



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

January 29, 2019

Bridget Peterson
Regulatory Specialist I
Ecolab Inc.
1 Ecolab Place
St. Paul, MN 55102

Subject: Label Amendment – Adding Public Health Claims
Product Name: Oxonia Active
EPA Registration Number: 1677-129
Application Date: March 1, 2018
Decision Number: 539177

Dear Ms. Peterson:

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

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

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

Page 2 of 2
EPA Reg. No. 1677-129
Decision No. 539177

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, you may contact Aline Heffernan at 703-347-8602 or via email at heffernan.aline@epa.gov.

Sincerely,



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

Enclosure: Stamped Label

ACCEPTED

Jan 29, 2019

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 1677-129

OXONIA ACTIVE

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

DISINFECTANT

Academic Facilities, Veterinary Facilities, Animal Care Facilities, Industrial Facilities, Dietary
Areas, Office Buildings, Recreational Facilities, Retail and Wholesale Establishments, Farms,
Livestock Quarters, Poultry Premises, and Poultry Hatcheries

Kills *Clostridium difficile* Endospores

Kills Foot and Mouth Disease Virus (FMDV)

STERILANT SPORICIDAL

(DISINFECTANT) (AND) (SANITIZER)(VIRUCIDE) FOR THE PHARMACEUTICAL AND
COSMETIC INDUSTRY

A MICROBIOCIDAL FOR CONTROL OF SLIME-FORMING BACTERIA, FUNGI AND ALGAE IN
INDUSTRIAL RECIRCULATING COOLING WATER SYSTEMS, HEAT TRANSFER SYSTEMS,
DAIRY SWEETWATER SYSTEMS, AIR WASHER SYSTEMS, AIR AND GAS SCRUBBERS
AND COW WATER SYSTEMS

Active Ingredients:

Hydrogen Peroxide 27.5%

Peroxyacetic Acid 5.8%

Inert Ingredients:..... 66.7%

Total:..... 100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER

PELIGRO

(See [back], [side], [inside], [other] [fold-out] [booklet] [hang tag] [product container] [reference
sheet], [insert], [other] [label(s)] [panel(s)] [container] for [complete] [additional] [information]
[directions for use] [precautionary statements] [and] [first aid] [and] [storage and disposal]
[container handling and disposal])

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: CORROSIVE. Causes irreversible eye damage and skin burns. May be fatal if
inhaled. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Do not breathe vapor
or spray mist. Wear protective eyewear (goggles, face shield, or safety glasses), protective
clothing and rubber gloves. Wash thoroughly after handling with soap and water and before
eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash
contaminated clothing before reuse. Wear a mask or pesticide respirator jointly approved by Mine
Safety and Health Administration and the National Institute for Occupational Safety and Health.

FIRST AID

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

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

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

IF SWALLOWED: Call a 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person. Have the product container or label with you when calling a poison control center or going for treatment.

**FOR EMERGENCY MEDICAL INFORMATION CALL TOLL FREE: 1-800-328-0026
OUTSIDE NORTH AMERICA, CALL 1-651-222-5352**

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.

(For 5 gal containers and larger)

ENVIRONMENTAL HAZARDS: This pesticide is toxic to birds, fish, and aquatic invertebrates. 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.

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 secondary/use dilution container label will be used only when the product is diluted at or below 3.0 fl. oz. per gallon of water. Other dilutions must use concentrate signal word and precautionary statements from page 1.

(Note: For use on commercial labels where multiple contact times are listed. (These contact times will not control all organisms on the label. See label for other contact times for specific uses.))

SANITIZATION

Oxonia Active acid sanitizer is recommended for use on hard, non-porous, pre-cleaned surfaces such as equipment, pipelines, tanks, vats, fillers, evaporators, pasteurizers and aseptic equipment in dairies, dairy farms, breweries, wineries, biofuel producing facilities, 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 CaCO₃.

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 must be prepared at least daily or more often if the solution becomes diluted or soiled.

SANITIZING FOOD CONTACT SURFACES

Prior to sanitizing, remove gross food particles, and then wash with a detergent solution, followed by a potable water rinse. Sanitize hard, non-porous surfaces with a concentration of 1.0 - 1.4 fl. oz. 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* (ATCC 6538), *Escherichia coli* (ATCC 11229), *Escherichia coli* O157:H7 (ATCC 43895), *Listeria monocytogenes* (ATCC 7644), *Salmonella typhimurium* (ATCC 13311), *Pseudomonas aeruginosa* (ATCC 15442) and *Vibrio cholerae* (ATCC 25873). It is also effective against organisms found in the brewing industry, *Saccharomyces cerevisiae* (ATCC 834), *Pediococcus damnosus* (ATCC 25248) and *Lactobacillus malefermentans* (ATCC 11307). Use immersion, coarse spray or circulation techniques as appropriate to the equipment. All surfaces must be exposed to the sanitizing solution for a period of not less than 1 minute unless a longer time is specified by the governing sanitary code. Drain thoroughly and allow to air dry. Do not rinse.

ELEVATED TEMPERATURE SANITIZING (FOR FOOD CONTACT SURFACES)

For sanitization of hard, non-porous surfaces of equipment in (biofuel producing facilities) (food processing plants, clean and rinse equipment thoroughly. At a temperature of (49 °C) (120 °F), Oxonia Active is an effective sanitizer for hard, non-porous food contact surfaces at a concentration of 0.20% - 0.28% v/v (1.0 - 1.4 fl. oz. Oxonia Active to 4 gallons water) against *Staphylococcus aureus* (ATCC 6538) and *Escherichia coli* (ATCC 11229). All surfaces must be exposed to the sanitizing solution for a period of not less than 1 minute. Allow equipment to drain thoroughly.

CONTINUOUS TREATMENT OF CONVEYORS

Wash, rinse and sanitize conveyor equipment. During processing, apply Oxonia Active at no more than 0.20% - 0.28% v/v (1 - 1.4 fl. oz. per 4 gallons of water) concentration to hard, non-porous surfaces of the conveyor with Mikro Master or other suitable feeding equipment. At this dilution Oxonia Active is effective against *Staphylococcus aureus* (ATCC 6538), *Escherichia coli* (ATCC 11229), *Escherichia coli* O157:H7 (ATCC 43895), *Listeria monocytogenes* (ATCC 49594), *Salmonella typhimurium* (ATCC 13311), *Pseudomonas aeruginosa* (ATCC 15442) and *Vibrio cholerae* (ATCC 25873). Controlled volumes of Oxonia Active are applied to return portion of conveyor through nozzles so located as to permit maximum drainage of Oxonia Active from equipment and to prevent puddles on top of belt. During interruptions in operations, coarse spray the processing equipment with Oxonia Active solution at not more that 0.28% v/v concentration. Conveyor equipment must be free of product when applying coarse spray. Conveyor surface must be exposed to the sanitizing solution for a period of not less than 1 minute.

