Synergex™

PRODUCT DESCRIPTION

Synergex is a U.S. EPA Registered (No. 1677-250) mixed peracid-based sanitizer and disinfectant. This patented powerful antimicrobial agent helps protect against many pathogenic and environmental microorganisms as well as bacteriophage, broad yeast and mold in a number of sanitizing and disinfecting applications. For a list of organisms see directions for use. *Synergex is effective in destroying biofilms on food contact surface at sanitizing concentrations with no-rinse options. Demonstrated effectiveness against viruses similar to Covid-19* on hard, non-porous surfaces.*

BENEFITS

Promotes Quality Assurance

- Penetrates biofilms, killing a minimum of 6 log of *Listeria monocytogenes* and *Pseudomonas aeruginosa* as a no rinse sanitizer on food contact surfaces.
- Enhances food safety when used in a total Ecolab program, with kill against pathogenic organisms on surfaces as well as within Biofilms. See directions for use for list of organisms.
- Synergex is listed on EPA's List N for use against SARS-CoV-2*. According to EPA guidance, Synergex is expected to be effective against SARS-CoV-2*.
- Reduces prevalence of spoilage causing organism in biofilms that impact product shelf life.
- Effective against environmental microorganisms that can adversely affect product quality.
- Chemical concentration can be monitored real-time decreasing dependence on manual titrations.

Helps Protect Processing Equipment Investment

- Use solutions 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.

Saves Time and Money

- Convenient to use - provides acidified rinse and sanitizer in one step - no post-rinse required.
- Useful for CIP, spray, and soak sanitizing applications, and can be used in foam sanitizing applications with a foam additive (This foam use not approved in the state of California).
- Helps improve worker safety - reduced employee exposure to concentrated product, through unique drum packaging closure.
- Leaves stainless steel surfaces free from mineral deposits - low pH use solution aids in mineral, hard-water and milk soil removal.
- Improved productivity as improved mineral solubility helps reduce frequency of acid washes and labor needs.

Environmental Implications

- Enables reduced water consumption for CIP programs with a rinse post-sanitizer.
- Active ingredients rapidly break down after use into water, oxygen, acetic acid, and octanoic acid.
- Non phosphorus formulation helps minimize phosphate-related effluent fees.
- Convenient to use - provides acidified rinse and sanitizer in one step - no post rinse required.
- Helps improve employee safety by reducing total volatiles and oxidizer in the air compared to peroxyacetic acid and traditional mixed peracid sanitizers

*Synergex has demonstrated effectiveness against viruses similar to SARS-CoV-2 on hard, non-porous surfaces. Therefore, Synergex can be used against SARS-CoV-2 when used in accordance with the directions for use against Reovirus on hard, non-porous surfaces. Refer to the CDC website at cdc.gov/coronavirus for additional information.

PROPERTIES

Form	Liquid
Color	Clear/colorless
Odor	Slight pungent
Spec. Grav. @ 68°F (20°C)	1.20
Pounds per gallon	10.0 (1.2 Kg/L)
100% solution pH	0.2
pH 1% solution	1.6

ACTIVE INGREDIENTS:	
Hydrogen Peroxide	10.70%
Peroxyoctanoic Acid	0.63%
Peroxyacetic Acid	2.38%
INERT INGREDIENTS:	86.29%
TOTAL:	100.00%
EPA Reg. No. 1677-250	

Formula ingredients contain no phosphorus.

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DIRECTIONS FOR USE

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

Sanitization
Synergex acid sanitizer is recommended for use on pre-cleaned, hard, non-porous surfaces in food and beverage processing, industrial, and institutional applications. This product is effective as a sanitizer when solution is prepared in water of up to 500 ppm hardness as $CaCO_3$.

