No rinse is necessary. Contact your Ecolab representative for information on Liquid K and a recommended foamer.

DIRECTIONS FOR FOGGING: To sanitize hard surfaces as an adjunct to acceptable manual cleaning and disinfecting of room surfaces: Prior to fogging, food products and packaging materials must be removed from the room or carefully protected. Fog desired areas using one quart per 1000 cu. ft. of room area with a 0.3% to 3.0% (3 oz. to 30 oz. per 8 gallons of water) **Oxonia Active** solution. Vacate the area of all personnel during fogging and until the hydrogen peroxide air concentration is below 0.5 ppm. Allow surfaces to drain thoroughly before operations are resumed. Solutions above 0.5% may be corrosive and are not to be used on all surfaces. Test solutions on surfaces prior to use.

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 beverage spoilage organisms such as *Pediococcus damnosus*, *Lactobacillus buchneri*, and *Saccharomyces cerevisiae* apply 0.5 - 4.0% (5 oz. to 40 oz. per 8 gallons of water) of **Oxonia Active** to surfaces at a temperature of 25 to 45 deg C and allow to remain wet for at least 5 minutes. Allow surfaces to drain thoroughly before operations are resumed. Drainage may be followed by a potable or sterile water rinse.

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

To reduce the number of beverage spoilage organisms, such as *Pediococcus damnosus*, *Lactobacillus buchneri*, and *Saccharomyces cerevisiae*, apply **Oxonia Active** at a concentration of 1.0 to 4.0% (10 oz. to 40 oz. per 8 gallons of water) at a temperature of 40 to 60 deg C for at least 7 seconds. After thorough draining, rinse interior container surfaces with sterile or potable water.

ANTIMICROBIAL TREATMENT OF WATER FILTERS

To reduce the number of beverage spoilage organisms such as *Pediococcus damnosus*, *Lactobacillus buchneri*, and *Saccharomyces cerevisiae* apply **Oxonia Active** as a 0.5 to 2.0% (5 oz. to 20 oz. per 8 gallons of water) solution at 25 to 45 deg C for a minimum contact time of 5 minutes. After thorough draining, rinse filters with potable or sterile water.

ANTIMICROBIAL RINSE OF PRECLEANED OR NEW RETURNABLE OR NON-RETURNABLE CONTAINERS WITH THE ADDITION OF [SURFACTANT - NAME(S)]

To reduce the number of beverage spoilage organisms, such as *Pediococcus damnosus*, *Lactobacillus buchneri*, and *Saccharomyces cerevisiae*, add a 1.0 to 4.0% (10 oz. to 40 oz. per 8 gallons of water) solution of **Oxonia Active** to a 0.05 - 0.5% concentration (1 oz per 16 gallons to 2 oz per 3 gallons) of [insert name of surfactant blend] solution. Apply at a temperature of 40 to 60 deg C with a contact time of at least 7 seconds. After thorough draining, rinse interior container surfaces with sterile or potable water.

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DISINFECTION

Oxonia Active disinfects as it cleans in one operation. **Oxonia Active** can be used to disinfect floors, walls and other hard nonporous surfaces such as tables, chairs, countertops, bathroom fixtures, sinks, bed frames, shelves, racks, carts, refrigerators, coolers, tile, linoleum, vinyl, asphalt, porcelain, plastic (such as polypropylene and polyethylene), stainless steel, or glass.

Areas of Use: In Hospitals, use **Oxonia Active** for Surgical and Obstetrical Suites; Housekeeping Services; Physical Therapy Departments; Nursing Services; Autopsy Facilities. Also, use Oxonia Active in nursing homes, other health-care facilities, schools, colleges, veterinary clinics, animal life science laboratories, industrial facilities, dietary areas, office buildings, recreational facilities, retail and wholesale establishments.

COMBINATION DISINFECTION AND CLEANING

Oxonia Active is effective against *Staphyccoccus aureus*, *Salmonella choleraesuis*, *Pseudomonas aeruginosa*, *Salmonella enteriditis*. *Salmonella typhimurium*, *Proteus vulgaris*, *Streptococcus pyogenes* and *Histoplasma capsulatum** at 0.4% (4 oz per 8 gallons of water) in hard water (500 ppm as $CaCO_3$), 5% blood serum and dried soap film residue on hard nonporous surfaces. For heavily soiled areas a precleaning step is required. Prepare a disinfecting and cleaning solution by diluting 4 ounces **Oxonia Active** in 8 gallons of water (0.4% v/v). Apply solution with mop, cloth, sponge, brush, scrubber, or coarse spray device or by soaking so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove solution and entrapped soil with a clean wet mop, cloth, or wet vacuum pickup. Prepare a fresh solution daily or when it becomes soiled or diluted..

**Not tested in the presence of soap film residue.*

TUBERCULOCIDAL

Oxonia Active passes the rigid requirements as a tuberculocide at 0.4% (4 oz. per 8 gallons of water) in the presence of 5% blood serum, 500 ppm hard water and residual soap scum on nonporous surfaces at 20 deg C. Remove heavy soil or gross filth prior to disinfection. Allow surfaces to remain wet for 10 minutes, then remove solution with a clean wet mop, cloth, or wet vacuum pickup.