SANITIZE PRE-CLEANED OR NEW RETURNABLE OR NON-RETURNABLE CONTAINERS

To sanitize pre-cleaned or new returnable or non-returnable containers for processing, apply Oxonia Active at a concentration of 0.3% - 1.0% (3 - 10 fl. oz. per 8 gallons or water) at a temperature of (40 - 60 °C) (104 - 140 °F) for at least 20 seconds. At these conditions, Oxonia Active is effective against *Staphylococcus aureus* (ATCC 6538), *Escherichia coli* (ATCC 11229) and *Pseudomonas aeruginosa* (ATCC 15442). After thorough draining, rinse interior container surfaces with a disinfected water rinse free of pathogenic bacteria.¹

SANITIZE PRE-CLEANED OR NEW RETURNABLE OR NON-RETURNABLE CONTAINERS

To sanitize pre-cleaned or new returnable or non-returnable containers for processing, apply Oxonia Active at a concentration of 1.0% - 4.0% (10 - 40 fl. oz. per 8 gallons or water) at a temperature of (40 - 60 °C) (104 - 140 °F) for at least 7 seconds. At these conditions, Oxonia Active is effective against *Staphylococcus aureus* (ATCC 6538), *Escherichia coli* (ATCC 11229), *Salmonella typhimurium* (ATCC 13311), *Pediococcus damnosus* (ATCC 25248), *Lactobacillus malefermentans* (ATCC 11305) and *Saccharomyces cerevisiae* (ATCC 834). After thorough draining, rinse interior container surfaces with a disinfected water rinse free of pathogenic bacteria.¹

FINAL SANITIZING CONTAINER RINSE

This product may be used as a final sanitizing rinse, followed by adequate draining, for returnable and non-returnable containers at a 1% - 4% dilution (10 - 40 fl. oz. per 8 gallons of water) at temperature of (40 - 60 °C) (104 - 140 °F) for at least 7 seconds.

FOR SANITIZING OF HATCHING EGGS

Prepare a solution of Oxonia Active by diluting 2 fl. 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, and allow 1 minute of contact time. The solution must not be reused for sanitizing eggs.

SANITIZING NON-FOOD CONTACT SURFACES

Prior to sanitizing, remove gross soil particles and then wash with a detergent solution followed by a potable water rinse. Sanitize hard, non-porous, non-food contact surfaces such as floors, walls, tables, chairs, benches, drains, troughs, and drip pans with 1 fl. oz. Oxonia Active per 8 gal water. At this concentration the product is effective against *Staphylococcus aureus* (ATCC 6538), *Enterobacter aerogenes* (ATCC 13048), *Escherichia coli* (ATCC 11229), *Listeria monocytogenes* (ATCC 7644), *Salmonella typhimurium* (ATCC 13311), *Pseudomonas aeruginosa* (ATCC 15442), and *Saccharomyces cerevisiae* (ATCC 834). It is also effective against organisms found in the brewing industry, *Pediococcus damnosus* (ATCC 25248) and *Lactobacillus malefermentans* (ATCC 11305). All surfaces must 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 (This use not approved in the state of California)

Oxonia Active is an effective foam sanitizer of pre-cleaned, hard, non-porous, 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 fl. oz. per 4 gallons water) Oxonia Active and 0.13% v/v (0.7 fl. oz. per 4 gallons water) Liquid K. For example, in four gallons of water, add 1 fl. oz. of Oxonia Active and 0.7 fl. oz. 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* (ATCC 6538), *Enterobacter aerogenes* (ATCC 13048) and *Listeria monocytogenes* (ATCC 7644). Surfaces must 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.

SANITIZING NON-FOOD CONTACT PACKAGING EQUIPMENT

Prior to use of this product, remove gross soil particles from surfaces. Wash with a recommended detergent solution and rinse thoroughly with potable water. For sanitization against the beverage spoilage organisms *Pediococcus damnosus* (ATCC 25248), *Lactobacillus malefermentans* (ATCC 11305) and *Saccharomyces cerevisiae* (ATCC 834), apply 0.5 - 4.0% (5 - 40 fl. oz. per 8 gallons of water) of Oxonia Active to hard, non-porous surfaces at a temperature of (25 - 45 °C) (77 - 113 °F) and allow to remain wet for at least 5 minutes. Allow surfaces to drain thoroughly before operations are resumed.

SANITIZING NON-POROUS GLOVED HANDS

To reduce cross-contamination from area to area in animal areas and packaging and storage areas of food plants, dip pre-washed (plastic, latex, or other synthetic rubber) non-porous gloved hands into a suitable clean container that contains enough freshly made sanitizing solution to cover the gloved area.

Prepare the sanitizing solution by adding 1 - 1.4 fl. oz. Oxonia Active per 4 gal. of water (0.20 - 0.28% v/v concentration) (or equivalent use dilution). Dip (soak) gloves in solution for 1 minute. Do not let sanitizing solution come into contact with the exposed skin. Change the solution in the bath at least daily or more often if the solution becomes diluted or visibly soiled.

**Sanitizing Claims:
Listed Organisms and Contact Times**

Organism	ATCC	Contact Time
Sanitizing Food Contact Surfaces		
<i>Escherichia coli</i>	ATCC 11229	1 min
<i>Escherichia coli O157:H7</i>	ATCC 43895	1 min
<i>Lactobacillus malefermentans</i>	ATCC 11307	1 min
<i>Listeria monocytogenes</i>	ATCC 7644	1 min
<i>Pediococcus damnosus</i>	ATCC 25248	1 min
<i>Pseudomonas aeruginosa</i>	ATCC 15442	1 min
<i>Saccharomyces cerevisiae</i>	ATCC 834	1 min
<i>Salmonella typhimurium</i>	ATCC 13311	1 min
<i>Staphylococcus aureus</i>	ATCC 6538	1 min
<i>Vibrio cholerae</i>	ATCC 25873	1 min
Sanitizing Food Contact Surfaces (Elevated Temp)		
<i>Escherichia coli</i>	ATCC 11229	1 min
<i>Staphylococcus aureus</i>	ATCC 6538	1 min
Sanitizing Food Containers (Elevated Temp)		
<i>Escherichia coli</i>	ATCC 11229	7, 20 sec
<i>Lactobacillus malefermentans</i>	ATCC 11307	7 sec
<i>Pediococcus damnosus</i>	ATCC 25248	7 sec
<i>Pseudomonas aeruginosa</i>	ATCC 15442	20 sec
<i>Saccharomyces cerevisiae</i>	ATCC 834	7 sec
<i>Salmonella typhimurium</i>	ATCC 13311	7 sec
<i>Staphylococcus aureus</i>	ATCC 6538	7, 20 sec
Sanitizing Non-Food Contact Surfaces		
<i>Enterobacter aerogenes</i>	ATCC 13048	5 min
<i>Escherichia coli</i>	ATCC 11229	5 min
<i>Lactobacillus malefermentans</i>	ATCC 11307	5 min
<i>Listeria monocytogenes</i>	ATCC 7644	5 min
<i>Pediococcus damnosus</i>	ATCC 25248	5 min
<i>Pseudomonas aeruginosa</i>	ATCC 15442	5 min
<i>Saccharomyces cerevisiae</i>	ATCC 834	5 min
<i>Salmonella typhimurium</i>	ATCC 13311	5 min
<i>Staphylococcus aureus</i>	ATCC 6538	5 min

ANTIMICROBIAL

DIRECTIONS FOR ANTIMICROBIAL SURFACE SATURATION FOR SPOILAGE ORGANISMS

To treat large areas of hard surfaces by surface saturation: Prior to application, food products and packaging materials must be removed from the room or carefully protected. Saturate desired areas using a 0.3% - 3.0 % Oxonia Active solution (3 - 30 fl. oz. per 8 gallons of water). Vacate the area of all personnel during large area application 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. All hard, non-porous food contact surfaces must be rinsed thoroughly with a potable water rinse.