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 particles, and then wash with a detergent solution, followed by a potable water rinse. Sanitize with a concentration of 1 fl. oz. Synergex concentrate per 4 – 7 gallons of water (0.112-0.195% v/v or 1120 ppm –1950 ppm product or 1.12-1.95 ml/L). At this dilution Synergex is effective as a food contact surface sanitizer against *Staphylococcus aureus* (ATCC 6538) and *Escherichia coli* (ATCC 11229), as well as food pathogens *Escherichia coli* O157:H7 (ATCC 35150), *Escherichia coli* O26:H11 (STEC), *Escherichia coli* O45:H2 (STEC), *Escherichia coli* O103:H6 (STEC), *Escherichia coli* O111:H8 (STEC), *Escherichia coli* O121:H19 (STEC), *Escherichia coli* O145:NM (STEC), *Listeria monocytogenes* (ATCC 49594), *Salmonella typhimurium* (ATCC 13311), *Campylobacter jejuni* (ATCC 29428), *Cronobacter sakazakii* (ATCC 12868), *Pseudomonas aeruginosa* (ATCC 15442) and *Vibrio cholerae* (ATCC 25873). At the same dilution Synergex is effective at reducing spoilage causing organisms *Pediococcus damnosus* (ATCC 25248) and *Lactobacillus malefermentans* (ATCC 11305). 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 1 minute unless a longer time is specified by the governing sanitary code. Drain thoroughly. No rinse necessary.

Continuous Treatment Of Conveyors: Wash, rinse and sanitize conveyor equipment. During processing, apply Synergex at a concentration of 1 fl. oz. Synergex concentrate per 4 – 7 gallons of water (0.112-0.195% v/v or 1120 ppm–1950 ppm product or 1.12-1.95 ml/L) to conveyor with Mikro Master or other suitable feeding equipment. At this dilution Synergex is effective against *Staphylococcus aureus* (ATCC 6538) and *Escherichia coli* (ATCC 11229), as well as food pathogens *Escherichia coli* O157:H7 (ATCC 35150), *Escherichia coli* O26:H11 (STEC), *Escherichia coli* O45:H2 (STEC), *Escherichia coli* O103:H6 (STEC), *Escherichia coli* O111:H8 (STEC), *Escherichia coli* O121:H19 (STEC), *Escherichia coli* O145:NM (STEC), *Listeria monocytogenes* (ATCC 49594), *Salmonella typhimurium* (ATCC 13311), *Campylobacter jejuni* (ATCC 29428), *Cronobacter sakazakii* (ATCC 12868), and *Vibrio cholerae* (ATCC 25873) as well as reducing spoilage organisms *Pediococcus damnosus* (ATCC 25248) and *Lactobacillus malefermentans* (ATCC 11305). Controlled volumes of Synergex are applied to return portion of conveyor through nozzles so located as to permit maximum drainage of Synergex from equipment and to prevent puddles on top of belt. During interruptions in operations, coarse spray the processing equipment with Synergex solution at 0.112-0.195% v/v concentration. Conveyor equipment must be free of food product when applying coarse spray. Conveyor surface must be exposed to the sanitizing solution for a period of 1 minute.

Final Bottle and Closure Sanitizing Rinse: Synergex may be used as a final sanitizing rinse for returnable and non-returnable bottles (e.g. glass or PET) and/or closures at dilution rate of 1 fl. oz. Synergex concentrate per 4 – 7 gallons of water (0.112-0.195% v/v or 1120 ppm–1950 ppm product or 1.12-1.95 ml/L). At this dilution Synergex is effective as a food contact surface sanitizer against Staphylococcus aureus (ATCC 6538) and *Escherichia coli* (ATCC 11229), as well as food pathogens *Escherichia coli* O157:H7 (ATCC 35150), *Escherichia coli* O26:H11 (STEC), *Escherichia coli* O45:H2 (STEC), *Escherichia coli* O103:H6 (STEC), *Escherichia coli* O111:H8 (STEC), *Escherichia coli* O121:H19 (STEC), *Escherichia coli* O145:NM (STEC), *Listeria monocytogenes* (ATCC 49594), *Salmonella typhimurium* (ATCC 13311), *Campylobacter jejuni* (ATCC 29428), *Cronobacter sakazakii* (ATCC 12868), and *Vibrio cholerae* (ATCC 25873) as well as reducing spoilage organisms *Pediococcus damnosus* (ATCC 25248) and *Lactobacillus malefermentans* (ATCC 11305). All surfaces must be exposed to the sanitizing solution for a period of 1 minute. Drain thoroughly. No rinse necessary. Suitable for use in bottle rinse applications.

