

# Ster-Bac<sup>™</sup>

#### PRODUCT DESCRIPTION

Ster-Bac<sup>™</sup> is a liquid quaternary ammonium sanitizer.

#### BENEFITS

### **Promotes Quality Assurance**

- Enhances food safety when used in a total Ecolab product and professional services program.
- Versatile ideal for deodorizing, disinfecting and no-rinse sanitizing.
- Effective against Listeria monocytogenes.
- Effective againstSARS-CoV-2 virus, the cause of COVID-19 on hard, non-porous surfaces.

# Saves Time and Labor

Convenient to use – easily proportioned through sprayers or injection meters.

#### Saves Money

- Effectively controls odors.
- A Noncorrosive at recommended use dilution.
- Sanitizes at a recommended use dilution in warm water.

#### **Environmental Implication**

Formula ingredients contain no Phosphorus.

PROPERTIES	Formliquid	Pounds per gallon	8.29 (3.76 kg)
	Colorclear	pH 1.0% solution	7.9
	Odor sweet	0.1% solution	7.6
	Foam high	Spec. Grav. @ 68°F(20°C) .	0.995
	Wetting Abilitygood	•	

### **ACTIVE INGREDIENTS:**

n-Alkyl (50% C <sub>14</sub> , 40% C <sub>12</sub> , 10% C <sub>16</sub> )	
dimethyl benzyl ammonium chloride	10.0%
OTHER INGREDIENTS:	90.0%
TOTAL:	.100.0%
FPA Reg. No. 1677-43	

EPA Reg. No. 1677-43

## STATEMENT OF ASSURANCE

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).

A Letter of Guaranty is available from your Ecolab representative.

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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. **DEODORIZING:** To deodorize waste containers and non-food areas of food processing plants mix 1 fl. oz. Ster-Bac per 1 gal. of water in up to 500 ppm hard water. Apply solution with mop, sponge, cloth, or mechanical sprayer to hard surfaces. Allow surfaces to air dry.

**PRE-PASSIVATION CLEANING:** For cleaning prior to passivation, use up to a 3% use solution (up to 4 fl. oz. per gallon of water). Apply use solution manually or by mechanical application to thoroughly clean surfaces. Rinse with potable water or follow with detergent cleaning step. Can capture and re-use solution for additional cleaning if desired.

#### **GENERAL DISINFECTION/VIRUCIDAL\*:**

Disinfect pre-cleaned hard, non-porous surfaces such as walls, floors, sinks, finished woodwork, bathroom fixtures with 3 fl. oz. Ster-Bac per 1 gal. of water (2400 ppm active quat) in up to 300 ppm hard water. At this dilution Ster-Bac is effective against Staphylococcus aureus and Salmonella enterica. Thoroughly wet surfaces with mop, sponge, cloth, or coarse spray. Allow surfaces to remain wet for 10 minutes. Allow to air dry. Food contact surfaces that have been disinfected must be rinsed thoroughly with potable water. 3 fl. oz. Ster-Bac per 1 gal. of water (2400 ppm active quat) in up to 500 ppm hard water. At this dilution Ster-Bac is effective against \*SARS-CoV-2 (SARS-Related Coronavirus 2, BEI Resources NR-52281 Strain Isolate USA-WA). Thoroughly wet surfaces with mop, sponge, cloth, or coarse spray. Allow surfaces to remain visibly wet for 4 minutes. Allow to air dry. Food contact surfaces that have been disinfected must be rinsed thoroughly with potable water.

#### GENERAL DISINFECTION OF MEAT, POULTRY, AND OTHER FOOD PROCESSING FACILITIES:

Prior to disinfection, food products and packaging materials must be removed from the room or carefully protected. For disinfecting pre-cleaned hard, non-porous surfaces such as walls, floors, and sinks, apply use solution of 3 fl. oz. per 1 gal. of water (2400 ppm active quat) in up to 300 ppm hard water with cloth, mop, sponge, or sprayer. Treated surfaces must remain wet for 10 minutes. At this dilution Ster-Bac is effective against Staphylococcus aureus and Salmonella enterica. Food contact surfaces that have been disinfected must be rinsed thoroughly with potable water. For sprayer applications, use a coarse spray device. Spray 6-8 inches from the surface, rub with a brush, sponge, or cloth. Do not breathe spray. For use on non-food contact hard, non-porous surfaces as a general disinfectant in the brewery industry, use 2400 ppm active quaternary. Follow general disinfectant directions.