ANTIMICROBIAL RINSE OF PRE-CLEANED OR NEW RETURNABLE OR NON-RETURNABLE CONTAINERS

To reduce the number of the beverage spoilage organisms, *Pediococcus damnosus* (ATCC 25248), *Lactobacillus malefermentans* (ATCC 11305), and *Saccharomyces cerevisiae* (ATCC 834), apply Oxonia Active at a concentration of 1.0% - 4.0% (10 - 40 fl. oz. per 8 gallons of water)

at a temperature of (40 - 60 °C) (104 - 140 °F) for at least 7 seconds. After thorough draining, rinse interior container surfaces with a disinfected water rinse free of pathogenic bacteria.¹

¹A disinfected water rinse free of pathogenic bacteria is equivalent to a water rinse using water disinfected by ozone, ultraviolet radiation, chlorine dioxide, filtration, chlorine or chlorine compounds.

ANTIMICROBIAL TREATMENT OF WATER FILTERS

To reduce the number of the beverage spoilage organisms *Pediococcus damnosus* (ATCC 25248), *Lactobacillus malefermentans* (ATCC 11305) and *Saccharomyces cerevisiae* (ATCC 834). Clean the water filters with a detergent solution followed by a potable water rinse. Apply Oxonia Active as a 0.5 - 2.0% (5 - 20 fl. oz. per 8 gallons of water) solution at (25 °C) (77 °F) for a minimum contact time of 5 minutes. After thorough draining, rinse filters with a disinfected water rinse free of pathogenic bacteria.¹ Consult filter manufacturer for filter compatibility guidelines. Conduct filter treatment while the process is not in operation.

ANTIMICROBIAL TREATMENT OF REVERSE OSMOSIS WATER MEMBRANES

To reduce the number of the beverage spoilage organisms *Pediococcus damnosus* (ATCC 25248), *Lactobacillus malefermentans* (ATCC 11305) and *Saccharomyces cerevisiae* (ATCC 834). Clean the RO system with a detergent solution followed by a potable water rinse. Apply Oxonia Active as a 0.1 - 0.2% (1 - 2.1 fl. oz. per 8 gallons of water) use solution at (24 °C) (75 °F) for a minimum contact time of 5 minutes. After treatment with Oxonia Active use solution, rinse membranes thoroughly with a disinfected water rinse free of pathogenic bacteria.¹ Do not treat membranes more than once per week. Consult membrane manufacturer for membrane compatibility guidelines. Conduct membrane treatment while the membrane system is off-line.

ANTIMICROBIAL TREATMENT OF FOOD PROCESSING MEMBRANES

To reduce the number of the spoilage organisms *Pediococcus damnosus* (ATCC 25248), *Lactobacillus malefermentans* (ATCC 11305), *Saccharomyces cerevisiae* (ATCC 834), *Sphingomonas paucimobilis* (ATCC 10829), and *Aureobacterium esteraromaticum* (ATCC 958). Check with membrane manufacturer to ensure membrane compatibility is acceptable with the particular concentrations and conditions of use.

Ultrafiltration and Microfiltration Membranes: Use 2 - 10.2 fl. oz. of Oxonia Active per 8 gallons of water (2,000 - 10,000 ppm v/v) at (24 °C) (75 °F) for a minimum contact time of 5 minutes. Membranes can be treated daily. Conduct membrane treatment while food processing is not in operation. After treatment with Oxonia Active use solution, rinse membranes thoroughly with disinfected water free of pathogenic bacteria.¹

Reverse Osmosis and Filtration Membranes: Use 0.9 - 10.2 fl. oz. of Oxonia Active per 8 gallons of water (900 - 10,000 ppm v/v) at (24 °C) (75 °F) for a minimum contact time of 5 minutes. Do not treat membranes more than once per week. Conduct membrane treatment while food processing is not in operation. After treatment with Oxonia Active use solution, rinse membranes thoroughly with disinfected water free of pathogenic bacteria.¹

¹A disinfected water rinse free of pathogenic bacteria is equivalent to a water rinse using water disinfected by ozone, ultraviolet radiation, chlorine dioxide, filtration, chlorine or chlorine compounds.

ANTIMICROBIAL RINSE FOR REDUCING SLIME-FORMING / (BIOFOULING) (AND) (NON-PUBLIC HEALTH SPOILAGE) BACTERIA ON MEMBRANES (Not for use in California)

Oxonia Active with Ultrasil 740 may be used to reduce ((slime-forming)/(biofouling) (and) (non-public health spoilage) bacteria) on Microfiltration (MF), Ultrafiltration (UF), Nanofiltration (NF), and Reverse Osmosis (RO) membranes used in food handling/storage establishments, food and

beverage manufacturing, human drinking water systems, biofuel producing facilities, and industrial processes and water systems. Prior to use, check with the membrane manufacturer to confirm chemical compatibility.

Prior to antimicrobial rinsing, remove gross food particles, then wash with a detergent solution, followed by a potable water rinse. Prepare a solution containing both Oxonia Active and Ultrasil 740. First, add 1.1 - 1.4 fl. oz. of Ultrasil 740 per gallon of water (0.9 - 1.1% v/v concentration), then add 0.25 - 0.32 fl. oz. of Oxonia Active per gallon of the Ultrasil 740 solution (0.2 - 0.25% v/v concentration). Temper the solution to a minimum of (43 °C) (110 °F) and apply to the membrane by circulation for at least 5 minutes. Drain the solution from the membrane and rinse the membrane thoroughly with water.

Used as directed, treatment will kill at least 99.9% of slime-forming (and non-public health spoilage) bacteria on MF, UF, NF and RO membranes. Cleaning effectiveness is verified by monitoring pressure drop across the membrane, or other parameter as appropriate, during ((slime-forming)/(biofouling) bacteria) control treatment.