Antimicrobial Rinse For Pre-Cleaned Food Contact Surfaces: Prior to antimicrobial rinsing, remove visible food particles, then wash with a detergent solution, followed by a potable water rinse. To reduce the number of spoilage organisms *Bacillus coagulans* (ATCC 7050) and *Clostridium butyricum* (ATCC 19398), apply Synergex at a concentration of 1 fl. oz. per 4 – 7 gallons of water (0.112-0.195% v/v or 1120 ppm – 1950 ppm product or 1.12-1.95 ml/L) at a temperature of 50°C to 60°C for at least 5 minutes. Drain thoroughly. No rinse necessary.

Antimicrobial Rinse Of Pre-Cleaned Or New Returnable Or Non-Returnable Containers and Closures: To reduce the number of beverage spoilage organisms, *Pediococcus damnosus* (ATCC 25248), *Lactobacillus malefermentans* (ATCC 11305), *Saccharomyces cerevisiae* (ATCC 834) and *Penicillium digitatum* (ATCC 36038), apply Synergex at a concentration of 0.64 – 2.56 fl. oz. per gallon of water (0.5-2% v/v or 5000 ppm-20000 ppm product or 5-20 ml/L) at a temperature of 40°C to 60°C for a minimum contact time of 7 seconds. After thorough draining, rinse interior container surfaces with a disinfected water rinse free of pathogenic bacteria. To reduce the number of beverage spoilage organisms, *Pediococcus damnosus* (ATCC 25248), *Lactobacillus malefermentans* (ATCC 11305) and *Saccharomyces cerevisiae* (ATCC 834), apply *Synergex at a concentration* of 0.64-2.56 fl. oz. per gallon of water (0.5-2% v/v or 5000 ppm – 20000 ppm product or 5-20 ml/L) at a temperature of 15°C to 60°C for a minimum contact time of 15 seconds. After thorough draining, rinse interior container surfaces with a disinfected water rinse free of pathogenic bacteria.

Antimicrobial Rinse For Yeast Reduction: Remove visible food particles, and then wash with a detergent solution, followed by a potable water rinse. To reduce the number of food spoilage organisms *Saccharomyces cerevisiae* (ATCC 834) apply 1 fl. oz. of Synergex concentrate per 4 - 7 gallons of water (0.112 – 0.195% v/v or 1120 ppm–1950 ppm product or 1.12–1.95 ml/L) for at least one minute. Drain thoroughly. No rinse necessary.

Sanitizing Hard, Non-Porous, Non-Food Contact Surfaces: Prior to use of this product, remove visible soil particles from surfaces. Wash with a detergent solution and rinse with potable water. Sanitize hard, non-porous, non-food contact surfaces such as floors, walls, tables, chairs, benches, drains, troughs, and drip pans with 1 fl. oz. of Synergex concentrate per 4 – 8 gallons of water (0.098-0.195% v/v or 980 ppm–1950 ppm product or 0.98 ml/L-1.95 ml/L). Apply use solution using a cloth, mop, sponge, coarse sprayer, or by immersion. At this concentration the product is effective as a non-food contact surface sanitizer against the following organisms: *Staphylococcus aureus* (ATCC 6538), *Enterobacter aerogenes* (ATCC 13048), *Listeria monocytogenes* (ATCC 49594), *Salmonella typhimurium* (ATCC 13311), *Pseudomonas aeruginosa* (ATCC 15442), *Cronobacter sakazakii* (ATCC 12868), *Escherichia coli* O157:H7 (ATCC 35150) and *Campylobacter jejuni* (ATCC 29428) as well as reducing spoilage organisms *Lactobacillus malefermentans* (ATCC 11305). All surfaces must be exposed to the sanitizing solution for a period of 5 minutes. Drain thoroughly. No rinse necessary.

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DIRECTIONS FOR USE (CONT.)

