

1839-79

10/1/2009

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460United States
Environmental Protection
Agency**Office of Pesticide Programs**Mr. Thomas W. Isaac
Senior, Regulatory Specialist
Stepan Company
22 W. Frontage Rd.
Northfield, IL. 60093

OCT - 1 2009

Subject:	Product Name:	NP 4.5 Detergent/Disinfectant
	EPA Registration No.:	1839-79
	Notification Date:	September 8, 2009
	EPA Receipt Date:	September 8, 2009
	Submission #:	858177

Dear Mr. Isaac,

This letter acknowledges receipt of your notification submitted under the provision of FIFRA section 3(c)9 and PR Notice 98-10.

Notification to propose the following changes:

- Revise the Salmonella choleraesuis nomenclature to Salmonella (choleraesuis) enterica (ATCC 10708).
- Revise the Salmonella schottmuelleri nomenclature to Salmonella (schottmuelleri) enterica.

General Comments

Based on a review of the submitted materials, your notification is found to be acceptable. A copy has been placed in our records for future reference.

Should you have any questions or comments concerning this letter, please contact Velma Noble, PM Team 31 at (703) 308-6233 or Jamil Mixon at (703) 308-8032.

Sincerely,

Velma Noble
Product Manager, Team 31
Regulatory Management Branch
Antimicrobials Division (7510P)**CONCURRENCES**

SYMBOL							
SURNAME							
DATE							

2019

Please read instructions on reverse before completing form.

Form Approved MB No. 2070-0060

Print Form



United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 1839-79	2. EPA Product Manager Velma Noble	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) NP 4.5 Detergent/Disinfectant	PM# 31	
5. Name and Address of Applicant (Include ZIP Code) Stepan Company 22 W. Frontage Rd. Northfield, IL 60093 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

SEE ATTACHED SHEET

Section - III

1. Material This Product Will Be Packaged In:			
Child-Resistant Packaging <input checked="" type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Type of Container <input checked="" type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted		If "Yes" Unit Packaging wgt. 2 OZS.	No. per container multiple
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 32oz, 1,5,55 gal	5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____	

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Thomas W. Isaac	Title Sr. Regulatory Specialist	Telephone No. (Include Area Code) (847)501-2309
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete; I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received _____ (Stamped) _____ _____ _____ _____
2. Signature <i>Thomas W. Isaac</i>	3. Title Sr. Regulatory Specialist	
4. Typed Name Thomas W. Isaac	5. Date September 8, 2009	

September 8, 2009

Document Processing Desk (NOTIF)
Office of Pesticide Programs
U.S. Environmental Protection Agency
Antimicrobials Division (7504P)
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

ATTN: Ms. Velma Noble
PM-31
Regulatory Management Branch I

RE: NP 4.5 Detergent/Disinfectant
EPA Reg. No. 1839-79

Dear Ms. Noble:

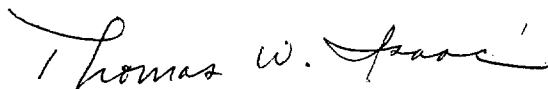
This NOTIFICATION proposes the following label revisions:

1. Revise the *Salmonella choleraesuis* nomenclature to *Salmonella (choleraesuis) enterica* (ATCC 10708), see pages 6 and 7 of label.
2. Revise the *Salmonella schottmuelleri* nomenclature to *Salmonella (schottmuelleri) enterica*, see page 7 of label.

Five (5) copies of the proposed label are enclosed are for Agency review. One copy is highlighted to illustrate the proposed revision.

Should you have any questions concerning this notification, please contact me at (847) 501-2309 or via email: tisaac@stepan.com.

Sincerely,
STEPAN COMPANY



Thomas W. Isaac
Sr. Regulatory Specialist

Enclosures: 1839-79 Label (5 copies)
TWI:slf

074-09-TI-EPA-1839-79



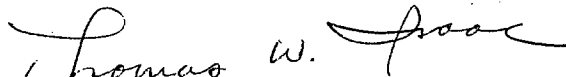
September 8, 2009

Stepan Company
NP 4.5 Detergent/Disinfectant
EPA Reg. No. 1839-79

Section II – Explanation

This NOTIFICATION proposes the following label revisions:

1. Revise the *Salmonella choleraesuis* nomenclature to *Salmonella (choleraesuis) enterica* (ATCC 10708), see pages 6 and 7 of label.
2. Revise the *Salmonella schottmuelleri* nomenclature to *Salmonella (schottmuelleri) enterica*, see page 7 of label.

Signature:**Title:** Sr. Regulatory Specialist

Stepan

Stepan Company

Northfield, Illinois 60093
Telephone 847 446 7500



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"This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA."

Thomas W. Isaac
Sr. Regulatory Specialist

Date: September 8, 2009



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NP 4.5 Detergent/Disinfectant

- DISINFECTANT
- CLEANER
- DETERGENT
- *VIRUCIDE
- FUNGICIDE (against pathogenic fungi)
- MILDEWSTAT (on hard, inanimate surfaces)
- DEODORIZER
- SANITIZER
- Effective in the presence of 5% serum contamination
- For Home, Hospital, Institutional and Industrial Use
- For Farm, School, Restaurant, Food Handling and Processing Areas, Equine, Poultry/Turkey Farm, Bar, Tavern and Institutional Kitchen Use
- Formulated for Effective Farm Premise Sanitation
- Formulated for Effective Poultry Premise Sanitation
- Formulated for Effective Swine Premise Sanitation
- Formulated for Effective Veterinary Practice/Animal Care/Animal Laboratory Disinfection
- For Mushroom Farm Sanitation
- KILLS GERMS

ACTIVE INGREDIENTS

n-Alkyl (60% C ₁₄ , 30% C ₁₆ , 5% C ₁₂ , 5% C ₁₈)	
dimethyl benzyl ammonium chlorides	2.25%
n-Alkyl (68% C ₁₂ , 32% C ₁₄) dimethyl	
ethylbenzyl ammonium chlorides	2.25%
INERT INGREDIENTS	95.50%
Total	100.00%

KEEP OUT OF REACH OF CHILDREN
DANGER

FIRST AID

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

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 poison control center or doctor for treatment advice.