FOGGING - NON-PUBLIC HEALTH This product can be applied by fogging to control the growth of non-public health spoilage and decay causing bacteria on hard, non-porous surfaces in dairies, beverage and food processing plants including meat and poultry processing facilities. All surfaces must be pre-cleaned prior to fogging. DIRECTIONS FOR FOGGING in Dairies, Beverage and Food Processing Plants (including meat and poultry processing facilities): Prior to fogging, food products and packaging material must be removed from the room or carefully protected. The room or building must be vacant of all personnel during and at least two hours after the fogging treatment. Calculate volume of the room to determine volume of solution needed to fog (one quart per 1000 cu. ft. of room area). Prepare a Ster-Bac solution containing 3 fl. oz. per 1 gal. of water (2400 ppm active quat) in up to 300 ppm hard water and fog using a mechanical fogging apparatus. Fog product for length of time necessary to fill room based on fogging apparatus manufacturer directions. Surfaces must remain undisturbed for 5 minutes after room fill is achieved before initiating aeration of the room.

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

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

# **DISINFECTING - POTATO STORAGE AREA**

**AND EQUIPMENT:** Remove all potatoes prior to disinfection of potato storage area or equipment. Pre-clean hard, non-porous surfaces by removing heavy soil or gross filth. Follow general disinfection (3 fl. oz. per 1 gal. in up to 300 ppm hard water) procedures. At this dilution Ster-Bac is effective against *Staphylococcus aureus* and *Salmonella enterica*. All treated surfaces must be thoroughly rinsed with potable water prior to reuse.

DISINFECTION - NON-FOOD CONTACT HARD, NON-POROUS SURFACES: Pre-clean surfaces. Disinfect waterproof work boots, tools, forklifts, and hand trucks with 3 fl. oz. Ster-Bac per 1 gal. of water in up to 300 ppm hard water (2400 ppm active quat). At this dilution Ster-Bac is effective against *Staphylococcus aureus* and *Salmonella enterica*. For waterproof boots and tools, thoroughly apply use solution by immersion, foam, or coarse spray. For forklifts and hand trucks, thoroughly apply by coarse spray and foam. Treated surfaces must remain wet for 10 minutes. Allow to air dry.

SANITIZING - NON-POROUS GLOVED HANDS: To reduce cross-contamination on treated hard, non-porous surfaces in animal areas and the 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 1-1.5 fl. oz. product per 3 gal. of water (250-400 ppm active quat) in up to 500 ppm hard water (or

equivalent use dilution). Dip (soak) in solution

for 1 minute. NO POTABLE WATER RINSE IS REQUIRED. Change the sanitizing solution in the bath at least daily or when solution appears dirty. At this dilution Ster-bac is an effective food contact surface sanitizer against Escherichia coli, Staphylococcus aureus, Listeria monocytogenes and Enterobacter sakazakii.

#### SANITIZING NON-FOOD CONTACT SURFACES:

To sanitize pre-cleaned, hard, non-porous, nonfood contact surfaces, add 1 - 1.5 fl. oz. product per 1 gal. of water (800 - 1200 ppm active quat) in up to 500 ppm hard water. Apply sanitizer usesolution with a cloth, mop, sponge, sprayer or by immersion. For sprayer applications, use a coarse spray device and spray 6-8 inches from surface. Do not breathe spray. Treated surfaces must remain wet for 2 minutes. Wipe dry with a sponge, mop, or cloth or allow to air dry. At this dilution Ster-Bac is effective against *Stapyhlococcus aureus* and *Enterobacter aerogenes*.