Sanitizing Hard, Non-Porous, Non-Edible Outside Surfaces Of Airtight, Sealed Packages Containing Food Or Non-Food Products: Synergex may be used as a final sanitizing rinse for hard, non-porous non-edible outside surfaces of airtight, sealed packages containing food or non-food products at 1 fl. oz. of Synergex concentrate per 4 – 7 gallons of water (0.112-0.195% v/v or 1120 ppm – 1950 ppm product or 1.12-1.95ml/L). The treated hard, non-porous, non-edible packaging, such as food wraps and meat casings, must be removed and discarded before packaged food products are further processed or consumed. All surfaces must be exposed to the sanitizing solution for a period of 1 minute. Drain thoroughly. No rinse necessary. This is not to be used on porous surfaces.

Foam Sanitizing Non-Food Contact Surfaces: (This use not approved in the state of California) Synergex in conjunction with Liquid K is an effective foam sanitizer of pre-cleaned non-food contact surfaces, such as floors, walls, drains, and equipment surfaces. For this application, prepare a solution of 1 fl. oz. of Synergex concentrate per 4 – 8 gallons of water (0.098-0.1950% v/v or 980 ppm – 1950 ppm product or 0.98-1.95ml/L) and 1-2 fl. oz. Liquid K per 6 gallons water (0.13% – 0.26% v/v). For example, in 6 gallons of water, add 1 fl. oz. of Synergex and 1-2 fl. oz. of Liquid K. Liquid K is the only approved foam generator. At this concentration, the product is effective as a non-food contact surface sanitizer against the following organisms: *Staphylococcus aureus* (ATCC 6538), *Enterobacter aerogenes* (ATCC 13048), *Listeria monocytogenes* (ATCC 49594), *Salmonella typhimurium* (ATCC 13311), *Escherichia coli* O157:H7 (ATCC 35150) as well as reducing spoilage causing organisms *Lactobacillus malefermentans* (ATCC 11305). Apply solution as a foam using recommended equipment. Wet surfaces thoroughly with foam. Surfaces must be exposed to the sanitizing foam for a period of 5 minutes. Drain thoroughly. No rinse is necessary. Contact your Ecolab representative for information on Liquid K foaming agents and recommended foaming equipment.

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. Sanitize non-food contact packaging equipment with 1 fl. oz. of Synergex concentrate per 4 – 8 gallons of water (0.098-0.195% v/v or 980 ppm – 1950 ppm product or 0.98-1.95ml/L). Apply use solution using a cloth, sponge, coarse sprayer, or by immersion. At this concentration the product is effective as a non-food contact surface sanitizer against the following organisms: *Staphylococcus aureus* (ATCC 6538), *Enterobacter aerogenes* (ATCC 13048), *Listeria monocytogenes* (ATCC 49594), *Salmonella typhimurium* (ATCC 13311), *Pseudomonas aeruginosa* (ATCC 15442), *Cronobacter sakazakii* (ATCC 12868), *Escherichia coli* O157:H7 (ATCC 35150) and *Campylobacter jejuni* (ATCC 29428) as well as reducing spoilage causing organisms (beverage spoilage organisms) *Lactobacillus malefermentans* (ATCC 11305). All surfaces must be exposed to the sanitizing solution for a period of 5 minutes. Allow surfaces to drain thoroughly before operations are resumed. Drainage may be followed by a potable or sterile water rinse.

Sanitizing Biofilm:
Synergex acid sanitizer is recommended for use on pre-cleaned, hard, non-porous surfaces in food and beverage processing, industrial, and institutional applications. When applied to pre-cleaned hard, non-porous food contact and other pre-cleaned, hard, non-porous surfaces conducive to biofilm formation, Synergex is effective as a biofilm sanitizer against *Listeria monocytogenes* (ATCC 49594) and *Pseudomonas aeruginosa* (ATCC 15442). Use a cleaning solution suitable to remove visible particles, followed by a potable water rinse as required by the governing sanitary code. Sanitize according to the table below using immersion, coarse spray or CIP circulation techniques as appropriate to the equipment. All surfaces must be exposed to the sanitizing solution for the required contact time unless a longer time is specified by the governing sanitary code. Drain thoroughly. See table for rinsing requirements.