Membrane Cleaning (Not for use in California)

For Food Plant and Industrial use

Use on Microfiltration (MF), Ultrafiltration (UF), Nanofiltration (NF), and Reverse Osmosis (RO) membranes

Prior to this cleaning, remove gross (food) (soil) particles, then wash with a detergent solution, followed by a potable water rinse. Prepare a solution containing both Oxonia Active and Ultrasil 740. First, add 1.1 - 1.4 fl. oz. of Ultrasil 740 per gallon of water (0.9 - 1.1% v/v concentration), then add 0.25 - 0.32 fl. oz. of Oxonia Active per gallon of the Ultrasil 740 solution (0.2 - 0.25% v/v concentration). Temper the solution to a minimum of (43 °C) (110 °F) and apply to the membrane by circulation for at least 5 minutes. Drain the solution from the membrane and rinse the membrane thoroughly with water.

Ultrasil 740 can also be used as a CIP acid for high Temperature Equipment.

Note: Observe the recommendations of the membrane manufacturers for maximum temperature, pH and time limits.

Avoid food contamination during application and storage. Rinse surfaces thoroughly with potable water after use.

RECIRCULATING COOLING WATER SYSTEMS AND HEAT TRANSFER SYSTEMS

Examples of heat transfer systems are Evaporative Condensers, Hydrostatic Sterilizers and Retorts, Cooling Canals, Pasteurizers, Tunnel Coolers and Warmers, Closed and Once Through Cooling Systems and COW Water Systems. For control of slime-forming bacteria, algae and fungi in recirculating cooling water systems add Oxonia Active to the tower basin, distribution box or some other point to insure uniform mixing. For heat transfer systems, the product should be added to the system at a point of uniform mixing such as a basin area, sump area or other reservoir or collecting area from which the treated water will be circulated uniformly throughout the system.

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, apply 150 - (600) (1800) ppm Oxonia Active (1.25 - (5.0) (15) pounds per 1,000 gallons of water in the system) weekly or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

Subsequent Dose: After microbial control is evident, add 75 - 300 ppm Oxonia Active (0.62 - 2.5 pounds per 1,000 gallons of water in the system) weekly or as needed to maintain microbial control. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled apply 150 - (600) (1800) ppm Oxonia Active (1.25 - (5.0) (15) pounds per 1,000 gallons of water in the system) weekly or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 60 - 240 ppm Oxonia Active (0.5 - 2.0 pounds per 1,000 gallons of makeup water added to the system). Badly fouled systems must be cleaned before treatment is begun.

DAIRY SWEETWATER SYSTEMS

For control of slime-forming bacteria, algae and fungi in dairy sweetwater systems add Oxonia Active to the system at a point of uniform mixing such as a basin area, sump area or other reservoir or collecting area from which the treated water will be circulated uniformly throughout the system.

(Meets the criteria in Appendix F of the Grade "A" Pasteurized Milk Ordinance)

(Oxonia Active fulfills the criteria of Appendix F of the Grade "A" Pasteurized Milk Ordinance.

Recommendation of the U.S. Public Health Service in water up to 500 ppm of hardness calculated as CaCO₃ when tested by the A.O.A.C Germicidal and Detergent Sanitizer Official Method.)

INTERMITTENT OR SLUG METHOD

Initial Dose: When the system is noticeably fouled, apply 195 - 273 ppm Oxonia Active (25 - 35 fl. oz. of product per 1,000 gallons of water in the system) weekly or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

Subsequent Dose: After microbial control is evident, add 98 - 137 ppm Oxonia Active (12.5 - 17.5 fl. oz. per 1,000 gallons of water in the system) weekly or as needed to maintain microbial control. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled apply 195 - 273 ppm Oxonia Active (25 - 35 fl. oz. per 1,000 gallons of water in the system) weekly or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 78 - 109 ppm Oxonia Active (10 - 14 fl. oz. per 1,000 gallons of makeup water added to the system). Badly fouled systems must be cleaned before treatment is begun.

AIR WASHER SYSTEMS

To control slime-forming bacteria, fungi and algae in industrial air washer systems. Add to the Air Washer sump or Chill Water or Coil Spray Water to insure uniform mixing.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled apply 300 - 3000 ppm Oxonia Active (2.5 - 25 pounds per 1,000 gallons of water in the system) weekly or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 120 - 1800 ppm Oxonia Active (1.0 - 15 pounds per 1,000 gallons water lost by blowdown). Badly fouled systems must be cleaned before treatment is begun.

AIR AND GAS SCRUBBER AND COW WATER SYSTEMS

To control slime-forming bacteria, fungi and algae in these water systems. This product should be added to the system at a convenient point of mixing.

CONTINUOUS FEED METHOD

Initial Dose: When the system is noticeably fouled apply 300 - 9000 ppm Oxonia Active (2.5 - 75 pounds per 1,000 gallons of water in the system) weekly or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 150 - 5400 ppm Oxonia Active (1.25 - 45 pounds per 1,000 gallons water lost by blowdown). Badly fouled systems must be cleaned before treatment is begun.

FOGGING – NON-PUBLIC HEALTH

(This product can be applied by fogging to control the growth of non-public health spoilage and decay causing bacteria on hard, non-porous surfaces in dairies, beverage and food processing plants including meat and poultry processing facilities. All surfaces must be pre-cleaned prior to fogging.)

DIRECTIONS FOR FOGGING (in Dairies, Beverage and Food Processing Plants (including meat and poultry processing facilities)):

Prior to fogging, food products and packaging material must be removed from the room or carefully protected. The room or building must be vacant of all personnel during and at least two hours after the fogging treatment. Calculate volume of the room to determine volume of solution needed to fog (one quart per 1000 cu. ft. of room area). Prepare a solution containing 1.0 - 1.4 fl. oz. per 4 gallons of water (0.20 - 0.28% v/v concentration) and fog using a mechanical fogging apparatus. Fog product for length of time necessary to fill room based on fogging apparatus manufacturer directions. Surfaces must remain undisturbed for 5 minutes [after room fill is achieved] before initiating aeration of the room.

Do not enter the treated area for a minimum of 2 hours [or 8 air exchanges (ACH)] after fogging is completed. If the room or building must be entered prior to complete aeration, the individual must wear a self-contained respirator approved by NIOSH/MSHA, goggles, long sleeves, and long pants.

The fog generated is irritating to the eyes, skin and mucous membranes. Wear a dust mist respirator when mixing the use solution and pouring it into the mechanical fogging apparatus. All food contact surfaces must be thoroughly rinsed with potable water prior to sanitizing with an EPA approved food contact sanitizer.

