

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

April 24, 2023

Elaine Money Principal Regulatory Specialist Ecolab Electronic Transmittal: <u>Elaine.Money@ecolab.com</u>

Subject: PRIA Label Amendment – Add additional Biofilm Organism Claim and add Alternate Brand Name Product Name: Oxonia Active EPA Registration Number: 1677-129 Received Date: December 1, 2022 Action Case Number: 00412622

Dear Elaine Money:

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. Pursuant to 40 CFR 156.10(a)(6), 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 FIFRA and is subject to review by the Agency. See FIFRA section 2(p)(2). 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) lists 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, FIFRA section 12(a)(1)(B). 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 Assurance.

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The alternate brand name Lely Astri San has been added to the product record.

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, please contact Zebora Johnson by phone at (202) 566-0730, or via email at johnson.zebora@epa.gov.

Sincerely,

Steven Dryderman

Steven Snyderman, Product Manager 33 Regulatory Management Branch II Antimicrobials Division (7510M) Office of Pesticide Programs

Enclosure: Accepted Label

## **OXONIA ACTIVE**

ACID LIQUID SANITIZER FOR FOOD PROCESSING EQUIPMENT in [Dairies], [Dairy Farms], [Breweries], [Wineries], [Biofuel Producing Facilities], [Beverage], [Dietary Supplement Processing Plants], 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 *Clostridioides difficile* (formerly *Clostridium difficile*) Endospores

(STERILANT,) (DISINFECTANT WITH SPORICIDAL ACTIVITY,) (DISINFECTANT) (AND) (SANITIZER) (VIRUCIDE\*) (FUNGICIDE) FOR THE (PHARMACEUTICAL), (DIETARY SUPPLEMENT) AND (COSMETIC INDUSTRY)

A MICROBIOCIDE 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	
Peroxyacetic Acid	
Inert Ingredients:	
Total:	



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

້ 1677-129

## KEEP OUT OF REACH OF CHILDREN DANGER PELIGRO

(Note to reviewer: First aid statements must be located on the front panel to be consistent with 40 CFR) (See [front] [top] [label] [panel] for [precautionary statements] [and] [first aid] (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] [storage and disposal] [container handling and disposal])

## 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.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

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

#### 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 NIOSH approved particulate respirator, with any R or P filter with NIOSH approval number prefix TC-84A.

**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.

## 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], [milling equipment], [granulators], [aseptic equipment] and [associated equipment] in [dairies], [dairy farms], [breweries], [wineries], [biofuel producing facilities], [beverage], [dietary supplement manufacturing], [cosmetics manufacturing], [pharmaceutical manufacturing] 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<sub>3</sub>.

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 visible [food] [product] 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] [tap water] [up to 500 ppm hard 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 and remain visibly wet for a period of 1 minute unless a longer time is specified by the governing sanitary code. Drain thoroughly [and allow to air dry]. No rinse necessary.

#### ELEVATED TEMPERATURE SANITIZING (FOR FOOD CONTACT SURFACES)

For sanitization of hard, non-porous surfaces of equipment in (biofuel producing facilities) (food) (dietary supplements) 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] [tap water] [up to 500 ppm hard water]) against *Staphylococcus aureus* (ATCC 6538) and *Escherichia coli* (ATCC 11229). All surfaces must be exposed to the sanitizing solution and remain visibly wet for a period of 1 minute. Allow equipment to drain thoroughly. No rinse necessary.

#### 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 (1.0 - 1.4 fl. oz. per 4 gallons of [water] [tap water] [up to 500 ppm hard 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* 0157:H7 (ATCC 43895), *Listeria monocytogenes* (ATCC 7644), *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 and remain visibly wet for a period of 1 minute.

#### FINAL CONTAINER SANITIZING

Oxonia Active may be used as a final sanitizing step for returnable and non-returnable [bottles] [containers] (e.g. glass or PET) [and/or closures] at a dilution rate of 1.0-1.4 fl. oz. Oxonia Active per 4 gallons of [water] [tap water] [up to 500 ppm hard water] (2.0-2.8 mL/L or 0.20%-0.28% v/v). At this dilution, Oxonia Active is effective [as a food contact surface sanitizer] 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). All surfaces must be exposed to the sanitizing solution and remain visibly wet for 1 minute. Drain thoroughly [and allow to air dry]. No rinse necessary.

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

To sanitize pre-cleaned or new returnable or non-returnable containers [and/or closures] for processing, apply Oxonia Active at a concentration of 0.3% - 1.0% (3 - 10 fl. oz. per 8 gallons or [water] [tap water] [up to 500 ppm hard water]) at a temperature of (40 - 60 °C) (104 - 140 °F), and remain visibly wet 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 [potable] water rinse.

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

sanitize pre-cleaned or new returnable or non-returnable containers [and/or closures] for

processing, apply Oxonia Active at a concentration of 1.0% - 4.0% (10 - 40 fl. oz. per 8 gallons or [water] [tap water] [up to 500 ppm hard water]) at a temperature of (40 - 60 °C) (104 - 140 °F), and remain visibly wet 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 [potable] water rinse.