SANITIZING FOOD CONTACT SURFACES AND EQUIPMENT IN FOOD PROCESSING PLANTS OR RESTAURANTS: For sanitization of hard. non-porous food contact surfaces and equipment in food processing plants or restaurants, remove gross food particles and excess soil by a pre-flush or pre-scrape, wash with a good detergent or compatible cleaner, rinse equipment thoroughly with clear water, then rinse equipment with a sanitizing solution of 1 - 1.5 fl. oz. product per 3 gal. of water (250 - 400 ppm active quat) (or equivalent use dilution) in up to 500 ppm hard water. All surfaces must be exposed to the sanitizing solution for a period of not less than 1 minute. Allow equipment to drain thoroughly and air dry. At this dilution Ster-Bac is an effective food contact surface sanitizer against Escherichia coli, Staphylococcus aureus, Listeria monocytogenes and Enterobacter sakazakii.

**ENTRYWAY SANITIZING SYSTEMS** (Use not approved in the State of California): To reduce cross-contamination on treated hard, non-porous surfaces from area to area, set the system to deliver sanitizing solution at 1-1.5 fl. oz. product per 1 gal. of water in up to 500 ppm hard water (or equivalent use dilution) (800-1200 ppm active quat). At this dilution Ster-Bac is effective against *Stapyhlococcus aureus* and *Enterobacter aerogenes*. The foam (or spray) must cover the entire path of the doorway. Set the system so that a continuous wet blanket of sanitizer solution is delivered to the floor. Do not mix other foam additives to the sanitizing solution.

SHOE BATH SANITIZER DIRECTIONS: TO reduce cross-contamination on treated hard. non-porous surfaces in animal areas, shoe baths containing one inch of freshly made solution must be placed at all entrances to buildings and hatcheries. Sanitize in a solution of 1 fl. oz. product per 1 gal. of water (800 ppm active quat) (or equivalent use dilution) in up to 500 ppm hard water. At this dilution Ster-Bac is effective against Stapyhlococcus aureus and Enterobacter aerogenes. Scrape waterproof work boots (shoes) and place in solution for 2 minutes prior to entering area. Change the solution in the bath daily or sooner if solution appears diluted or soiled. SHOE FOAM SANITIZER DIRECTIONS (Use not approved in the State of California): Ster-Bac can be used to reduce cross-contamination

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### **DIRECTIONS FOR USE (CONT.)**

on treated hard, non-porous surfaces in animal areas and packaging and storage areas of food plants. Apply a foam layer approximately 0.5 to 2 inches thick made from a solution of 1 - 1.5 fl. oz. product per 1 gal. of water in up to 500 ppm hard water (or equivalent use dilution) (800 to 1200 ppm active quat) 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 2 minutes prior to entering area. Foam area must be washed and replaced daily or when it appears dirty. At this dilution Ster-Bac is effective against Stapyhlococcus aureus and Enterobacter aerogenes.

**ELEVATED TEMPERATURE SANITIZING:** For sanitization of equipment in food processing plants, restaurants, remove gross food particles and excess soil by a pre-flush or pre-scrape, wash with a good detergent or compatible cleaner, rinse equipment thoroughly with clear water, then rinse equipment with a sanitizing solution. At a temperature of 120° F, this product is an effective sanitizer for food contact surfaces at 1 fl. oz. product to 10 gal. of water in up to 500 ppm hard water. At this dilution Ster-Bac is effective against *Stapyhlococcus aureus* and *Escherichia coli*. All surfaces must be exposed to the sanitizing solution for a period of not less than 1 minute. Allow equipment to drain thoroughly.

# SANITIZING EATING AND DRINKING UTENSILS

- 1. Scrape and preflush utensils to remove excess soil.
- 2. Wash with good detergent or compatible cleaner (see your Ecolab representative for a recommendation).

3. Rinse with clear water.

4. Sanitize in a solution of 1 - 1.5 fl. oz. product per 3 gal. of water (250 - 400 ppm active quat) in up to 500 ppm hard water (or equivalent use dilution). Immerse all utensils for at least 1 minute. Use 2 minutes exposure time if required by governing sanitary code. At this dilution Ster-bac is effective against *Stapyhlococcus aureus* and *Escherichia coli*.
5.Drain and air dry.