**Non-Public Health Claims:
Listed Organisms and Contact Times**

Organism	ATCC	Contact Time
Spoilage Organism Reduction of Food Containers (Elevated Temp)		
<i>Lactobacillus malefermentans</i>	ATCC 11307	7 sec
<i>Pediococcus damnosus</i>	ATCC 25248	7 sec
<i>Saccharomyces cerevisiae</i>	ATCC 834	7 sec
Spoilage Organism Reduction on Filters / Membranes		
<i>Lactobacillus malefermentans</i>	ATCC 11307	5 min
<i>Pediococcus damnosus</i>	ATCC 25248	5 min
<i>Saccharomyces cerevisiae</i>	ATCC 834	5 min
<i>Sphingomonas paucimobilis</i>	ATCC 10829	5 min
<i>Aureobacterium esteraromaticum</i>	ATCC 958	5 min

DISINFECTION

Oxonia Active disinfects as it cleans in one operation. Oxonia Active can be used to disinfect floors, walls and other hard, non-porous surfaces such as tables, chairs, countertops, bathroom

fixtures, sinks, shelves, racks, carts, refrigerators, coolers, tile, linoleum, vinyl, glazed porcelain, plastic (such as polypropylene and polyethylene), stainless steel, or glass.

Areas of Use: Housekeeping services; hospitals, academic facilities, veterinary facilities, animal care facilities, industrial facilities, dietary areas, office buildings, recreational facilities, retail and wholesale establishments. Not for use on food contact surfaces, medical devices or medical equipment.

COMBINATION GENERAL DISINFECTION AND CLEANING

Oxonia Active is effective against *Staphylococcus aureus* (ATCC 6538), *Salmonella enterica* (ATCC 10708), *Salmonella enteritidis* (ATCC 13076), *Salmonella typhimurium* (ATCC 13311), *Proteus vulgaris* (ATCC 13315), *Streptococcus pyogenes* (ATCC 19615) and *Histoplasma capsulatum** at 0.4% - 1.0% (2 fl. oz. / 4 gallons to 5 fl. oz. / 4 gallons of water) in hard water (500 ppm as CaCO₃), 5% blood serum and dried soap film residue on hard, non-porous surfaces. For heavily soiled areas a pre-cleaning step is required. Prepare a disinfecting and cleaning solution by diluting 4 fl. oz. 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, and 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.

VIRUCIDAL

At 0.4% - 1.0% (2 fl. oz. / 4 gallons to 5 fl. oz. / 4 gallons of water) Oxonia Active is effective against Influenza B/Taiwan/2/62 Virus, Influenza A Virus (H3N2) and Influenza A Virus (H1N1) when used at (20 °C) (68 °F) with a 10 minute contact time in the presence of 500 ppm hard water and organic soil. Apply as directed under disinfection.

(Oxonia Active is effective against Respiratory Syncytial Virus (Strain Long) [RSV], Vaccinia Virus (Strain WR) [Pox Virus], Norovirus (Feline Calicivirus tested surrogate), Rhinovirus (Type 37, Strain 151-1), Rotavirus (Strain WA), and Adenovirus Type 5 at a dilution of 3 fl. oz./ gallon of water and a contact time of 3 minutes. At 3 fl. oz. / gallon of water Oxonia Active is effective against Poliovirus (Type 1, Chat strain) with a contact time of 10 minutes. (Apply as directed under disinfection.))

HOSPITALS/ HEALTHCARE FACILITIES

This product use solution cleans, disinfects and deodorizes hard, non-porous hospital/medical surfaces in one step with no rinsing required.

This product use solution is a one-step [hospital use] germicidal [disinfectant] cleaner and deodorant [odor counteractant] [odor neutralizer] designed for general cleaning, [and] disinfecting [deodorizing] [of] hard, non-porous inanimate surfaces. Quickly removes dirt, grime, blood and other organic matter commonly found in hospitals [healthcare facilities] [on medical surfaces]. It [also] eliminates odors leaving [restroom] surfaces smelling clean and fresh. Use where odors are a problem.

This product use solution is a [broad spectrum] [germicidal] [sporocidal] [disinfectant] cleaner and deodorizer designed for general cleaning [and] disinfecting [deodorizing] [of] hard, non-porous surfaces [and is efficacious against [*Clostridium difficile*] [C. difficile] [C. diff] endospores]. Quickly removes dirt, grime, blood and other organic matter commonly found in hospitals [in healthcare facilities] [on medical surfaces].

Where housekeeping is of prime importance in controlling the hazard of cross-contamination between treated hard, non-porous surfaces.

SPORICIDAL***Clostridium difficile***

This product kills and/or inactivates spores of *Clostridium difficile* on hard, non-porous surfaces. Fecal matter/waste must be thoroughly pre-cleaned from surfaces/objects. This cleaning may be accomplished with any cleaning solution, including this product. Cleaning is to include vigorous wiping and/or scrubbing, until all visible soil is removed. This product is effective against *Clostridium difficile* endospores when diluted at 3 fl. oz. product per gallon in 400 ppm hard water and applied to hard, non-porous surfaces with a clean cloth, mop, and/or sponge so as to wet all surfaces thoroughly. Leave surface wet for 3 minutes, and then remove solution with a clean wet mop, cloth or wet vacuum pickup.

SPECIAL INSTRUCTIONS FOR CLEANING PRIOR TO DISINFECTION AGAINST *Clostridium difficile* SPORES

Personal Protection: Wear appropriate barrier protection such as gloves, gowns, masks or eye covering.

Contact time: Leave surface wet for 3 minutes with 3 fl. oz. per gallon use solution.

Cleaning Procedure: Fecal matter/waste must be thoroughly cleaned from surfaces/objects before disinfection by application with a clean cloth, mop, and/or sponge saturated with the disinfectant product. This cleaning may be accomplished with any cleaning solution, including this product. Cleaning is to include vigorous wiping and/or scrubbing, until all visible soil is removed. Special attention is needed for high-touch surfaces. Surfaces in patient rooms are to be cleaned in an appropriate manner, such as from right to left or left to right, on horizontal surfaces, and top to bottom, on vertical surfaces, to minimize spreading of the spores. Restrooms are to be cleaned last. Do not reuse soiled cloths.

Infectious Materials Disposal: Materials used in the cleaning process that may contain feces/wastes are to be disposed of immediately in accordance with local regulations for infectious materials disposal.

Organism	ATCC Number
3 minute contact time	
<i>Clostridium difficile</i> *	ATCC 700792

*Not tested in presence of soil load in accordance with US EPA Guidance for the Efficacy Evaluation of Products with Sporocidal Claims against *Clostridium difficile*

FUNGICIDAL

This product kills *Trichophyton interdigitale* (formerly *Trichophyton mentagrophytes*) (the athlete's foot fungus) in areas such as locker rooms, dressing rooms, shower and bath areas and exercise facilities.

This product is a one-step fungicide at 3 fl. oz. per gallon of water. Treated surfaces must remain wet for 10 minutes.