#### FINAL BOTTLE AND CLOSURE CLEANING RINSE

Oxonia Active may be used as a final cleaning rinse for returnable and non-returnable [bottles] [containers] (e.g. glass or PET) [and/or closures] not requiring a final food contact surface sanitizing rinse when used at a dilution rate of 1.0-1.4 oz Oxonia Active per 4 gallons of [water] [tap water] [up to 500 ppm hard water] (2.0-2.8 mL/L or 0.20%-0.28% v/v). Drain thoroughly.

#### SANITIZING SHELL EGGS

Prepare a solution of Oxonia Active by diluting 2 fl. oz. product with 5 gallons of [water] [tap water] [up to 500 ppm hard water]. As eggs are gathered or prior to setting, apply solution as a coarse spray so as to lightly wet, and remain visibly wet on 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 visible 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 [equipment], [blenders], [pipelines], [tanks], [vats], [fillers], [evaporators], [pasteurizers], [aseptic equipment], [associated equipment], [floors], [walls], [tables], [chairs], [benches], [drains], [troughs], and [drip pans] with 1.0-2.5 fl. oz. Oxonia Active per 8 gal [water] [tap water] [up to 500 ppm hard water] (0.1-0.3% v/v). At this concentration the product is effective against *Staphylococcus aureus* (ATCC 6538), [*Klebsiella aerogenes* (formerly known as] *Enterobacter aerogenes* (ATCC 13048), *Escherichia coli* (ATCC 11229), *Listeria monocytogenes* (ATCC 7644), *Salmonella typhimurium* (ATCC 13311), *Pseudomonas aeruginosa* (ATCC 15442), *Burkholderia cepacia* (ATCC 25416), 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 and remain visibly wet for a period of not less than 5 minutes at room temperature. 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 - 0.4% v/v (1 - 2 fl. oz. per 4 gallons [water] [tap water] [up to 500 ppm hard 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), [*Klebsiella aerogenes* (formerly known as] *Enterobacter aerogenes* (ATCC 13048) and *Listeria monocytogenes* (ATCC 7644). Surfaces must be exposed to the sanitizing foam and remain visibly wet for a period of 5 minutes. No rinse 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 visible 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] [tap water] [up to 500 ppm hard water]) of Oxonia Active to hard, non-porous surfaces at a temperature of (25 - 45 °C) (77 - 113 °F) and allow to remain visibly wet for at least 5 minutes. Allow surfaces to drain thoroughly before operations are resumed.

#### SANITIZING NON-POROUS GLOVED HANDS

To reduce cross-contamination between treated areas in [[animal areas] and [packaging] and [storage areas]] of [food] [cosmetics] [personal care] [pharmaceutical] [nutraceutical] [supplements] [vitamins] 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 1.0 - 1.4 fl. oz. Oxonia Active per 4 gal. of [water] [tap water] [up to 500 ppm hard 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.

Organism	ATCC	Contact Time
Sanitizing Food Contact Surfaces		
Escherichia coli	ATCC 11229	1 min
Escherichia coli O157:H7	ATCC 43895	1 min
Lactobacillus malefermentans	ATCC 11307	1 min
Listeria monocytogenes	ATCC 7644	1 min
Pediococcus damnosus	ATCC 25248	1 min
Pseduomonas aeruginosa	ATCC 15442	1 min
Saccharomyces cerevisiae	ATCC 834	1 min
Salmonella typhimurium	ATCC 13311	1 min
Staphylococcus aureus	ATCC 6538	1 min
Vibrio cholerae	ATCC 25873	1 min
Sanitizing Food Contact	Surfaces (Elevate	d Temp)
Escherichia coli	ATCC 11229	1 min
Staphylococcus aureus	ATCC 6538	1 min
Sanitizing Food Conta	ainers (Elevated T	emp)
Escherichia coli	ATCC 11229	7, 20 sec
Lactobacillus malefermentans	ATCC 11307	7 sec
Pediococcus damnosus	ATCC 25248	7 sec
Pseduomonas aeruginosa	ATCC 15442	20 sec
Saccharomyces cerevisiae	ATCC 834	7 sec
Salmonella typhimurium	ATCC 13311	7 sec
Staphylococcus aureus	ATCC 6538	7, 20 sec
Sanitizing Non-Foo	od Contact Surfac	es
Burkholderia cepacia	ATCC 25416	5 min
[ <i>Klebsiella aerogenes</i> (formerly known as] <i>Enterobacter aerogenes</i>	ATCC 13048	5 min
Escherichia coli	ATCC 11229	5 min
Lactobacillus malefermentans	ATCC 11307	5 min
Listeria monocytogenes	ATCC 7644	5 min
Pediococcus damnosus	ATCC 25248	5 min
Pseduomonas aeruginosa	ATCC 15442	5 min
Saccharomyces cerevisiae	ATCC 834	5 min
Salmonella typhimurium	ATCC 13311	5 min
Staphylococcus aureus	ATCC 6538	5 min

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

## 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] [tap water] [up to 500 ppm hard 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] [tap water] [up to 500 ppm hard water]) at a temperature of (40 - 60 °C) (104 - 140 °F), and remain visibly wet for at least 7 seconds. After thorough draining, rinse interior container surfaces with a [potable] water rinse.