Biofilm Sanitizing Treatment		
Use Rate	**Minimum Conditions for Use**	**Post-Treatment Rinse Requirement**
1 fl. oz./4-4.5 gallons of water (0.173-0.195%, 1730-1950 ppm product)	10 minutes (at a minimum of 33°C)	No rinse necessary
1 fl. oz./4-4.5 gallons of water (0.173-0.195%, 1730-1950 ppm product)	25 minutes (by immersion or CIP circulation)	No rinse necessary
1.54-1.92 fl. oz./3 gallons of water (0.40-0.50%, 4000-5000 ppm product)	5 minutes	Potable water rinse required

Sanitizing Non-Porous Gloved Hands: To prevent cross contamination of organisms between treated surfaces in animal areas or packaging and storage areas of food plants, dip pre-washed (plastic, latex or other synthetic rubber) gloved hands into a suitable clean container that contains enough freshly made sanitizing solution to cover the gloved area. Do not let sanitizing solution come into contact with the exposed skin. Make up the sanitizing solution by adding 1 fl. oz. of Synergex concentrate per 4 – 8 gallons of water (0.098-0.195% v/v or 980 ppm – 1950 ppm product or 0.98-1.95ml/L). Dip (soak) in solution for 1 minute. **NO POTABLE WATER RINSE IS ALLOWED.** Change the sanitizing solution in the bath at least daily or when solution appears dirty.

Entryway Sanitizing Systems: (This use is not approved in the state of California) To prevent cross contamination of organisms between treated surfaces, set the system to deliver sanitizing solution at 1 fl. oz. of Synergex concentrate per 4 – 8 gallons of water (0.098-0.195% v/v or 980 ppm – 1950 ppm product) and 1-2 fl. oz. Liquid K per 6 gallons of water (0.13% - 0.26% v/v). For example, in six gallons of water, add 1 fl. oz. of Synergex and 1-2 fl. oz. of Liquid K. Liquid K is the only approved foam generator. The foam (or spray) must cover the entire path of the doorway. Set the system so that a wet blanket of sanitizer solution is maintained on the floor. Treated surfaces must remain visibly wet for 1 minute. Do not mix other foam additives to the sanitizing solution. Recommend draining/replacing the solution daily or more often if it appears soiled.

Shoe Bath Sanitizer Directions: (This use is not approved in the state of California) To prevent cross contamination of organisms between treated surfaces in animal areas, shoe baths containing one inch of freshly made solution should be placed at all entrances to buildings and hatcheries. Sanitize boots (shoes) in a solution of 1 fl. oz. of Synergex concentrate per 4 – 7 gallons of water (0.112 - 0.195% v/v or 1120 ppm – 1950 ppm product or 1.12 – 1.95 ml/L). Scrape visible soils from waterproof work boots (shoes) and place in solution for 1 minute prior to entering area. Change the solution in the bath daily or sooner if solution appears soiled.

Shoe Foam Sanitizer Directions: (This use is not approved in the state of California) Synergex can be used to prevent cross contamination of organisms between treated surfaces in animal areas and packaging and storage areas of food plants. Apply a foam layer approximately 0.5 - 2 inches (1.3 - 5 cm) thick made from a solution of 1 fl. oz. of Synergex concentrate per 4 – 7 gallons of water (0.112 - 0.195% v/v or 1120 ppm – 1950 ppm product or 1.12 – 1.95 ml/L) and 1 fl. oz. Liquid K per 6 gallons of water (0.13% v/v). For example, in 6 gallons of water, add 1 fl. oz. of Synergex and 1-2 fl. oz. of Liquid K at all entrances to buildings, hatcheries, production and packaging rooms by using a foam generating machine or aerator to apply foam layer. Follow the foaming directions as specified by the manufacturer of the foam generator/ aerator. Scrape waterproof shoes. Stand and/or walk through foamed area for 1 minute prior to entering area. Foam area must be washed and replace daily or when it appears soiled.