DISINFECTION OF PHARMACEUTICAL AND COSMETIC SURFACES

Oxonia Active is recommended for use on hard, non-porous, environmental surfaces such as floors, walls and processing equipment in pharmaceutical and cosmetic processing facilities. This product is effective against *Staphylococcus aureus* (ATCC 6538) and *Salmonella enterica* (ATCC 10708) at 0.4% - 1.0% (2 fl. oz. / 4 gallons to 5 fl. oz. / 4 gallons of water) in hard water (500 ppm as CaCO₃), 5% blood serum and dried soap film residue. For heavily soiled areas a pre-cleaning step is required. Rinse all surfaces thoroughly with the disinfecting solution and maintain a contact time of at least 10 minutes. Product contact surfaces must be rinsed with sterile water.

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, non-porous 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 that are generally hard to keep fresh smelling such as garbage storage areas, empty garbage bins and cans, and any other 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.

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

DISINFECTION AGAINST POULTRY & LIVESTOCK VIRUSES

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% - 1.0% (2 fl. oz. / 4 gallons to 5 fl. oz. / 4 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 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% - 1.0% (2 fl. oz. / 4 gallons to 5 fl. oz. / 4 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 (BARNES, KENNELS, HUTCHES)

Remove animals and feed from facilities. Remove litter, waste matter and gross soils. Empty all troughs, racks 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% - 1.0% (2 fl. oz. / 4 gallons to 5 fl. oz. / 4 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.

VIRUCIDAL ACTIVITY

Oxonia Active is effective as a disinfectant against poultry and livestock viruses on hard, non-porous surfaces of agricultural facilities and equipment, dairy processing facilities, military facilities and equipment, airport facilities and equipment, port facilities and equipment, rail facilities and equipment, quarantine facilities and equipment, slaughter facilities and equipment (including processing facilities), shipping facilities and equipment, and similar sites where animals, animal

by-products or soil contaminants suspected of harboring the following poultry and livestock pathogens:

Influenza A Virus (H10N7), Avian Influenza A Virus (H5N1), Newcastle Disease Virus, Infectious Bronchitis Virus, Avian Reovirus, Infectious Bovine Rhinotracheitis Virus (IBR), Parainfluenza 3 Virus, and the Foot & Mouth Disease Virus (Aphthovirus).

Within these facilities, hard, non-porous surfaces of treated objects include, but are not limited to, vehicles, farm equipment (including tractors, plough shares, cars and trucks, farm engines, harvesters, loaders, mowers, tillers and slaughter machinery), military equipment (including tanks and troop carriers), and shipping equipment (bins and containers).

Apply a 0.4% (2 fl. oz. / 4 gallons of water) solution of Oxonia Active with a mop, cloth, brush or coarse spray to disinfect walls, ceilings, floors, decks, container surfaces, vehicles, water proof footwear (such as rubber boots), livestock equipment, utensils, hoses, and instruments. Wet all surfaces and allow to remain wet for 10 minutes. Allow surfaces to air dry and rinse with potable water before reuse.

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.

**Disinfecting Claims:
Listed Organisms and Contact Times**

Organism	ATCC	Contact Time
General Cleaning & Disinfecting		
<i>Histoplasma capsulatum</i>	-	10 min
<i>Proteus vulgaris</i>	ATCC 13315	10 min
<i>Salmonella enterica</i>	ATCC 13076	10 min
<i>Salmonella typhimurium</i>	ATCC 13311	10 min
<i>Staphylococcus aureus</i>	ATCC 6538	10 min
<i>Streptococcus pyogenes</i>	ATCC 19615	10 min
Hospital Disinfection		
† <i>Acinetobacter baumannii</i> – MDR	ATCC BAA 1605	3 min
† <i>Enterococcus faecalis</i> – VRE	ATCC 51299	3 min
† <i>Escherichia coli</i>	ATCC BAA 196	3 min
† <i>Klebsiella pneumoniae</i> – KPC	ATCC BAA 1705	3 min
† <i>Staphylococcus aureus</i> – CA-MRSA	ATCC BAA 1556	3 min
† <i>Staphylococcus aureus</i> – CA-MRSA	ATCC BAA 1683	3 min
† <i>Staphylococcus aureus</i> – MRSA	ATCC BAA 33592	3 min
† <i>Staphylococcus aureus</i> – VISA	ATCC 700788	3 min
† <i>Staphylococcus epidermidis</i> – MRSE	ATCC 51625	3 min
Virucidal		
*Adenovirus (Type 5)	-	3 min
*Avian Influenza A Virus (H5N1)	-	10 min
*Avian Reovirus	-	10 min
*Foot & Mouth Disease Virus	-	10 min
*Infectious Bronchitis Virus	-	10 min
*Infectious Bovine Rhinotracheitis Virus	-	10 min
*Influenza A Virus (H1N1)	-	10 min
*Influenza A Virus (H3N2)	-	10 min
*Influenza A Virus (H10N7)	-	10 min
*Influenza B/Taiwan/2/62 Virus	-	10 min
*Newcastle Disease Virus	-	10 min

*Norovirus (FCV surrogate tested)	-	3 min
*Parainfluenza 3 Virus	-	10 min
*Poliovirus (Strain Chat)	-	10 min
*Respiratory Syncytial Virus (Strain Long)	-	3 min
*Rhinovirus (Type 37)	-	3 min
*Rotavirus (Strain WA)	-	3 min
*Vaccina Virus (Strain WR)	-	3 min
Sporicidal		
<i>Clostridium difficile</i> **	ATCC 700792	3 min
Fungicidal		
<i>Trichophyton interdigitale</i>	-	10 min

† Multi-Drug Resistant Organisms [MRDOs]

**Not tested in presence of soil load in accordance with US EPA Guidance for the Efficacy Evaluation of Products with Sporocidal Claims against *Clostridium difficile*

BACTERIOSTATIC

BACTERIOSTATIC

At 0.04% (1 fl. oz. per 20 gallons of water) Oxonia Active is effective at inhibiting the growth of bacteria when used in the presence of 500 ppm hard water and organic soil. Oxonia Active can be used on floors, walls and other hard, non-porous surfaces such as tables, chairs, countertops, bathroom fixtures, sinks, shelves, racks, carts, refrigerators, coolers, tile, linoleum, vinyl, glazed porcelain, plastic (such as polypropylene and polyethylene), stainless steel, or glass.

STERILIZATION

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 fl. oz. 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 must 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

Thoroughly rinse food contact surfaces with either a sterile water or potable 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. This product is an effective sporicide against *Bacillus subtilis* (ATCC 19659) and *Clostridium sporogenes* (ATCC 3584) when used per the label directions.

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.

**Sterilization Claims:
Listed Organisms and Contact Times**

Organism	ATCC	Contact Time
Sporicidal (80°C)		
<i>Bacillus subtilis</i>	ATCC 19659	5 min
<i>Clostridium sporogenes</i>	ATCC 3584	5 min
Sporicidal (50°C)		
<i>Bacillus subtilis</i>	ATCC 19659	20 min
<i>Clostridium sporogenes</i>	ATCC 3584	20 min
Sporicidal (20°C)		
<i>Bacillus subtilis</i>	ATCC 19659	6 hours
<i>Clostridium sporogenes</i>	ATCC 3584	6 hours

CLEANER

BOOSTER FOR ALKALINE DETERGENTS TO CLEAN FOOD PROCESSING EQUIPMENT

Oxonia Active is an effective oxygen bleach cleaning booster for use with alkaline detergents. For cleaning applications as a detergent booster, use 0.5 - 2.5% v/v total product (0.64 - 3.2 fl. oz. per gallon of detergent use solution) to aid in the removal of organic soils. All hard, non-porous food contact surfaces treated with this boosted detergent must be rinsed thoroughly with a potable water rinse followed by sanitizing with an approved food contact surface sanitizer.