#### 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] [tap water] [up to 500 ppm hard water]) solution [at (25 °C) (77 °F)], and remain visibly wet for a minimum contact time of 5 minutes. After thorough draining, rinse filters with a [potable] water rinse. 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] [tap water] [up to 500 ppm hard water]) use solution [at ( $24 \, ^\circ$ C) ( $75 \, ^\circ$ F)], and remain visibly wet for a minimum contact time of 5 minutes. After treatment with Oxonia Active use solution, rinse membranes thoroughly with a [potable] water rinse. [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 2.0 - 2.5 fl. oz. of Oxonia Active per 8 gallons of [water] [tap water] [up to 500 ppm hard water] (2,000 - 2,500 ppm v/v) for a minimum contact time of 5 minutes. For extreme fouling situations, use up to 10.2 fl. oz. of Oxonia Active per 8 gallons of [water] [tap water] [up to 500 ppm hard water] (10,000 ppm v/v). Conduct membrane treatment while [food] processing is not in operation. After treatment with Oxonia Active use

solution, rinse membranes thoroughly with a [potable] water rinse. Consult membrane manufacturer for membrane compatibility guidelines.

**Reverse Osmosis and Nanofiltration Membranes:** Use 0.9 - 1.1 fl. oz. of Oxonia Active per 8 gallons of [water] [tap water] [up to 500 ppm hard water] (900 - 1,100 ppm v/v) for a minimum contact time of 5 minutes. For extreme fouling situations, use up to 10.2 fl. oz. of Oxonia Active per 8 gallons of [water] [tap water] [up to 500 ppm hard water] (10,000 ppm v/v). Conduct membrane treatment while [food] processing is not in operation. After treatment with Oxonia Active use solution, rinse membranes thoroughly with a [potable] water rinse. Consult membrane manufacturer for membrane compatibility guidelines.

#### 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) (nonpublic 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 visible 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] [tap water] [up to 500 ppm hard 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 for antimicrobial rinse, treatment will kill at least 99.9% of slime-forming (and nonpublic 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

#### For Food Plant and Industrial use

Use on Microfiltration (MF), Ultrafiltration (UF), Nanofiltration (NF), and Reverse Osmosis (RO) membranes. Consult membrane manufacturer for membrane compatibility guidelines.

Oxonia Active is an effective cleaning booster for use with alkaline and acid membrane compatible detergents. For membrane cleaning applications as a detergent booster, use 0.09 - 0.25% v/v total product (0.11 - 0.32 fl. oz. per gallon of detergent use solution) to aid in the removal of soils. All food contact surfaces treated with this boosted detergent must be rinsed thoroughly with a potable water rinse after use. Consult membrane manufacturer for membrane compatibility guidelines.

#### Membrane Cleaning with Ultrasil 740 (Not for use in California)

Prior to this cleaning, remove visible (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] [tap water] [up to 500 ppm hard 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], [dietary supplement], [cosmetics], [pharmaceutical] 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], [Dietary supplement], [Cosmetics], [Pharmaceutical] 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] [tap water] [up to 500 ppm hard 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 particulate 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 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.

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

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

## DISINFECTION

Oxonia Active disinfects as it cleans in one operation when used according to disinfection directions. Oxonia Active can be used to disinfect floors, walls and other hard, non-porous surfaces such as [equipment], [pipelines], [tanks], [blenders], [vats], [fillers], [evaporators], [pasteurizers], [aseptic equipment], [tables], [chairs], [countertops], [bathroom fixtures], [sinks], [shelves], [racks], [carts], [refrigerators], [coolers], [tile], [linoleum], [vinyl], [glazed porcelain], [plastic (such as polypropylene and polyethylene)], [stainless steel], and [glass]. [Note: Allow surfaces such as refrigerators, vats, coolers to come to room temperature prior to use.]

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], [pharmaceutical manufacturing facilities], [cosmetics manufacturing facilities], [dietary supplement manufacturing facilities] and [personal care manufacturing facilities]. Not for use on food contact surfaces.

#### **COMBINATION GENERAL DISINFECTION AND CLEANING**

A pre-cleaning step is required for visibly soiled areas. Dilute according to disinfection directions below, then 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 visibly wet for required contact time, 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.

When diluted at 0.4% - 1.0% (2 fl. oz. / 4 gallons to 5 fl. oz. / 4 gallons) in [water] [tap water] [up to 500 ppm hard water]in the presence of 5% blood serum and dried soap film residue, and remain visibly wet with a 10 minute contact time, Oxonia Active is effective against: *Burkholderia cepacia*<sup>1</sup> (ATCC 25416) *Staphylococcus aureus* (ATCC 6538) *Pseudomonas aeruginosa* (ATCC 15442) *Salmonella enterica* (ATCC 10708) *Salmonella enteritidis* (ATCC 13076) *Salmonella typhimurium* (ATCC 13311) *Proteus vulgaris* (ATCC 13315) *Streptococcus pyogenes* (ATCC 19615) *Histoplasma capsulatum*<sup>1</sup> <sup>1</sup>Not tested in the presence of soap film residue. When diluted at 3 fl. oz. / gallon in [water] [tap water] [up to 400 ppm hard water]in the presence of 5% blood serum, and remain visibly wet with a 3 minute contact time, Oxonia Active is effective against:

Staphylococcus aureus (ATCC 6538) Pseudomonas aeruginosa (ATCC 15442) Salmonella enterica (ATCC 10708) Escherichia coli (ATCC 11229) Klebsiella pneumoniae (ATCC 4352) Acinetobacter baumannii (ATCC 19606) Streptococcus pyogenes (ATCC 19615) Streptococcus pneumoniae (ATCC 6303) Bordetella pertussis (ATCC 12743) Proteus mirabilis (ATCC 7002)

When diluted at 3 fl. oz. / gallon in [water] [tap water] [up to 400 ppm hard water]in the presence of 5% blood serum, and remain visibly wet with a 10 minute contact time, Oxonia Active is effective against:

*Mycobacterium bovis* (TB) (Tuberculosis)

#### VIRUCIDAL\*

When diluted at 0.4% - 1.0% (2 fl. oz. / 4 gallons to 5 fl. oz. / 4 gallons of [water] [tap water] [up to 500 ppm hard water]) Oxonia Active is effective against the following when used at (20 °C) (68 °F), and remain visibly wet with a 10 minute contact time in the presence of organic soil. Apply as directed under disinfection.

\*Influenza B/Taiwan/2/62 Virus \*Influenza A Virus (H1N1) \*Influenza A Virus (H3N2) \*Influenza A Virus (H10N7) \*SARS-Related Coronavirus 2 (BEI Resources NR-52281) (Strain Isolate USA-WA 1/2020)[SARS-CoV-2]

When diluted at 3 fl. oz./ gallon in [water] [tap water] [up to 400 ppm hard water] with a contact time of 3 minutes, 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)
\*Adenovirus Type 5
\*HIV virus (Type 1) (AIDS virus)
\*Human Coronavirus (ATCC VR-740)
\*Herpes Simplex Virus Type 1 (ATCC VR-733)
\*Herpes Simplex Virus Type 2 (ATCC VR-734)
\*Influenza A Virus (Hong Kong strain)
\*SARS-Related Coronavirus 2 (BEI Resources NR-52281) (Strain Isolate USA-WA

When diluted at 3 fl. oz. / gallon in [water] [tap water] [up to 400 ppm hard water], and remain visibly wet with a contact time of 5 minutes, Oxonia Active is effective against: \*Hepatitis B Virus \*Hepatitis C Virus

1/2020)[SARS-CoV-2]

When diluted at 3 fl. oz. / gallon in [water] [tap water] [up to 400 ppm hard water], and remain visibly wet with a contact time of 10 minutes, Oxonia Active is effective against: \*Poliovirus (Type 1, Chat strain)

#### HOSPITALS/ HEALTHCARE FACILITIES

When diluted at 3 fl. oz./ gallon in [water] [tap water] [up to 400 ppm hard water], and remain visibly wet with a contact time of 3 minutes, Oxonia Active is effective against the following antibiotic resistant organisms:

Acinetobacter baumannii – Multi-Drug Resistant<sup>2</sup> (MDR) (ATCC BAA-1605)

Enterococcus faecalis – Vancomycin Resistant (VRE) (ATCC 51299) Escherichia coli – Extended Spectrum Beta Lactamase producing (ESBL) (ATCC BAA-196) Klebsiella pneumoniae – Carbapenemase producer (KPC) (ATCC BAA-1705) Staphylococcus aureus – Community Associated Methicillin Resistant (CA-MRSA) (Genotype USA300) (ATCC BAA-1556) Staphylococcus aureus – Community Associated Methicillin Resistant CA-MRSA (Genotype USA400) (ATCC BAA-1683) Staphylococcus aureus – Methicillin Resistant (MRSA) (ATCC BAA-33592) Staphylococcus aureus – Intermediate Vancomycin Resistant (VISA) (ATCC 700788) Staphylococcus epidermidis – Methicillin Resistant (MRSE) (ATCC 51625) <sup>2</sup>gentamicin, imipenem, ceftazidime

**To Disinfect Non-Critical, Pre-cleaned Instruments:** Instruments must be thoroughly precleaned to remove visible organic debris, rinsed, and rough dried. Clean and rinse lumens of hollow instruments before filling with this product. Fully immerse or thoroughly wet instruments in 3 fl. oz. Oxonia Active per gallon of [water] [tap water] [up to 500 ppm hard water]. Allow to remain visibly wet for listed contact time. [To kill TB and Poliovirus, let stand for 10 minutes at room temperature.] Wipe with a clean, damp cloth or paper towel and allow to air dry.

#### **BIOFILM DISINFECTION**

**Disinfection of Biofilm on Hard, Non-Porous Surfaces at elevated temperature:** When applied to pre-cleaned hard, non-porous, non-food contact surfaces conducive to biofilm formation, Oxonia Active is effective as a biofilm disinfectant against *Pseudomonas aeruginosa* (ATCC 15442) and *Staphylococcus aureus* (ATCC 6538). Use a cleaning solution suitable to remove visible particles and rinse with potable water. Disinfect with a concentration of 3 fl. oz. of product per gallon of [water] [tap water] [up to 500 ppm hard water]. Apply use solution using a cloth, mop, sponge, coarse sprayer, or by immersion. All surfaces must be exposed to the solution and remain visibly wet for a period of not less than 10 minutes at 30°C. Drain thoroughly and allow to air dry. No rinse necessary.