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DIRECTIONS FOR USE (CONT.)

Bacteriophage Control: When applied to pre-cleaned surfaces, Synergex will reduce the incidence of bacteriophage *Lactococcus lactis* DSM 4366: P001 DSM 4262 and P008 DSM 10567 in manufacturing establishments by spraying or immersion of equipment in a solution of 1 fl. oz. of Synergex concentrate per 4 – 7 gallons of water (0.112 - 0.195% v/v or 1120 ppm – 1950 ppm product or 1.12 – 1.95 ml/L). All surfaces must be exposed to the solution for a period of 1 minute. Drain thoroughly. No rinse necessary.

DISINFECTION

Synergex disinfects as it cleans in one operation when used according to disinfection directions. Synergex 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, glazed tile, linoleum, vinyl, glazed porcelain, plastic (such as polypropylene and polyethylene), stainless steel, or glass. Areas of use: Use Synergex in veterinary clinics, animal life science laboratories, industrial facilities, office buildings, recreational facilities, retail and wholesale establishments.

Combination Disinfection And Cleaning: Synergex is effective as a disinfectant at a concentration of 1 – 7.68 fl. oz. Synergex concentrate per 3 gallons (0.260 – 2% v/v concentration or 2600-20000 ppm product or 2.6-20ml/L) of water and 5% blood serum on hard non-porous surfaces. At this dilution, Synergex is effective against *Staphylococcus aureus* (ATCC 6538), *Salmonella enterica* (ATCC 10708) and *Pseudomonas aeruginosa* (ATCC 15442).
For visibly soiled areas a pre-cleaning step is required. Apply solution with mop, cloth, sponge, brush, scrubber, or coarse spray device or by soaking so as to wet all surfaces thoroughly. All surfaces must remain visibly 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. Rinse food contact surfaces with a potable water rinse prior to reuse.

Disinfecting Hard, Non-Porous And Non-Food Contact Surfaces: Synergex is recommended for use on hard, non-porous, environmental surfaces such as floors, walls and processing equipment. Synergex is effective against Staphylococcus aureus (ATCC 6538), Salmonella enterica (ATCC 10708) and Pseudomonas aeruginosa (ATCC 15442) at a concentration of 1 – 7.68 fl. oz. Synergex concentrate per 3 gallons (0.260 – 2% v/v concentration or 2600 ppm-20000 ppm product or 2.6-20ml/L) of water and 5% blood serum. 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 potable water.

Virucidal*: For visibly soiled areas a pre-cleaning step is required. At 1 fl. oz. of Synergex concentrate per 4–7 gallons of water (0.112–0.195% v/v or 1120 ppm – 1950 ppm product or 1.12–1.95ml/L) Synergex is effective against *Influenza B Virus (ATCC VR-823), *Influenza A virus (H1N1) (Strain A/Mexico/4108/2009), and *Reovirus Type 3 (ATCC VR-232) on hard, non-porous, inanimate surfaces when used at a 5 minute contact time in the presence of 5% blood serum. Allow surface to remain visibly wet for 5 minutes and let air dry. Synergex is effective against *SARS-CoV-2 (SARS-Related Coronavirus 2, BEI Resources NR-52281 Strain Isolate USA-WA 1/2020) on hard, non-porous, inanimate surfaces when used at a 90 seconds contact time in the presence of 5% blood serum. Allow surface to remain visibly wet for 90 seconds and let air dry. When using on food contact surfaces, no rinse is required. Wipe or let air dry.

Fungicidal: Synergex can be used on hard non-porous inanimate surfaces such as shower room floors, locker room benches, shower stalls and bath mats. At 1 fl. oz. of Synergex concentrate per 4 – 5.5 gallons of water (0.142-0.195% v/v or 1420 ppm – 1950 ppm product or 1.42–1.95ml/L) Synergex is effective against *Trichophyton interdigitale* (formerly known as *Trichophyton mentagrophytes*) (Athletes Foot Fungi) (ATCC 9533) in the presence of protein (5% blood serum) with a 10 minute contact time. Apply as directed under disinfection.