If swallowed: Call 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.

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

(OPTIONAL) You may contact xxx/xxx-xxxx for emergency medical treatment information.

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

See side (back) panel for additional precautionary (and first aid) statements.

EPA REG. NO. 1839-79
EPA EST. NO. 1839-IL-01

STEPAN COMPANY
22 West Frontage Road
Northfield, IL 60093

NET CONTENTS

NP 4.5 Detergent/Disinfectant (this product) (product name) is a phosphate free formulation designed to provide effective cleaning, deodorization, sanitization and disinfection specifically for hospitals, nursing homes, schools, food processing plants, food service establishments, transportation terminals, automotive garages, office buildings, manufacturing facilities, lodging establishments, retail businesses, athletic/recreational facilities, sports stadiums, amphitheaters, convention centers, and households where housekeeping is of prime importance in controlling the hazard of cross contamination.

NP 4.5 Detergent/Disinfectant (this product) (product name) for use in:

- Hospitals, nursing homes, medical and dental offices and clinics, operating rooms, isolation wards, and medical research facilities.
- Restaurants and bars, cafeterias, institutional kitchens, fast food operations and food storage areas.
- Supermarkets, convenience stores, retail and wholesale establishments, dressing rooms and laundries.
- Crime scenes and funeral homes, mortuaries, burial vaults, mausoleums, autopsy rooms.
- Institutional facilities, laboratories, factories, business and office buildings, restrooms, hotels and motels and transportation terminals.
- Institutional kitchens and bathrooms.
- Kitchen, bathrooms, and other household areas.
- Health clubs, spas, tanning spas, massage/facial salons, hair/nail/pedicure salons, barber/beauty shops, tattoo parlors.
- Museums, art galleries, post offices, performance/theatre centers, banks, libraries, movie houses.
- Recycling centers and equipment.
- Institutions, schools and colleges, churches, classrooms, athletic facilities, sports stadiums, convention centers and locker rooms.
- Camp grounds, play grounds, and recreational facilities.
- Food processing plants, USDA inspected food processing facilities, equine farms, hog farms, poultry and turkey farms and egg processing plants, meat/poultry processing plants, meat/poultry producing establishments, mushroom farms.
- Processing facilities for fish, milk, citrus, ice cream, and potatoes.
- Cruise lines, airline terminals, shipping terminals, transportation terminals.
- Commercial florist and flower shops.
- Basements, cellars, bedrooms, attics, living rooms, porches.
- Veterinary clinics, animal life science laboratories, kennels, breeding and grooming establishments, pet animal quarters, zoos, pet shops, tack shops and other animal care facilities.
- Household, automotive garages, boats, ships, campers, trailers, mobile homes, cars, buses, trains, taxis and airplanes.

This product (product name), when used as directed, is formulated to disinfect inanimate, hard surfaces: floors, walls, metal surfaces, stainless steel surfaces, glazed porcelain, glazed ceramic tile, plastic surfaces, vanity tops, shower stalls, sink tops, toilet bowls, bathtubs, cabinets, tables, chairs and telephones.

- Non-food contact glass, metal, stainless steel, glazed porcelain, glazed ceramic, sealed granite, sealed marble, plastic, chrome and vinyl.
- Tables, chairs, desks, bed frames, walls, cabinets, doorknobs and garbage cans.
- Picnic tables (non-wooden) and outdoor furniture (except cushions and wood frames).
- Telephones.
- Non-food contact counter tops, sinks, refrigerator exteriors, coolers, freezer exteriors, stovetops, appliances, non-food contact equipment, shelves, racks and carts.
- Shower stalls, shower doors and curtains, tubs and glazed tiles, toilets, urinals, glazed porcelain tile and restroom fixtures.

- Kennels and cages.
- Windows and mirrors.
- For larger areas such as operating rooms, patient care facilities, and restrooms, this product (product name) is designed to provide both general cleaning and disinfecting.

This product (product name), when used as directed, is formulated to disinfect inanimate, hard, non-porous, surfaces: floors, walls, metal surfaces, stainless steel surfaces, glazed porcelain, glazed ceramic tile, plastic surfaces, vinyl, chrome, bathrooms, shower stalls, shower doors, bathtubs, toilets, bathroom fixtures, kitchens, countertops, sinks, exteriors of (microwaves, refrigerators, stoves, and other) kitchen appliances, stovetops, automobile interiors, cabinets, tables, chairs, desks, dining room surfaces, doorknobs, garbage cans, telephones, hospital beds, traction devices, MRI, CAT, examining tables, scales, paddles, wheelchairs, ultrasonic baths and whirlpools. For larger areas: operating rooms, patient care facilities and restrooms, this product is designed to provide both general cleaning and disinfecting.

This product (product name) is a no rinse disinfectant cleaner that disinfects, cleans and deodorizes in one labor saving step.

This product (product name) is a one step detergent disinfectant that is effective against a broad spectrum of bacteria, is virucidal* (including HIV-1, HBV and HCV) and inhibits the growth of mold and mildew and their odors when used as directed.

This product has demonstrated virucidal efficacy against Hepatitis B (HBV), Hepatitis C (HCV), and Human Immunodeficiency Virus (HIV-1) on hard, inanimate, environmental surfaces.

This product (product name) meets AOAC Use-Dilution Test Standards for hospital disinfectants.

This product (product name) can be used as a disinfectant on hard, non-porous, environmental surfaces (at 703 ppm active).

This product (product name) is for use in institutional kitchens and bathrooms.

Disinfects kitchen (bathroom) surfaces. Kills germs. Kills household bacteria.

Kills Athlete's Foot fungus on bathroom surfaces.