#### Disinfection of Biofilm on Pre-Cleaned Instruments at elevated temperature:

Oxonia Active can be used to kill bacteria in a biofilm (*Pseudomonas aeruginosa* and *Staphylococcus aureus*) on pre-cleaned hard non-porous surfaces of [reusable] non-critical stainless steel instruments [(not for use on flexible or semi-rigid endoscopes unless recommended by the instrument manufacturer)].

Instruments must be thoroughly cleaned and free of visible soil before treatment. Fully immerse or thoroughly wet instruments in 3 fl. oz. Oxonia Active per gallon of [water] [tap water] [up to 500 ppm hard water]. For hollow instruments, clean and rinse lumens prior to filling with Oxonia Active. Allow to remain visibly wet for 10 minutes at 30°C. Remove and thoroughly rinse instruments. Instruments must be further processed and sterilized after this application.

**Disinfection of Biofilm on Hard, Non-Porous Surfaces:** When applied to pre-cleaned hard, nonporous, non-food contact surfaces conducive to biofilm formation, Oxonia Active is effective as a biofilm disinfectant against *Pseudomonas aeruginosa* (ATCC 15442), *Staphylococcus aureus* (ATCC 6538) and *Burkholderia cepacia* (ATCC 25416). Use a cleaning solution suitable to remove visible particles and rinse with potable water. Disinfect with a concentration of 4 fl. oz. of product per gallon of [water] [tap water] [up to 500 ppm hard water]. Apply use solution using a cloth, mop, sponge, coarse sprayer, or by immersion. All surfaces must be exposed to the solution and remain visibly wet for a period of not less than 5 minutes at room temperature. Drain thoroughly and allow to air dry. No rinse necessary.

#### **Disinfection of Biofilm on Pre-Cleaned Instruments:**

Oxonia Active can be used to kill bacteria in a biofilm (*Pseudomonas aeruginosa, Staphylococcus aureus and Burkholderia cepacia*) on pre-cleaned hard non-porous surfaces of [reusable] non-critical stainless steel instruments [(not for use on flexible or semi-rigid endoscopes unless recommended by the instrument manufacturer)].

Instruments must be thoroughly cleaned and free of visible soil before treatment. For hollow instruments, clean and rinse lumens prior to filling with Oxonia Active. Fully immerse or thoroughly wet instruments in 4 fl. oz. Oxonia Active per gallon of [water] [tap water] [up to 500 ppm hard water]. Allow all surfaces to remain visibly wet for 5 minutes at room temperature. Remove and thoroughly rinse instruments. Instruments must be further processed and sterilized after this application.

This product is not to be used as a terminal sterilant/high level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream, or normally sterile areas of the body, or (2) contacts intact mucous membranes, but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization or high level disinfection.

**To Pre-clean Instruments Prior to Terminal Sterilization/High Level Disinfection:** Apply this product diluted (3 fl. oz. per 1 gallon of water) (3 fl. oz. per 128 fl. oz. of [water] [tap water] [up to 500 ppm hard water]) (23 milliliters per 1 liter of water) and wipe clean [with a dry paper towel or lint-free cloth or microfiber cloth or sponge]. No rinsing necessary. [For best results, use a dry paper towel or lint-free cloth or microfiber cloth or sponge]. For stubborn stains or visibly soiled areas or tougher jobs, allow product to penetrate [dirt and/or soap scum] before wiping.

#### 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), *Burkholderia cepacia*<sup>1</sup> (ATCC 25416) and *Salmonella enterica* (ATCC 10708) at 0.4% - 1.0% (2 fl. oz. / 4 gallons to 5 fl. oz. / 4 gallons of [water] [tap water] [up to 500 ppm hard water]) in 5% blood serum and dried soap film residue. For visibly soiled areas a pre-cleaning step is required. Rinse all surfaces thoroughly with the disinfecting solution and maintain a visibly wet contact time of at least 10 minutes. Product contact surfaces must be rinsed with [sterile water] [water of suitable quality]. Prepare fresh solution for each use.

<sup>1</sup>Not tested in the presence of soap film residue.

#### SPECIAL INSTRUCTIONS FOR CLEANING PRIOR TO DISINFECTION AGAINST [Clostridioides difficile (formerly known as] Clostridium difficile SPORES

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

**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.

#### DISINFECTANT WITH SPORICIDAL ACTIVITY

#### [Clostridioides difficile (formerly known as] Clostridium difficile)

When applied to pre-cleaned surfaces, this product kills and/or inactivates spores of [*Clostridioides difficile* (formerly known as] *Clostridium difficile*) on hard, non-porous surfaces. This product is effective against *C. difficile* endospores when diluted at 3 fl. oz. per gallon after a 5 minute contact time. Treated surface must remain visibly wet for entire contact time.