VIRUCIDAL

At 0.4% (4 oz. per 8 gallons of water) **Oxonia Active** is effective against Influenza B/Taiwan/2/62, Influenza A(H3N2) and Influenza A (H1N1) when used at 20 deg C with a 10 minute contact time in the presence of 500 ppm hard water and organic soil. Apply as directed under disinfection.

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OXONIA ACTIVE is designed for use in animal hospitals, animal laboratories, kennels, pet shops, zoos, pet animal quarters, poultry premises, poultry hatcheries, and livestock quarters. When used as directed, **Oxonia Active** is specifically designed to disinfect, deodorize and clean inanimate, hard, *surfaces such as walls, floors, sink tops, furniture, operating tables, kennel runs, cages and feeding and* watering equipment. In addition **Oxonia Active will** deodorize those areas which are generally hard to keep fresh smelling such as garbage storage areas, empty garbage bins and cans, and any other areas which 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.

For heavily soiled areas, a pre-cleaning step is required. Prepare a fresh solution for each use.

DISINFECTION OF POULTRY PREMISES, TRUCKS, COOPS AND 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 a detergent and rinse with water.
5. Saturate surfaces with a 0.4% (4 oz. per 8 gallons of water) solution of **Oxonia Active** for a period of 10 minutes.
6. Ventilate buildings, coops and other closed spaces. Do not house poultry or employ equipment until treatment has been absorbed, set or dried.
7. Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains and waterers with a detergent and rinse with potable water before reuse.

See your Ecolab or Airkem Representative for specific recommendations for all cleaning and rinsing requirements.

POULTRY HATCHERY DISINFECTION

Clean out any remaining eggs and chicks. Remove gross soils, such as litter, down, shell fragments or other hatching related debris. Empty all racks and other equipment. Thoroughly wash all surfaces, including floors, walls, conveyors, trays and water systems with a recommended detergent. Rinse thoroughly with water. Apply a 0.4% (4 oz. per 8 gallons of water) solution of **Oxonia Active** with a mop, cloth, brush or coarse spray. Wet all surfaces and allow to remain wet for 10 minutes. Ventilate buildings and other closed spaces. Allow to dry before reintroducing eggs.

DISINFECTION AND DEODORIZING OF ANIMAL HOUSING FACILITIES (BARNS, KENNELS, HUTCHES, ETC.)

Remove animals and feed from facilities. Remove litter, waste matter and gross soils. Empty all troughs, rack and other feeding and watering equipment. Wash surfaces with a recommended alkaline detergent, by manual, foam, or spray application. Rinse with water. Apply a 0.4% (4 oz. per 8 gallons of *water) solution of* **Oxonia Active** *with a mop, cloth, brush or coarse spray. Wet all surfaces and allow to* remain wet for 10 minutes. Ventilate buildings and other closed spaces. Allow to air dry before reintroducing animals. Effective against the following organisms: *Aspergillus fumigatus, Bordetella avium, Pasteurella multocida,* and *Alcaligenes faecalis.*

VIRUCIDAL ACTIVITY - Poultry and Livestock Pathogens

Oxonia Active is useful as a disinfectant against viruses pathogenic to poultry, such as Influenza A (H10N7), Newcastle Disease virus, Infectious bronchitis virus, Reovirus ($C0_8$), Chicken Anemia Virus, Infectious Bursal Disease Virus, Laryngotracheitis Virus, as well as bovine pathogens such as Infectious bovine rhinotracheitis (IBR) and Parainfluenza 3 Virus.

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FOR SANITIZING OF HATCHING EGGS

Prepare a solution of **Oxonia Active** by diluting 2 oz product with 5 gallons of water. As eggs are gathered or prior to setting, apply solution as a coarse spray so as to lightly wet all shell surfaces.

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STERILIZATION OF MANUFACTURING, FILLING, AND PACKAGING EQUIPMENT IN ASEPTIC PROCESSES

Prior to use of this product, remove gross soil particles from processing surfaces, then wash with a recommended detergent solution, followed by a thorough potable water rinse. Prepare a sterilizing solution by diluting 6.4 ounces **Oxonia Active** concentrate per each gallon of water (50 mL/liter) (5.0% v/v). Circulate, coarse spray, or flood the sterilizing solution through the system. All surfaces should be exposed to the sterilizing solution for a minimum exposure time based on the product solution temperature. The following time and temperature relationships are required:

Oxonia Active Concentration	Temperature	Time
5%	68°F (20°C)	6 hours
5%	122°F (50°C)	20 minutes
5%	176°F (80°C)	5 minutes

Rinse surfaces completely with a sterile water rinse. For food-contact surfaces, follow with a sanitizing solution of **Oxonia Active**. Allow surfaces to drain thoroughly prior to any food product contact.

NOTE: This product in its use solutions 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.

STORAGE & DISPOSAL

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

STORAGE: Product should be kept cool and in a vented container to avoid any explosion hazard.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: (1 gl) Do not reuse empty containers. Wrap container and put in trash.
(4, 15, 30, 50 gl plastic) Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
(2.5 gl bladder in box) Remove empty bladder from outer corrugated box. Triple rinse bladder (or equivalent). Offer box and bladder for recycling or dispose of in a sanitary landfill or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.
(Totes) Verify that the tote is empty. Do not rinse or clean. Seal tote and contact Ecolab for return.

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