Kills common kitchen (bathroom) germs (and viruses).

This product (product name) is a versatile broad spectrum disinfectant formulated for use in Ultrasonic Baths.

This product (product name) is a versatile cleaner and broad spectrum disinfectant formulated for use on bath and therapy equipment (whirlpools).

Use this product (product name) to sanitize and disinfect non-porous salon/barber tools and instruments: combs, brushes, scissors, clippers, trimmers, razors, blades, tweezers and manicure instruments.

This product controls (reduces) (eliminates) (neutralizes) (destroys) odors to make your home (kitchen) (bathroom) sanitary.

Use this product (product name) to clean and disinfect non-porous personal protective safety equipment, protective headgear, hard hats, half mask respirators, full face breathing apparatus, gas masks, goggles, spectacles, face shields, hearing protectors and ear muffs. Rinse all equipment that comes in prolonged contact with skin before reuse with clean warm water (about 120°F), and allow to air dry. (Caution: Cleaning at the 120°F temperature will avoid overheating and distortion of the personal safety equipment that would necessitate replacement.)

This product (product name) is a multi-surface cleaner, deodorizer and disinfectant. Use on windows, mirrors, and other non-food contact glass surfaces.

This product (product name) is for use on washable, hard, non-porous surfaces:

- Food preparation and storage areas
- Dishes, glassware, silverware, cooking utensils, plastic and other non-porous cutting boards, coolers, ice chests, refrigerator bins.
- Kitchen equipment such as food processors, blenders, cutlery and other utensils.
- Countertops, Slurppy® machines, stovetops, sinks, appliances, ice machines.
- Glass, metal, stainless steel, glazed porcelain, glazed ceramic, sealed granite, sealed marble, plastic, chrome and vinyl.
- Enameled surfaces, painted woodwork, Formica®, vinyl and plastic upholstery.
- Tables, chairs, desks, bed frames, lifts, washable walls, cabinets, doorknobs and garbage cans.

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- Exhaust fans, refrigerated storage and display equipment, coils and drain pans of air conditioning/refrigeration equipment and heat pumps.
- Large inflatable non-porous plastic (rubber) (advertising) structures: animals, promotional items, moonwalk, slides, obstacle course play equipment, exercise equipment, exercise mats, wrestling mats.
- Beer fermentation equipment and holding tanks, bottling or pre-mix dispensing equipment.
- Citrus processing equipment and holding tanks.
- Picnic tables (non-wooden) and outdoor furniture (except cushions and wood frames).
- Shower stalls, shower doors/curtains, bathtubs, glazed tiles, chrome plated intakes. Toilets, toilet bowl surfaces, urinals, portable toilets, glazed porcelain tile and restroom fixtures.
- Kennels, kennel runs, cages.

This product (product name) sanitizes previously cleaned and rinsed non-porous food contact surfaces such as tanks, chopping blocks, countertops, drinking glasses and eating utensils.

This product (product name) has been cleared in 40CFR Section 180.940 for use as a sanitizer on food processing equipment, utensils, and other food contact articles at a concentration of 200 ppm active quaternary without requiring a Potable Water Rinse.

This product (product name) is for use as a sanitizer on food contact surfaces (at 200 ppm quat active). A potable water rinse is not required after use as a sanitizer on food contact surfaces.

This product (product name) meets AOAC Germicidal and Detergent Test Standards for food contact surface sanitizers.

Dishes, silverware, glasses, cooking utensils and other similar size food processing equipment can be sanitized by immersion. NO POTABLE WATER RINSE REQUIRED.

This product (product name) is for use in sanitizing beer fermentation and holding tanks.

Regular, effective cleaning and sanitization of equipment, utensils and dining surfaces that could harbor microorganisms minimizes the probability of contamination of food during preparation, storage or service. Effective cleaning will remove soil and prevent the accumulation of food residues that may decompose or support the rapid development of organisms which cause food poisoning. Application of an effective sanitization program reduces the number of organisms that may be present on food processing equipment and utensils. Effective sanitization also reduces the potential for the transfer of organisms either indirectly through food or directly through (tableware, glasses, plates and flatware).

To prevent cross contamination, (food contact surfaces) (kitchenware) (food processing equipment) must be washed, rinsed with potable water and sanitized after each use and following any interruption in operation at which time contamination may occur.

Where equipment and utensils are used for continuous (production line) food preparation, all food contact surfaces must be washed, rinsed and sanitized at scheduled intervals throughout the day based on food temperature, food type and food particle accumulation.

This product (product name) contains no phosphorous.

This product (product name) deodorizes those areas which generally are hard to keep fresh smelling, such as garbage storage areas, empty garbage bins and cans, toilet bowls, behind and under sinks and other areas where bacterial growth can cause malodors.

This product (product name) cleans, deodorizes and disinfects all hard non-porous household surfaces. It inhibits the growth of mold and mildew, leaving bathrooms and kitchens clean and fresh smelling.

This product (product name) deodorizes those areas which generally are hard to keep fresh smelling, such as garbage storage areas, empty garbage bins and cans, toilet bowls, and other areas which are prone to odors caused by microorganisms.

When used as directed, this product (product name) will deodorize surfaces in toilet areas, behind and under sinks and counters, garbage cans and garbage storage areas, and other places where bacterial growth can cause malodors.

This product (product name) is an effective antimicrobial cleaner designed for use by wholesale and retail florists, shippers and greenhouses.

When used as directed, this product (product name) will disinfect hard, non-porous surfaces such as flower buckets, floors and walls of coolers, design and packing benches and counter tops.

This product (product name) may be relied on to deodorize coolers, buckets, garbage pails and other areas where obnoxious odors may develop.

Use this product (product name) to clean, disinfect and deodorize flower buckets, walls and floors of coolers, shippers, greenhouse packing areas, garbage pails and other areas where obnoxious odors may develop.