Organism	ATCC Number
5 minute contact time	
[Clostridioides difficile (formerly known as] Clostridium difficile)	ATCC 43598

#### **FUNGICIDAL**

This product is a one-step fungicide when diluted at 3 fl. oz. per gallon of [water] [tap water] [up to 500 ppm hard water]. This product kills *Candida albicans* after a contact time of 3 minutes, and *Trichophyton interdigitale* (formerly *Trichophyton mentagrophytes*) (the athlete's foot fungus) after a contact time of 10 minutes. Treated surface must remain visibly wet for entire contact time. Oxonia Active can be used in areas such as locker rooms, dressing rooms, shower and bath areas and exercise facilities.

## **DISINFECTION AGAINST POULTRY & LIVESTOCK VIRUSES**

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 visibly 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.
- Saturate surfaces, and allow surfaces to remain visibly wet with a 0.4% 1.0% (2 fl. oz. / 4 gallons to 5 fl. oz. / 4 gallons of [water] [tap water] [up to 500 ppm hard 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 visible 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] [tap water] [up to 500 ppm hard water]) solution of Oxonia Active with a mop, cloth, brush or coarse spray. Wet all surfaces and allow to remain visibly 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)

Remove animals and feed from facilities. Remove litter, waste matter and visible 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] [tap water] [up to 500 ppm hard water]) solution of Oxonia Active with a mop, cloth, brush or coarse spray. Wet all surfaces and allow to remain visibly 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, nonporous 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 byproducts 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] [tap water] [up to 500 ppm hard 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 visibly 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 When Diluted at 3 fl. oz. / gallon

Organism	ATCC	Contact Time
General Cleaning	g & Disinfection	
Acinetobacter baumannii	ATCC 19606	3 min
Escherichia coli	ATCC 11229	3 min
Klebsiella pneumoniae	ATCC 4352	3 min
Mycobacterium bovis (TB)	-	10 min
Proteus mirabilis	ATCC 7002	3 min
Pseudomonas aeruginosa	ATCC 15442	3 min
Salmonella enterica	ATCC 10708	3 min

Stanbylaggagus guraus	ATCC 6538	3 min
Staphylococcus aureus Streptococcus pneumoniae	ATCC 0558 ATCC 6303	3 min
Hospital Disinfection -		
<sup>1</sup> Acinetobacter baumannii – MDR	ATCC BAA-1605	3 min
<sup>1</sup> Enterococcus faecalis – VRE	ATCC 51299	3 min
<sup>1</sup> Escherichia coli – ESBL	ATCC BAA-196	3 min
<sup>1</sup> Klebsiella pneumoniae – KPC	ATCC BAA-1705	3 min
<sup>1</sup> Staphylococcus aureus – CA-MRSA	ATCC BAA-1556	3 min
<sup>1</sup> Staphylococcus aureus – CA-MRSA	ATCC BAA-1683	3 min
<sup>1</sup> Staphylococcus aureus – MRSA	ATCC BAA-33592	3 min
<sup>1</sup> Staphylococcus aureus – VISA	ATCC 700788	3 min
<sup>1</sup> Staphylococcus epidermidis – MRSE	ATCC 51625	3 min
Biofilm Disinfe		
Pseudomonas aeruginosa	ATCC 15442	10 min
Staphylococcus aureus	ATCC 6538	10 min
Viruc	idal*	
*Adenovirus (Type 5)	-	3 min
*HIV Type 1 Virus (AIDS Virus)	-	3 min
*Hepatitis B Virus	-	5 min
*Hepatitis C Virus	-	5 min
*Herpes Simplex Type 1 virus	ATCC VR-733	3 min
*Herpes Simplex Type 2 virus	ATCC VR-734	3 min
*Human Coronavirus	ATCC VR-740	3 min
*Influenza A Virus (Hong Kong strain)	-	3 min
*Norovirus (FCV surrogate tested)	ATCC VR-782	3 min
*Poliovirus (Strain Chat)	ATCC VR-1562	10 min
*Respiratory Syncytial Virus (Strain Long)	ATCC VR-26	3 min
*Rhinovirus (Type 37)	ATCC VR-1147	3 min
*Rotavirus (Strain WA)	-	3 min
*Vaccina Virus (Strain WR)	ATCC VR-119	3 min
*SARS-Related Coronavirus 2 (BEI		
Resources NR-52281) (Strain Isolate	-	3 min
USA-WA 1/2020) [SARS-CoV-2]		
Disinfectant with S	poricidal Activity	
Clostridioides difficile (Clostridium	ATCC 43598	5 min
difficile)		0 11111
Fungi	cidal	40
Trichophyton interdigitale	-	10 min
Candida albicans	ATCC 10231	3 min

# Disinfecting Claims: Listed Organisms and Contact Times When Diluted at 2 fl. oz. / 4 gallon

Organism	ATCC	Contact Time
General Cleaning	g and Disinfection	
Burkholderia cepacia <sup>1</sup>	ATCC 25416	10 min
Histoplasma capsulatum <sup>1</sup>	-	10 min
Proteus vulgaris	ATCC 13315	10 min
Pseudomonas aeruginosa	ATCC 15442	10 min
Salmonella enterica	ATCC 10708	10 min
Salmonella enteritidis	ATCC 13076	10 min
Salmonella typhimurium	ATCC 13311	10 min
Staphylococcus aureus	ATCC 6538	10 min
Streptococcus pyogenes	ATCC 19615	10 min
Virucidal*		
*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
*Parainfluenza 3 Virus	-	10 min
*SARS-Related Coronavirus 2 (BEI		
Resources NR-52281) (Strain Isolate	-	10 min
USA-WA 1/2020) [SARS-CoV-2]		

<sup>1</sup>Not tested in the presence of soap film residue.