BOOSTER FOR ACID DETERGENTS TO CLEAN FOOD PROCESSING EQUIPMENT

Oxonia Active is an effective oxygen bleach cleaning booster for use with acidic detergents. For cleaning applications as a detergent booster, use 0.5 - 2.5% v/v total product (0.64 - 3.2 fl. oz. 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.

STORAGE & DISPOSAL

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

PESTICIDE STORAGE: Product must 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 HANDLING AND DISPOSAL:

(2.5 gal bladder in box) Non-refillable container. Do not reuse or refill this container. Remove empty bladder from outer corrugated box. Triple rinse as follows: Fill container ¼ full with water and recap. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat procedure two more times. Then offer box and bladder for recycling or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

(For containers 5 gallons or less.) Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Fill container ¼ full with water and recap. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat procedure two more times. Then offer for recycling or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

(For containers >5-55 gallons.) Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Empty 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 procedure two more times. Then offer for recycling or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

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

(Note to reviewer: The following can be used for plastic or metal 55 gallon sizes and smaller – to be refilled only by customer for reuse of Product Name)

(Refillable container.) Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before refilling is the responsibility of the refiller. Cleaning the container before final disposal is the responsibility of the person disposing of the container. (Plastic or Metal Containers) 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, and dispose of rinsate consistent with pesticide disposal instructions. Repeat this rinsing procedure two more times. Then offer for recycling or reconditioning. If not available, puncture and dispose in sanitary landfill. If not triple rinsed, these containers are acute hazardous wastes and must be disposed in accordance with local, state, and federal regulations.

FOR COMMERCIAL USE
STRONG OXIDIZING AGENT

EPA Reg. No. 1677-129
EPA Est. 1677-MN-1 (P), 60156-IL-1 (SI), 1677-CA-2(R),
1677-TX-1(D), 1677-IL-2 (J), 1677-GA-1(M), 1677-NC-1(G),
1677-WV-1(V), 303-IN-1 (L), 58046-TX-2 (X)
Superscript refers to first letter of date code

Net Contents:	1 U.S. Gal. (3.78 L)
	4 U.S. Gals. (15.1 L)
	2.5 U.S. Gals. (9.5 L)
	15 U.S. Gals. (56.8 L)
	30 U.S. Gals. (113.5 L)
	50 U.S. Gals. (189 L)
	300 U.S. Gals. (tote)

(Manufactured)(Distributed)(for)(by)
Ecolab Inc.
1 Ecolab Place
St. Paul, MN 55102

(Made in USA) (Made in United States of America)
This product may be patented | Ce produit peut être breveté | Este producto puede ser
patentado: www.ecolab.com/patents

Optional Marketing Language:

- (This use not approved in CA - *used only for claims not currently approved*)
- Container and product sterilized and distributed by Veltek Associates, Inc 15 Lee Blvd. Malvern, PA 19355
- Container and product sterilized by Veltek Associates, Inc 15 Lee Blvd. Malvern, PA 19355
- See side/back panel for First Aid...
- Effective in 3 minutes against [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*]
- Kills [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*] in 3 minutes.
- Concentrated broad-spectrum disinfectant/virucide with efficacy against [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*]
- Effective one-step disinfectant-cleaner for use in hospitals [ambulatory care centers, long term care facilities, and other healthcare settings]
- Proven “one-step” disinfectant – virucide which is effective in water up to 400 ppm hardness in the presence of 5% serum contamination
- Effective against Multidrug Resistant Organisms [MRDOs] †
- Effective against Multidrug Resistant Organisms [MDROs] (*Staphylococcus aureus*, (Resistant to Methicillin [MRSA], *Staphylococcus aureus*, (Genotype USA300) (Community Associated Methicillin Resistant) [CA-MRSA], *Staphylococcus aureus*, (Genotype USA400) (Community Associated Methicillin Resistant) [CA-MRSA], *Staphylococcus aureus*, (Intermediate Vancomycin Resistance) [VISA], *Enterococcus faecalis* (Resistant to Vancomycin) [VRE], *Staphylococcus epidermidis* (Resistant to Methicillin) [MRSE], *Escherichia coli* (Extended-Spectrum Beta Lactamase producing) [ESBL], *Klebsiella pneumoniae* (Carbapenemase producer) [KPC].
- Is designed for killing [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*] [on surfaces] on pre-cleaned, hard non-porous surfaces in hospitals
- Reduces exposure to [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*] from treated surfaces
- Effective against [**insert any organism from list of organisms**] and [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*]
- Effective for daily use against [**insert any organism from list of organisms**] [and] [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*]
- Kills [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*] in 3 minutes.
- Daily use product with [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*] efficacy [allows for product standardization] [eliminates need for separate sporocide] [bleach]
- Daily defense against [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*]
- The only non-bleach [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*] concentrate available
- The first non-bleach [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*] concentrate
- Tough on [*Clostridium difficile spores*] [*C. difficile spores*] [*C. diff spores*] but easy on surfaces and designed for daily use.
- Recommend wearing goggles when handling the use dilution in a process plant.
- Approved for use in dairy sweetwater per the Grade A PMO

Oxonia Active Plus Ultrasil 740 Optional Marketing Language

Oxonia Active + Ultrasil 740 is an antimicrobial [solution] [program] specifically formulated for reverse osmosis, nanofiltration, ultrafiltration and microfiltration membranes.

Oxonia Active + Ultrasil 740 is an antimicrobial [solution] [program] specifically formulated to reduce non-public health [and] [or] [biofouling bacteria] on reverse osmosis, nanofiltration, ultrafiltration and microfiltration membrane surfaces.