**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 solution must be prepared as soon as it becomes diluted or soiled.

FOR CONTINUOUS TREATMENT OF MEAT AND POULTRY OR FRUIT AND VEGETABLE CONVEYORS: Remove gross food particles and excess soil by a pre-flush or pre-scrape, wash

with a good detergent or compatible cleaner,

rinse equipment thoroughly with clear water. then rinse equipment with a sanitizing solution. During processing, apply Ster-Bac at a 250-400 ppm active quat level to conveyors with MIKRO MASTER or other suitable feeding equipment with a 1 minute contact time. At this dilution Ster-Bac is effective against Stapyhlococcus aureus, Escherichia coli, Listeria monocytogenes and Enterobacter sakazakii. Controlled volumes of sanitizer are applied to return portion of conveyor through nozzles so located as to permit maximum drainage of sanitizer from equipment and to prevent puddles on top of belt. During interruptions in operation, coarse spray equipment, peelers, collators, slicers and saws with MIKRO MASTER dispensed Ster-Bac solution of 250-400 ppm quat. Conveyor equipment must be free of product when applying this coarse spray.

# SANITIZING SHELL EGGS INTENDED FOR

FOOD: To sanitize previously cleaned food-grade eggs in shell egg and egg product processing plants, spray with a solution of 1 - 1.5 fl. oz. product per 3 gal. of warm water in up to 500 ppm hard water (250 - 400 ppm active quat). Allow 1 minute of contact time. At this dilution Ster-Bac is effective against Stapyhlococcus aureus, Escherichia coli, Listeria monocytogenes and Enterobacter sakazakii. The solution must be warmer than the eggs, but not to exceed 130°F. Wet eggs thoroughly and allow to drain. Eggs sanitized with this product shall be subjected to a potable water rinse only if they are broken immediately for use in the manufacture of egg products. Eggs must be reasonably dry before casing or breaking. The solution must not be reused for sanitizing eggs.

**NOTE:** Only clean, whole eggs can be used for sanitizing. Dirty, cracked, or punctured eggs cannot be sanitized.

ALGAE AND SLIME CONTROL IN COOLING AND PROCESS WATERS: (Use not approved in the State of California) Ster-Bac is formulated to provide control of growth of algae and slime forming bacteria in recirculating cooling water systems and evaporative condensers as well as cooling tunnels and warmers. It can be used in cooling water for thermal processing and pasteurizing operations in dairies, breweries, soft drink and food canning plants.

To control algae and slime forming bacteria, use as directed. For best results, slug feed. Add directly from the product container using proper and accurate dispensing equipment. The frequency of addition needed depends on many factors. To optimize your use, follow this procedure:

#### Recirculating Cooling Towers, Dairy Sweetwater and Other Process Waters:

Initially use not more than 25 fl. oz. per 1,000 gal. of water to be treated (up to 20 ppm active quat). Increase dosage to 45 fl. oz. per

1,000 gal. of water, if necessary, except in dairy recirculating cooling water (commonly referred to as sweetwater) systems where dose is limited to not more than 20 ppm active. Repeat initial dose every seven days or increase the frequency, if needed.

Ster-Bac 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.

Staining and Corrosion Control in Federally Inspected Meat and Poultry Plants: May be added to water of sealed containers of meat and poultry products to prevent staining, corrosion, or deposit formation on containers and processing equipment. This product must be used at the same application rates, and in the same manner as described above for recirculating cooling tower water. Deposit formation includes removal of black polishing dust as a cleaning process: Black Polishing Dust Removal Procedure

- 1. Apply a 10% (by volume) Ster-Bac solution to the tank surface.
- 2.Brush surface thoroughly and rinse. Use a long handled brush if necessary. Brushing, i.e., use of mechanical force, is necessary to break the electrostatic charge. Just rinsing or foaming the surface with the solution will not remove the electrostatically attached polishing dust particles.
- 3. Repeat if necessary.
- 4.Either wipe surface dry, or rinse with potable water. Potable water rinse is required for food contact surfaces.