#### Disinfecting Claims: Listed Organisms and Contact Times When Diluted at 4 fl. oz. / gallon

Organism	ATCC	Contact Time
Biofilm Dis	sinfection	
Pseudomonas aeruginosa	ATCC 15442	5 min
Staphylococcus aureus	ATCC 6538	5 min
Burkholderia cepacia	ATCC 25416	5 min

## BACTERIOSTATIC

#### BACTERIOSTATIC

At 0.04% (1 fl. oz. per 20 gallons of [water] [tap water] [up to 500 ppm hard water]) Oxonia Active is effective at inhibiting the growth of bacteria when used in the presence of organic soil for up to two days [48 hours]. 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 visible 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, and remain visibly wet 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°Ć)	20 minutes
5%	176°F (80°C)	5 minutes

Allow surfaces to drain thoroughly prior to any [food] [product] contact. Rinse [food] [product] contact surfaces with sterile water. 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.

Organism	ATCC	Contact Time
Sporic	idal (80°C)	
Bacillus subtilis	ATCC 19659	5 min
Clostridium sporogenes	ATCC 3584	5 min
Sporic	idal (50°C)	
Bacillus subtilis	ATCC 19659	20 min
Clostridium sporogenes	ATCC 3584	20 min
Sporicidal (20°C)		
Bacillus subtilis	ATCC 19659	6 hours
Clostridium sporogenes	ATCC 3584	6 hours

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

## CLEANER

#### BOOSTER FOR ALKALINE DETERGENTS TO CLEAN FOOD PROCESSING EQUIPMENT

Oxonia Active is an effective oxygen bleach cleaning booster for use with alkaline detergents. Contact Ecolab before mixing this product with any 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. Contact Ecolab before mixing this product with any 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 1/4 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®, 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

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

(Made in USA) (Made in United States of America) This product may be patented | Ce produit peut être breveté | Este 19porici puede ser patentado: www.ecolab.com/patents

#### Optional Marketing Language:

- 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
- Effective in 5 minutes against [*Clostridioides difficile* (formerly known as] [*Clostridium difficile* spores] [*C. diff* spores]
- Kills [*Clostridioides difficile* (formerly known as] [*Clostridium difficile* spores] [*C. difficile* spores] [*C. diff* spores] in 5 minutes.
- Concentrated broad-spectrum disinfectant/virucide with efficacy against [*Clostridioides difficile* (formerly known as] [*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] when used according to disinfection directions
- Proven one-step disinfectant-virucide which is effective in water up to [400] [500] ppm hardness in the presence of 5% serum contamination when used according to disinfection directions
- Effective against Multidrug Resistant Organisms [MRDOs]<sup>1</sup>
- 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 [*Clostridioides difficile* (formerly known as] [*Clostridium difficile* spores] [*C. difficile* spores] [*C. diff* spores] on pre-cleaned, hard non-porous surfaces in hospitals
- Effective against [insert any organism from list of organisms] and [*Clostridioides difficile* (formerly known as] [*Clostridium difficile* spores] [*C. difficile* spores] [*C. diff* spores]
- Effective for daily use against [insert any organism from list of organisms] [and] [*Clostridioides difficile* (formerly known as] [*Clostridium difficile* spores] [*C. difficile* spores] [*C. difficile* spores]
- Kills [*Clostridioides difficile* (formerly known as] [*Clostridium difficile* spores] [*C. difficile* spores] [*C. difficile* spores] in 5 minutes.
- Daily use product with [*Clostridioides difficile* (formerly known as] [*Clostridium difficile spores*] [*C. diff* spores] [*C. diff* spores] efficacy [allows for product standardization] [eliminates need for separate sporocide]
- Effective against [*Clostridioides difficile* (formerly known as] [*Clostridium difficile* spores] [*C. difficile* spores] [*C. diff* spores]
- Tough on [*Clostridioides difficile* (formerly known as] [*Clostridium difficile* spores] [*C. difficile* spores] [*C. diff* spores] but easy on surfaces and designed for daily use on hard, non-porous surfaces.
- Recommend wearing goggles when handling the use dilution in a process plant.
- Approved for use in dairy sweetwater per the Grade A PMO
- Kills 99.9999% of bacteria *Pseudomonas aeruginosa*, *Staphylococcus aureus*, [and] *Burkholderia cepacia* in biofilms on a hard, non-porous surface when used according to biofilm disinfection directions on hard, non-porous surfaces<sup>3</sup>
- Kills 99.9999% of bacteria *Pseudomonas aeruginosa*, *Staphylococcus aureus*, [and] *Burkholderia cepacia* in biofilms when used according to biofilm disinfection directions on hard, non-porous surfaces<sup>3</sup>
- Reduces 99.9999% of bacteria *Pseudomonas aeruginosa*, *Staphylococcus aureus*, [and] *Burkholderia cepacia* growing in biofilms when used according to biofilm disinfection directions on hard, non-porous surfaces<sup>3</sup>