This product (product name) is for use as a general purpose antimicrobial detergent in florist shops, wholesale florist, shippers, greenhouse packing areas and other commercial floriculture places for efficient cleaning and antimicrobial action against certain bacteria which cause:

1. Plugging of stems with slime, which reduces uptake of water for various flowers including roses, chrysanthemums, gladioli and tulips.
2. Production of ethylene gas, which may injure blooms of the various sensitive flowers including carnations, snapdragons, some orchids, babies breath, sweet peas, freesia and alstroemeria.

This product (product name) is used for Poultry Premise Sanitation (Hatcheries):

Egg Receiving Area	Tray Dumping Area	Chick Processing Area
Egg Holding Area	Chick Holding Area	Chick Loading Area
Setter Room	Hatchery Room	Poultry Buildings

This product (product name) is used for Swine Premise Sanitation:

Farrowing Barns and Areas	Dressing Plants	Blocks
Waterers and Feeders	Loading Equipment	Creep Area
Hauling Equipment	Nursery	Chutes

This product (product name) is used for poultry premise sanitation (hatcheries), egg receiving area, egg holding area, setter room, tray dumping area, trays, buggies, racks, egg flats, Chick Holding Room, Hatchery Room, Chick Processing Area, Chick Loading Area, Poultry Buildings, Ceilings, Side Walls and Floors, Drinkers, and all other hard, non-porous poultry house related equipment, and surfaces in the Hatchery environment.

This product (product name) is used for Swine Premise Sanitation; Waterers and Feeders, Hauling Equipment, Dressing Plants, Loading Equipment, Farrowing Barns and areas, Nursery, Blocks, Creep Areas, Chutes.

This product (product name) is a non-abrasive (non-scratch) cleaner for showers, tubs, shower doors, shower curtains, fixtures and toilet bowls.

This product is used in work areas such as garages for odor control and light duty cleaning.

This product (product name) is an economical concentrate that must be used with a mop and bucket, hand pump trigger sprayer, low pressure coarse sprayer or sponge.

This product (product name) is used for non-scratch cleaning of showers and tubs, shower doors and curtains, fixtures and toilet bowls.

Floor cleaner.

One step cleaner.

Cleans everyday kitchen messes.

Cleans kitchen surfaces and food preparation areas.

Cleans and shines.

Great for use (on) (in) the (kitchen), (bathroom), (floors) and other household areas. Removes (eliminates) odors. Deodorizes.

Eliminates odors caused by bacteria (and) (mildew) (and) (non-fresh foods). Kills odor causing bacteria in the kitchen (bathroom).

DIRECTIONS FOR USE

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

(For labels that list medical premises and metal and/or stainless steel surfaces, one of the following statements must be used:)

This product (product name) 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.

or

This product (product name) is not for use on critical and semi-critical medical device surfaces.

DISINFECTION - To disinfect inanimate, hard surfaces add 2 ounces of this product (product name) per gallon of water. Apply solution with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove excess liquid. For heavily soiled areas, a pre-cleaning step is required.

(Note: one of the following statements must appear after the dilution use directions)

BACTERICIDAL STABILITY of USE-DILUTION: Efficacy tests confirm that (this product or product name) when diluted as directed remains effective against *Pseudomonas aeruginosa*, *Staphylococcus aureus* and *Salmonella (choleraesuis) enterica* for (up to 7 days) (up to 1 week) (up to 14 days) (up to two weeks) (up to 21 days) (up to 3 weeks) (up to one month) (up to 30 days) (up to 4 weeks) when stored in a sealed container such as a spray bottle. If the (use-dilution) (use-solution) (diluted product) becomes visibly dirty or contaminated, it must be discarded and fresh (use-dilution) (use-solution) (diluted product) must be prepared. Always use clean, properly labeled containers when diluting (this product or product name). Bactericidal stability of the (use-dilution) (use-solution) (diluted product) does not apply to open containers such as buckets or pails.

(or)

Prepare a fresh (use-dilution) (use-solution) daily or more often if the (use-dilution) (use-solution) becomes visibly dirty or diluted.

(or)

Prepare a fresh solution for each use.

PACKETS *(for pre-measured tear open packets)* – (Simply) (tear) open and pour contents into 1 gallon of water. Keep packets in box until ready to use.

or

Pour contents of (2 oz) packet into 1 gallon of water. Keep packets in box until ready to use.

To disinfect toilet bowls: flush toilet, add 2 ounces of this product (product name) directly to the bowl water. Swab the bowl completely using a scrub brush or toilet mop, making sure to get under the rim. Let stand for 10 minutes and flush.

Non-Acid Toilet Bowl Disinfection/Cleaner Directions: Remove gross filth prior to disinfection.

From concentrate: Add 2 ounces per gallon to the toilet bowl and mix. Brush thoroughly over exposed surfaces and under the rim, allow to stand for 10 minutes and flush.

From use-solution: Empty toilet bowl or urinal and apply 2 ounces per gallon use-solution to exposed surfaces including under the rim with a cloth, mop, sponge or hand pump trigger sprayer. Brush or swab thoroughly and allow to stand for 10 minutes and flush.

For heavy duty use: Empty toilet bowl or urinal and apply 8 ounces per gallon use-solution to exposed surfaces including under the rim with a cloth, mop, sponge or sprayer. Brush or swab thoroughly and allow to stand for 10 minutes and flush.

To disinfect food processing premises: Before using this product, food products and packaging materials must be removed from the area or carefully protected. For floors, walls, and storage areas, add 2 ounces of this product (product name) per gallon of water. For heavily soiled areas, a pre-cleaning step is required. Apply solution with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove excess liquid. After use, all surfaces in the area must be thoroughly rinsed with potable water.

To disinfect food service establishment food contact surfaces: Before using this product, food products and packaging materials must be removed from the area or carefully protected. For countertops, appliances, tables, add 2 ounces of this product (product name) per gallon of water. For heavily soiled areas, a pre-cleaning step is required. Apply solution with a cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. Allow the surface to remain wet for 10 minutes, then remove excess liquid and rinse the surface with potable water. This product cannot be used to clean the following food contact surfaces: utensils, glassware and dishes.