Poultry And Swine Premise Disinfection

1. Remove all poultry and feeds from premises, vehicles, and enclosures such as coops and crates.
2. Remove all litter and droppings from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals.
3. Empty all troughs, racks and other feeding and watering appliances.
4. Thoroughly clean all surfaces with a suitable detergent and rinse with water.
5. Saturate surfaces with the recommended disinfecting solution for a period of at least 10 minutes.
6. Immerse all halters, ropes and other types of equipment used in handling and restraining animals, as well as forks, shovels and scrapers used for removing litter and manure.
7. Ventilate buildings, vehicles, coops and other closed spaces. Do not house poultry and animals or employ equipment until treatment has been absorbed, set or dried.
8. 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: Use to treat hatchers, setters, trays, racks, carts, sexing tables, delivery trucks and other hard surfaces.

1. Remove all poultry, eggs, chicks and feeds from premises, vehicles, and enclosures such as coops and crates.
2. Remove visible soils, such as litter, down, shell fragments or other hatching related debris.
3. Empty all racks and other equipment and appliances.
4. Thoroughly clean all surfaces with a suitable detergent and rinse with water.
5. Saturate surfaces with the recommended disinfecting solution for a period of at least 10 minutes.
6. Immerse all trays, racks, carts and other types of equipment used in handling animals.
7. Ventilate buildings, vehicles and other closed spaces. Do not house poultry and animals or employ equipment until treatment has been absorbed, set or dried.
8. Thoroughly scrub treated hatchers, setters, trays, racks, carts with a detergent and rinse with potable water before reuse.
9. Allow to dry before reintroducing poultry, eggs, chicks and feeds.

Farm Premise Disinfection

1. Remove all animals and feed from premises, vehicles, and enclosures.
2. Remove all litter, droppings and manure from floors, walls and surfaces of facilities occupied or traversed by animals.
3. Empty all troughs, racks and other feeding and watering appliances.
4. Thoroughly clean surfaces with soap or detergent by manual or spray application and rinse with water.
5. Saturate surfaces with the recommended disinfecting solution for a period of at least 10 minutes.
6. Immerse all halters, ropes and other types of equipment used in handling and restraining animals as well as forks, shovels and scrapers used for removing litter and manure.
7. Ventilate buildings, vehicles and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried.
8. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.

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DIRECTIONS FOR USE (CONT.)

Hard Surface Cleaner: For hard surface cleaning applications, remove visible soil particles from surfaces. Then thoroughly clean surfaces with a concentration of 1 - 7.68 fl. oz. Synergex concentrate per 3 gallons of water (0.260-2% v/v or 2600 ppm-20000 ppm product or 2.6-20ml/L) in conjunction with an alkaline pH modifier, such as KOH or NaOH to adjust the cleaning solution to a pH of 8.8. All hard, non-porous, food contact surfaces treated with this cleaning system must be rinsed thoroughly with potable water followed by sanitizing with an approved food contact sanitizer.

For hard surface acid cleaning applications, remove visible food particles with a water rinse, then wash using Synergex at a rate of up to 1 fl. oz. per 4 gallons of water (0.195% v/v or 1950 ppm product or 1.95ml/L). All hard, non-porous, food contact surfaces treated with this cleaning system must be drained thoroughly. No rinse necessary.

Final Bottle And Closure Cleaning Rinse: Synergex may be used as a final cleaning rinse for returnable and non-returnable bottles (e.g., glass or PET) and closures not requiring a final food contact surface sanitizing rinse when used at a rate of up to 1 fl. oz. per 4 gallons of water (0.195% v/v or 1950 ppm product or 1.95ml/L). Drain thoroughly. No rinse necessary.
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.

Consult your Ecolab Representative for specific use instructions and recommended dispensing equipment.

For cautionary and first aid information, consult the Safety Data Sheet (SDS) or product label.

This product is effective under the intended conditions of use as outlined on the product label or specified in a Sanitation Standard Operating Procedure (SSOP).

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