<sup>3</sup>When used according to biofilm disinfection directions on hard, non-porous surfaces

- Formulated to kill 99.9999% of bacteria *Pseudomonas aeruginosa*, *Staphylococcus aureus*, [and] *Burkholderia cepacia* in biofilms when used according to biofilm disinfection directions on hard, non-porous surfaces<sup>3</sup>
- Disinfects *Pseudomonas aeruginosa, Staphylococcus aureus*, and *Burkholderia cepacia* biofilms on hard non-porous surfaces [in [cosmetic] [personal care] [pharmaceutical] [and] [biopharma] manufacturing sites]<sup>3</sup>
- Kills biofilm bacteria *Pseudomonas aeruginosa*, *Staphylococcus aureus*, [and] *Burkholderia cepacia* [in 5 minutes] on hard, non-porous surfaces<sup>3</sup>
- Penetrates biofilms, killing the bacteria *Pseudomonas aeruginosa*, *Staphylococcus aureus*, [and] *Burkholderia cepacia* [living there]<sup>3</sup>
- Bacteria tested as a biofilm include *Pseudomonas aeruginosa, Staphylococcus aureus*, and *Burkholderia cepacia*<sup>3</sup>
- Effective as a biofilm disinfectant against *Pseudomonas aeruginosa, Staphylococcus aureus*, and *Burkholderia cepacia*<sup>3</sup>
- [Insert product name] is effective as a biofilm disinfectant [in 5 minutes at room temperature] [in 10 minutes at 30°C] <sup>3</sup>
- [Insert product name] disinfects *Burkholderia cepacia* biofilms, an organism of concern for cosmetic and pharmaceutical manufacturing<sup>3</sup>
- [Insert product name] disinfects biofilm bacteria *Pseudomonas aeruginosa*, *Staphylococcus aureus*, and *Burkholderia cepacia* [at room temperature]<sup>3</sup>
- [Insert product name] [sanitizes] [disinfects] *Burkholderia cepacia*, an organism of concern for cosmetic and pharmaceutical manufacturing<sup>3</sup>
- This product use solution cleans, disinfects and deodorizes hard, non-porous [hospital] [medical] surfaces in one step with no rinsing required when used according to disinfectant directions
- 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 when used according to disinfectant directions
- Removes dirt, grime, blood and other organic matter commonly found in hospitals [healthcare facilities] [on medical surfaces].
- This product [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] [sporicidal] [disinfectant] cleaner and deodorizer designed for general cleaning [and] disinfecting [deodorizing] [of] hard, nonporous surfaces [and is efficacious against [*Clostridioides difficile* (formerly known as] [*Clostridium difficile*] [*C. difficile*] [*C. diff*] endospores] when used according to disinfection directions. Removes dirt, grime, blood and other organic matter commonly found in hospitals [in healthcare facilities] [on medical surfaces].
- Use where housekeeping is of prime importance in controlling the hazard of crosscontamination between treated hard, non-porous surfaces.
- [Effective against] [Disinfects] [Kills] [99.9%] SARS-CoV-2 [virus] when used according to virucide directions for use on hard, non-porous surfaces
- [Effective against] [Disinfects] [Kills] [99.9%] SARS-CoV-2 virus, the cause of COVID-19 when used according to virucide directions for use on hard, non-porous surfaces
- Kills [Eliminates] 99.9% SARS-Related Coronavirus 2 [SARS-CoV-2] [USA-WA1/2020] [causative agent of COVID-19][the virus that causes COVID-19] when used according to virucide directions for use on hard, non-porous surfaces
- Effective against SARS-Related Coronavirus 2 [SARS-CoV-2] [USA-WA1/2020] [in [3] minutes] [in [10] minutes] on hard, non-porous surfaces

<sup>3</sup>When used according to biofilm disinfection directions on hard, non-porous surfaces

- Disinfects surfaces by killing [99.9%] SARS-Related Coronavirus 2 [SARS-CoV- 2] [USA-WA1/2020] [in One Step] when used according to virucide directions for use on hard, non-porous surfaces
- Kills [99.9% of] SARS-CoV-2, which causes COVID-19 when used according to virucide directions for use on hard, non-porous surfaces
- [Kills] [Effective against] the virus\* that causes COVID-19 (\*SARS-CoV-2) on hard, non-porous surfaces

#### 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] [nonpublic 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

- 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.

#### **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] on hard, non-porous surfaces. Refer to the [CDC or OIE] website at [pathogen-specific website address] for additional information.

For an emerging viral pathogen that is a/an	follow the directions for use for the following organisms on the label:
Enveloped virus	Poliovirus (Type 1, Chat strain) (ATCC VR-1562)
Large, non-enveloped virus	Poliovirus (Type 1, Chat strain) (ATCC VR-1562)
Small, non-enveloped virus	Poliovirus (Type 1, Chat strain) (ATCC VR-1562)

#### 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	
Peroxyacetic Acid	
Inert (Other) Ingredients:	
Total:	

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 DANGER

#### PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER**. 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