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For use on non-food contact surfaces as a general disinfectant in the brewery industry: Use 2 ounces of this product (product name) per gallon of water (or equivalent use dilution) (703 ppm active quat). Follow the Disinfectant directions above.

(Not for Use in California)

Directions for Fogging: Dairies, beverage and food processing plants. To sanitize hard, non-porous room surfaces as an adjunct to acceptable manual cleaning and disinfecting as described above. Prior to fogging, food products and packaging material must be removed from the room or carefully protected. After cleaning, fog desired areas using one quart per 1000 cubic feet of room area with a product use-solution containing 3.5 ounces product to 1 gallon of water (or equivalent use dilution) (1,230 ppm). Vacate the area of all personnel during fogging and for a minimum of 2 hours of actual fogging and a minimum of 4 air exchanges per hour in the room. All food contact surfaces must be thoroughly rinsed with potable water before reuse.

NOTE: The fog generated is irritating to the eyes, skin and mucous membranes. Under no circumstances should a room or building be entered by anyone within two hours of actual fogging. If the building must be entered, the individuals entering the building must wear a self-contained respirator approved by NIOSH/MSHA, goggles, long sleeves and long pants.

FOGGING IS TO BE USED AS AN ADJUNCT TO ACCEPTABLE MANUAL CLEANING AND DISINFECTING OF ROOM AND MACHINE SURFACES.

BACTERICIDAL ACTIVITY - When diluted at the rate of 2 ounces per gallon of water, this product (product name) exhibits effective disinfectant activity against the organisms: *Pseudomonas aeruginosa* PRD 10, *Escherichia coli*, *Klebsiella pneumoniae*, *Salmonella* (schottmuelleri) enterica, *Salmonella* (choleraesuis) enterica, *Streptococcus salivarius*, *Brevibacterium ammoniagenes*, *Streptococcus faecalis*, *Shigella dysenteriae*, *Enterobacter aerogenes*, *Staphylococcus aureus*, Methicillin resistant *Staphylococcus aureus* (MRSA), Vancomycin intermediate resistant *Staphylococcus aureus* (VISA), *Streptococcus pyogenes* (Clinical-Flesh Eating Strain, BIRD M3), and *Listeria monocytogenes*, and meets all requirements for hospital use.

FUNGICIDAL ACTIVITY - At the 2 ounce per gallon dilution, this product (product name) is also fungicidal against the pathogenic fungi, *Trichophyton mentagrophytes* (Athlete's Foot Fungus) (a cause of ringworm) (a cause of ringworm of the foot), when used as directed on hard surfaces found in bathrooms, shower stalls, locker rooms, exercise facilities or other clean, hard, non-porous, surfaces commonly contacted by bare feet.

***VIRUCIDAL ACTIVITY** - This product (product name), when used on environmental, inanimate, hard, non-porous surfaces at 2 ounces per gallon of water, exhibits effective virucidal activity against Influenza A2/Japan (representative of the common flu virus), Herpes Simplex Type 1 (causative agent of fever blisters), Adenovirus Type 2 (causative agent of upper respiratory infections), Vaccinia virus (representative of the Pox virus group), Human Immunodeficiency Virus Type 1 (HIV-1), Human Coronavirus (ATCC VR-740, Strain 229E), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Norovirus (Norwalk Virus), Bovine Viral Diarrhea Virus (BVDV), Feline calicivirus (FCV), SARS Associated Coronavirus, Avian Influenza A and Porcine Respiratory & Reproductive Syndrome Virus (PRRSV) (Strain NVSL).

At 8 ounces per gallon or equivalent dilution rate (2812 ppm (mg/L) active quat), this product (product name) is effective against the following viruses on hard non-porous environmental surfaces: Canine Parvovirus (CPV), Canine Adenovirus (causative agent of Infectious Canine Hepatitis), Canine Coronavirus (causative agent of Canine Coronavirus Disease, Canine Gastroenteritis), Canine Parainfluenza Virus (causative agent of viral Kennel Cough), Feline Panleukopenia (Feline Parvovirus), Feline Rhinotracheitis (causative agent of Feline Herpes virus Infection), Feline Coronavirus (causative agent of Feline Infectious Peritonitis), Feline Picornavirus and Porcine Parvovirus.

Canine Parvovirus (CPV) Activity: At 8 ounces per gallon of water or equivalent dilution, this product (product name) inactivates Canine Parvovirus (CPV) on hard, non-porous, environmental surfaces in the presence of 5% blood serum with a 10 minute contact time.

KILLS HIV-1, HBV AND HCV ON PRE-CLEANED ENVIRONMENTAL SURFACES/OBJECTS PREVIOUSLY SOILED WITH BLOOD/BODY FLUIDS in health care settings (Hospitals, Nursing Homes) or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus Type 1 (HIV-1) (associated with AIDS), Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV).

SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV-1, HBV AND HCV ON SURFACES/OBJECTS SOILED WITH BLOOD/BODY FLUIDS.

PERSONAL PROTECTION: When handling items soiled with blood or body fluids, use disposable latex gloves, gowns, masks, and eye coverings.

CLEANING PROCEDURES: Blood and other body fluids must be thoroughly cleaned from surfaces and objects before application of this product (product name).

CONTACT TIME: Allow surface to remain wet for 10 minutes.

DISPOSAL OF INFECTIOUS MATERIALS: Blood and other body fluids must be autoclaved and disposed of according to local regulations for infectious waste disposal.

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MILDEWSTAT - To control mold and mildew on pre-cleaned, hard, non-porous surfaces, add 2 ounces of this product (product name) per gallon of water. Apply solution with a cloth; mop, sponge, hand pump trigger sprayer or low pressure coarse sprayer making sure to wet all surfaces completely. Let air dry. Prepare a fresh solution for each use. Repeat application at weekly intervals or when mildew growth appears.