Quality

- The combination of Oxonia Active when mixed with ULTRASIL 740 is effective against slime forming bacteria on membrane surfaces which can provide improved finished product quality
- The combination of Oxonia Active when mixed with ULTRASIL 740 reduces biofouling bacteria on reverse osmosis, nanofiltration, ultrafiltration and microfiltration membrane surfaces which can provide improved finished product quality
- The combination of Oxonia Active when mixed with ULTRASIL 740 reduces bioslime forming bacteria on reverse osmosis, nanofiltration, ultrafiltration and microfiltration membrane surfaces which can provide improved finished product quality
- The combination of Oxonia Active when mixed with ULTRASIL 740 reduces bacteria on reverse osmosis, nanofiltration, ultrafiltration and microfiltration membrane surfaces which can provide improved finished product quality
- The program is designed for reducing (slime-forming)/(biofouling) (and) (non-public health spoilage bacteria) [on membrane surfaces]
- The program is designed for killing 99.9% of (slime-forming)/(biofouling) (and) (non-public health spoilage bacteria) [on membrane surfaces]
- Effective for daily use against [biofoulant bacteria][Slime-forming bacteria] [and] [non-public health spoilage bacteria]
- Effective for daily use against [biofoulant bacteria] [Slime-forming bacteria] [and] [non-public health spoilage bacteria] [on reverse osmosis, nanofiltration, ultrafiltration and microfiltration membrane surfaces which can provide improved finished product quality]
- Effective against spoilage organisms that can adversely affect product quality. See directions for use for list of organisms.
- Effective against many microorganisms, listed in Directions for Use.
- Ultrasil 740 concentration can be monitored via conductivity, decreasing dependence on manual titrations

Improved Productivity

- The reduction of biofouling bacteria improves flux
- The reduction of biofouling bacteria can lead to improved flux
- The reduction of biofoulants leads to improved flux
- The reduction of biofoulants leads to improved flux resulting in increased production capacity
- Performs acid rinse and antimicrobial rinse in one step
- Convenient to use - provides acidified wash and antimicrobial rinse in one step
- Performs acid wash and antimicrobial rinse in one step which can save water, time and energy

Saves Time

- Liquid formula allows for automatic dispensing and control. This helps reduce over-usage and saves employee time
- Removes mineral soils
- Removes mineral based soils
- Removes milk stone
- Removes calcium phosphate
- Removes mineral fouling soils
- Improved flux due to removal of mineral soils
- Proven to remove mineral soils
- Proven to remove mineral soils at lower temperatures

Convenient to Use

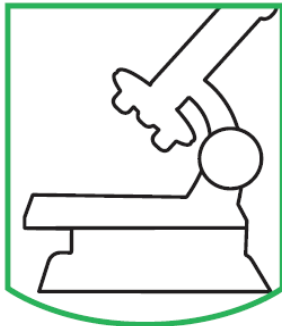
- Liquid formula reduces employee handling concerns normally associated with powdered products
- Formula is compatible with most membrane types

Environmental Implications

- Formulation does not contain Nitrates or Nitrogen.
- Program does not contribute nitrates to finished product
- Program does not contribute nitrates to waste stream
- Program does not contain nonyl phenol ethoxylates
- Performs acid rinse and antimicrobial rinse in one step
- Enables reduced water consumption due to the combined acid wash and antimicrobial rinse step.
- Formula contains less than 0.3% phosphorus in the concentrated product.
- Improved mineral solubility helps reduce frequency of acid washes and chemistry usage.
- Product contains no iodine, chlorine, quats.

Helps Protect Processing Equipment Investment

- Use solution is non-corrosive to 304, 316, and 410 stainless steel surfaces when used at recommended concentrations.
- Compatible with most plastic and rubber materials used in processing operations.
- Compatible with most membrane types
- Compatible with (ADD membranes)



Antimicrobial

Emerging Viral Pathogens

This product qualifies for emerging viral pathogen claims per the EPA's "Guidance to Registrants: Process for Making Claims Against Emerging Viral Pathogens not on EPA-Registered Disinfectant Labels" when used in accordance with the appropriate use directions indicated below.

(Note to the reviewer: The statements shall be made only through the following communications outlets: technical literature distributed exclusively to veterinarians, health care facilities, physicians, nurses and public health officials, "1-800" consumer information services, social media sites and company websites (non-label related). **These statements shall not appear on marketed (final print) product labels.**)

Statements shall adhere to the following format:

1. In the case of an Emerging [Small Non-Enveloped] [Large Non-Enveloped] [Enveloped] virus:

Oxonia Active has demonstrated effectiveness against viruses similar to [name of emerging virus] on hard, non-porous surfaces. Therefore, Oxonia Active can be used against [name of emerging virus] when used in accordance with the directions for use against [name of supporting virus] (at) (add dilution rate) for a contact time of 10 mins on hard, non-porous surfaces. Refer to the [CDC or OIE] website at [pathogen-specific website address] for additional information.

<i>For an emerging viral pathogen that is a/an...</i>	<i>...follow the directions for use for the following organisms on the label:</i>
Enveloped virus	Adenovirus Type 5 (ATCC VR-5) Rotavirus (Strain WA) Avian Reovirus, (ATCC VR-2449) Norovirus (Feline Calicivirus tested surrogate) (ATCC VR-782) Rhinovirus (Type 37, Strain 151-1) (ATCC VR-1147) Poliovirus (Type 1, Chat strain) (ATCC VR-1562) Foot & Mouth Disease Virus (Aphthovirus)
Large, non-enveloped virus	Adenovirus Type 5 (ATCC VR-5) Rotavirus (Strain WA) Avian Reovirus, (ATCC VR-2449) Norovirus (Feline Calicivirus tested surrogate) (ATCC VR-782) Rhinovirus (Type 37, Strain 151-1) (ATCC VR-1147) Poliovirus (Type 1, Chat strain) (ATCC VR-1562) Foot & Mouth Disease Virus (Aphthovirus)
Small, non-enveloped virus	Norovirus (Feline Calicivirus tested surrogate) (ATCC VR-782) Rhinovirus (Type 37, Strain 151-1) (ATCC VR-1147) Poliovirus (Type 1, Chat strain) (ATCC VR-1562) Foot & Mouth Disease Virus (Aphthovirus)

SECONDARY/USE DILUTION CONTAINER LABEL

(Note to reviewer: This secondary/use dilution container label will be used only when the product is diluted at or below 3.0 fl. oz. per gallon of water. Other dilutions must use concentrate signal word and precautionary statements from page 1.)

When this product is diluted in accordance with the directions on this label, the dilutions container must bear the following statements:

OXONIA ACTIVE
(Concentrate Ingredient Statement)

Active Ingredients:

Hydrogen Peroxide	27.5%
Peroxyacetic Acid	5.8%

Inert (Other) Ingredients:	<u>66.7%</u>
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Total:	100.0%
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The product in this container must be diluted at the use rate of 3 fl. oz. or less per gallon of water as directed on the concentrate product label. After product has been diluted according to label directions PPE is not required.

Diluted product in this container is _____ fl. oz. per gallon water.

KEEP OUT OF REACH OF CHILDREN**PRECAUTIONARY STATEMENTS****HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

(FIRST AID

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

Have the product container or label with you when calling a poison control center or going for treatment.

FOR EMERGENCY MEDICAL INFORMATION CALL TOLL FREE: 1-800-328-0026

OUTSIDE NORTH AMERICA, CALL 1-651-222-5352

Follow the directions for use listed on the concentrate label when applying this product.

(Use solution prepared by end user)

(Not for sale or distribution)

[Do Not Drink]

EPA Reg. No. 1677-129