EFFICACY TESTS HAVE DEMONSTRATED THAT THIS PRODUCT IS AN EFFECTIVE BACTERICIDE, FUNGICIDE, AND VIRUCIDE IN THE PRESENCE OF ORGANIC SOIL (5% BLOOD SERUM).

GENERAL CLEANING - Apply this product (product name) to soiled area with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer. This product (product name) can be diluted at 2 ounces per gallon or applied at full strength. Thoroughly wet soiled surface and scrub as necessary.

DEODORIZATION - To deodorize, apply this product (product name) as indicated under the heading DISINFECTION.

General Deodorization: To deodorize, add 2 ounces of this product (product name) to one gallon of water (or equivalent use dilution) (703 ppm active quat). Allow to air dry.

For Deodorizing Garbage Cans, Garbage Trucks, Industrial Waste Receptacles, and Garbage Handling Equipment: It is especially important to pre-clean for the product to perform properly. Then apply a wetting concentration of 7 ounces of this product (product name) per gallon of water (or equivalent use dilution) (2,460 ppm quat active).

For Odors Caused by Dogs, Cats and Other Domestic Animals: Use on rugs, floors, walls, tile, cages, crates, litter boxes, mats, floor coverings, or any surface soiled by a pet. Test a small inconspicuous area first. Blot problem area. Then follow directions for **General Deodorization**.

APPLICATIONS AND USE DILUTION

Poultry (And Swine) Premise Disinfection (Special Instructions for Inactivating Avian Influenza A): Remove all (poultry) (swine) (animals) and feeds from premises, trucks, cars, coops and crates. Remove all litter, droppings and manure from floors, walls and surfaces of facilities occupied or traversed by (poultry) (swine) (animals). Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Use 2 ounces of this product (product name) per gallon of water. Saturate surfaces with the disinfecting solution for a period of 10 minutes. Ventilate buildings, coops and other closed spaces. Do not house (poultry) (swine) (animals) or employ equipment until treatment has been absorbed, set or dried. Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse. Immerse all halters, ropes, and other types of equipment used in handling and restraining (poultry) (swine) (animals), as well as forks, shovels, and scrapers used for removing litter and manure.

Veterinary Practice/Animal Care/Animal Laboratory/Zoos/Pet Shop/Kennels Disinfection Directions: For cleaning and disinfecting the following hard non-porous surfaces: equipment not used for animal food or water, utensils, instruments, cages, kennels, stables, catteries, etc. Remove all animals and feed from premises, animal transportation vehicles, crates, etc. Remove all litter, droppings and manure from floors, walls and surfaces occupied or traversed by animals. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use-solution of 2 ounces of this product (product name) per gallon of water (or equivalent dilution) for a period of 10 minutes. Ventilate buildings and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried.

Disinfection/Fungicide/Virucide of Poultry/Turkey Equipment, Equine Quarters, Swine Quarters, Animal Quarters and Kennels Directions: Remove all animals and feeds from premises, vehicles and enclosures such as coops and crates. Remove all litter, droppings and manure from floors, walls, and surfaces of barns, pens, stalls, chutes, and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Use 2 ounces of this product (product name) per gallon of water (or equivalent use dilution) (703 ppm active quat). Saturate surfaces with the use-solution for a period of 10 minutes. 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.

After application, ventilate buildings, coops and other closed spaces. Do not house poultry or other animals or employ equipment until treatment has been absorbed, set or dried.

All treated equipment that will contact feed or drinking water (racks, troughs, automatic feeders, fountains and waterers) must be thoroughly scrubbed with soap or detergent, then rinsed with potable water before reuse.

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Farm Premise Use: Do not use in milking stalls, milking parlors or milk houses. Remove all animals and feed from premises, vehicles and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate all surfaces with a use-solution of 2 ounces of this product (product name) per gallon of water (or equivalent dilution) for a period of 10 minutes. Immerse all halters, ropes and other types of equipment used in handling and restraining animals as well as forks, shovels and scrapers used in removing litter and manure. Ventilate buildings, cars, trucks, boats and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set or dried. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent and rinse with potable water before reuse.

Hatcheries: Use 2 ounces of this product (product name) per gallon of water to treat the following hard non-porous surfaces: hatchers, setters, trays, racks, carts, sexing tables, delivery trucks and other hard surfaces. Leave all treated surfaces exposed to disinfectant solution wet for 10 minutes or more. Rinse with potable water before reuse. Then allow to air dry.

Vehicles: Clean all vehicles including mats, crates, cabs, and wheels with high pressure water and this product (product name). Use 2 ounces per gallon to treat all vehicles. Leave all treated surfaces exposed to disinfectant solution wet for 10 minutes or more.

Shoe Bath Sanitizer Directions: Shoe baths containing one inch of freshly made solution must be placed at all entrances to buildings, hatcheries and at all the entrances to the production and packaging rooms. Scrape waterproof shoes and place in 2 ounces of this product (product name) per gallon of water solution for 60 seconds prior to entering area. Change the use-solution in the bath daily or sooner if solution appears dirty.

Dressing Plant Use: Disinfect equipment, utensils, walls and floors in poultry and animal dressing plants. Disinfect offal rooms, exterior walls and loading platforms of dressing plants. Cover or remove all food and packaging materials. Remove all gross soils. Saturate all surfaces with the use-solution, 2 ounces of this product (product name) per gallon of water. Scrub to loosen all soils. Allow to soak for 10 minutes and thoroughly rinse all wetted and cleaned surfaces with potable water.

(Not for Use in California)

Directions for Hatchery Rooms Using Fogging Devices: Remove all animals and feed from premises, vehicles and enclosures. Remove all litter and manure from floors, walls and surfaces of the room to be treated. Empty all troughs, racks and other feeding and watering appliances. Close room off so fog is confined to room to be treated. Mix two parts of this product (product name) to five parts of water (2 gallons of this product (product name) to 5 gallons of water). Insert the nozzle of the fogger through a suitable opening into the room. With the setting in maximum output, fog for one minute for each 4000 cubic feet of space in the room. When fogging is completed, ventilate buildings and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed or dried. Thoroughly clean all surfaces with soap or detergent and rinse with water.

Directions for Incubators and Hatchers using Fogging Devices: Mix 24 ounces of this product (product name) to 244 ounces of water. Fog 3-8 ounces of this into setters and hatchers immediately after transfer. Repeat daily in setters and every 12 hours in hatchers. Discontinue hatcher treatments at least 24 hours prior to pulling the hatch. Do not allow people to contact or breathe this fog and do not enter until the fog has settled (30-60 minutes after fogging is completed). It is acceptable to fog setters and hatchers with a 2 ounce per gallon solution of this product (product name) on an hourly or every other hour basis. If this is done, fog for 30-90 seconds once per hour or once every two hours. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.

NOTE: The fog generated is irritating to the eyes, skin and mucous membranes. Under no circumstances must a room or building be entered by anyone within two hours of the actual fogging. If the building must be entered, then the individuals entering the building must wear a self-contained respirator approved by NIOSH/MSHA, goggles, long sleeves and long pants.

FOGGING IS TO BE USED AS AN ADJUNCT TO ACCEPTABLE MANUAL CLEANING AND DISINFECTING OF ROOM AND MACHINE SURFACES.

Ultrasonic Bath Disinfectant Directions: Use this product (product name) to disinfect hard non-porous non-critical objects compatible with Ultrasonic cleaning units. Pour fresh solution at 2 ounces of this product (product name) per gallon of water directly into bath chamber. Pre-clean heavily soiled objects. Place objects into unit and operate for a minimum of 10 minutes, according to the manufacturers directions. Remove objects and wash with sterile water (sterile water for injection) or allow to air dry. Prepare fresh solution for each use.

Disinfection of Hard Non-Porous Bath and Therapy Equipment (Whirlpool Units): After using the whirlpool unit, drain and refill with fresh water to just cover the intake valve. Add 2 ounces of this product (product name) for each gallon of fresh water added. Start the pump to circulate the solution. Wash down the unit sides, seat of the chair, lift and any (all) related equipment with a clean swab, brush or sponge. Treated surfaces must remain wet for 10 minutes. After the unit has been thoroughly cleaned, drain the use-solution from the unit and rinse any (all) cleaned surfaces with fresh water. Repeat for heavy soiled units.

Commercial Florist Use Directions: To clean, disinfect and deodorize hard non-porous surfaces in one step, prepare use-solution by adding (mixing) 2 ounces per gallon of water. For heavy-duty use, add (mix) 8 ounces per gallon of water.

Remove all leaves, petals, garbage and refuse. Pre-clean surfaces using pressurized water where possible. Apply use-solution to hard (inanimate) non-porous surfaces thoroughly wetting surfaces as required, with a cloth, mop, brush, sponge or sprayer.

For heavily soiled areas, a preliminary cleaning is required.

For sprayer applications, use a coarse mist pump or trigger sprayer. Spray 6-8 inches from surface; rub with brush, sponge or cloth. Do not breathe spray mist.

Treated surfaces must remain wet for 10 minutes. Allow to air dry.

Prepare a fresh solution at least daily or sooner if use-solution becomes visibly dirty.

SALON/BARBER INSTRUMENTS AND TOOLS SANITIZER DIRECTIONS: Pre-clean soiled instruments and tools. Completely immerse water safe non-porous instruments and tools in a use-solution of 0.56 ounce of this product (product name) per gallon of water (or equivalent use dilution) (200 ppm active quaternary) for at least 60 seconds. Rinse thoroughly and dry instrument before reuse. A fresh use-solution must be prepared daily or more often if the use-solution becomes cloudy.

Disinfection of Barber/Salon Tools Directions: Immerse pre-cleaned barber/salon tools (combs, brushes, razors, manicure/pedicure tools, clippers, scissors, trimmer blades) in a 2 ounce of this product (product name) per gallon of water use-solution (or equivalent dilution) (703 ppm active quaternary) for at least 10 minutes. Rinse instruments thoroughly and dry before reuse. A fresh use-solution must be prepared daily or more often if the use-solution becomes cloudy or soiled.

NOTE: Plastics may remain immersed until ready to use. Stainless steel shears and instruments must be removed after 10 minutes, rinsed, dried and kept in a clean non-contaminated receptacle. Prolonged immersion may cause damage to stainless steel or metal instruments.

SANITIZATION – For use in restaurants, dairies, food processing plants, and bars. When used as directed, this product (product name) is an effective sanitizer against *Escherichia coli* and *Staphylococcus aureus*.

Remove all gross food particles and soil from areas, which are to be sanitized, with a good detergent, pre-flush, pre-soak or pre-scrape treatment. Rinse with a potable water rinse. To sanitize previously cleaned and rinsed, non-porous food contact surfaces, prepare a 200 ppm active quaternary solution by adding 2 ounces of this product (product name) to 3.5 gallons of water (or equivalent use dilution).

From a closed loop dilution center: Apply 200 ppm active solution to the surface to be sanitized. Surfaces should remain wet for at least 1 minute, followed by adequate draining and air drying.

To sanitize immobile items such as tanks, chopping blocks, and counter tops, flood the area with a 200 ppm active quaternary solution or apply with a cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer making sure to wet all surfaces completely for at least 60 seconds. Let air dry. Prepare a fresh solution for each use.

To sanitize mobile items such as drinking glasses and eating utensils, immerse in a 200 ppm active quaternary solution for at least 60 seconds making sure to immerse completely. Remove and let air dry. Prepare a fresh solution daily or more frequently as soil is apparent.

When used for sanitization of previously cleaned food equipment or food contact items, limit active quaternaries to 200 ppm. At this level, NO POTABLE WATER RINSE IS REQUIRED. This product is an effective sanitizer when diluted in water up to 250 ppm hardness (as CaCO_3).

At 2 ounces per 3.5 gallons of water, this product (product name) eliminates 99.999% of *Escherichia coli* and *Staphylococcus aureus* in 60 seconds in 250 ppm water hardness (as CaCO_3) in accordance with the AOAC Germicidal and Detergent Sanitizing Action of Disinfectants test.

DIRECTIONS FOR SANITIZING FOOD PROCESSING EQUIPMENT, UTENSILS, AND FOOD CONTACT ARTICLES REGULATED BY 40CFR sec 180.940.

1. Scrape, flush or pre-soak articles (whether mobile or stationary) to remove gross food particles and soil.
2. Thoroughly wash articles with an appropriate detergent or cleaner.
3. Rinse articles thoroughly with potable water.
4. Sanitize articles using a solution of 2 ounces of this product (product name) per 3.5 gallons of water (or equivalent dilution) (200 ppm active quaternary). Articles to be immersed in use-solution must remain in solution for 60 seconds. Articles too large for immersion must be thoroughly wetted by rinsing, spraying or swabbing.
5. Remove immersed items from use-solution to drain and then air dry. Non-immersed items must also be allowed to air dry.

U.S. PUBLIC HEALTH SERVICE - FOOD SERVICE SANITIZATION RECOMMENDATIONS

CLEANING AND SANITIZING: Equipment and utensils shall be thoroughly pre-flushed or pre-scraped, and when necessary, pre-soaked to remove gross food particles and soil.

1. Thoroughly wash equipment and utensils in a hot detergent solution. Rinse utensils and equipment thoroughly with potable water.
2. Sanitize equipment and utensils by immersing in 2 ounces of this product (product name) per 3.5 gallons (or equivalent dilution) of water (200 ppm active quaternary) for at least 60 seconds at a temperature of 75°F. This dilution is equivalent to a solution containing 50 ppm available chlorine.
3. Allow sanitized surfaces to drain and air dry. Do not rinse.
4. For equipment and utensils too large to sanitize by immersion, apply 2 ounces of this product (product name) per 3.5 gallons of water (or equivalent dilution) (200 ppm active quaternary) by rinsing, spraying or swabbing. Allow the items to remain thoroughly wet for at least 60 seconds, then let air dry. Do not rinse.

Sanitizing of Food Processing Equipment (Ice Machines) and Other Hard Surfaces In Food Contact Locations: For sanitizing food processing equipment, dairy equipment, refrigerated storage and display equipment and other hard, non-porous surfaces. Equipment and utensils must be thoroughly pre-flushed or pre-scraped and when necessary pre-soaked to remove gross food particles. **NO POTABLE RINSE IS REQUIRED.**

1. Turn off refrigeration.
2. Thoroughly wash surfaces with a compatible detergent or cleaner, then rinse thoroughly with potable water.
3. Apply a solution of 2 ounces of this product (product name) in 3.5 gallons of water (or equivalent use dilution) (200 ppm active quaternary) by low pressure coarse sprayer, direct pouring or by recirculating through the system. Surfaces must remain wet for at least one minute followed by complete draining and drying. Fresh solution must be prepared for each cleaning. No potable water rinse is required when product is used as directed.
4. Return machine to service.

Directions for Restaurant and Bar Sanitizer: Equipment and utensils must be thoroughly pre-flushed or pre-scraped and when necessary pre-soaked to remove gross food particles and soil. Then thoroughly wash or flush objects with a good detergent or compatible cleaner followed by a potable water rinse before application of sanitizing solution.

For pre-cleaned dishes, glassware, silverware, cooking utensils, immerse in a solution containing 2 ounces of this product (product name) per 3.5 gallons of water (or equivalent use dilution) (200 ppm active quaternary).

(Alternative language for clean in place, closed loop dilution centers.)

For use as a sanitizer on dishes, glassware, silverware, cooking utensils. For heavily soiled areas, remove gross food particles by pre-flush, pre-scrape and pre-soak when necessary. Wash thoroughly with detergent or compatible cleaner then rinse with potable water prior to application of this product. Then immerse in a sanitizing solution from Closed Loop Dilution Center (200 ppm active quaternary). Allow surface to remain wet for at least 60 seconds. Drain thoroughly before reuse. No rinse is required.

Directions For Sanitizing Food Processing Equipment and Dairies: Equipment and utensils must be thoroughly pre-flushed or pre-scraped and when necessary pre-soaked to remove gross food particles. Thoroughly wash surfaces with a compatible detergent or cleaner, then rinse thoroughly with potable water. Apply sanitizing solution containing 2 ounces of this product (product name) per 3.5 gallons of water (or equivalent use dilution) (200 ppm active quaternary). Surfaces must remain thoroughly wet for at least 60 seconds by immersion or with a cloth, mop, sponge or sprayer. Allow equipment and utensils to drain thoroughly and air dry before reuse. No rinse is required.

Beverage Dispensing Equipment Sanitizer Directions: For sanitizing of bottling or pre-mix dispensing equipment, thoroughly wash surfaces with a compatible detergent or cleaner, then rinse thoroughly with potable water. Fill equipment with a solution of 2 ounces of this product per 3.5 gallons of water (or equivalent use dilution) (200 ppm active quaternary). Allow use-solution to remain in equipment for at least 60 seconds, or until operations resume at which time the use-solution must be drained from the system. During changeover between products the system must be cleaned, rinsed and flushed with the use-solution for at least 1 minute to insure removal of flavors. Drain thoroughly and allow to air dry before reuse. No rinse required.

Sanitary Filling Equipment Sanitizer Directions: For use in sanitizing bottles or cans in the final rinse application. The product (product name) is to be proportioned into the final rinse water line of the container washer or rinser in the concentration of 200 ppm active quaternary. Prepare a solution of 2 ounces of this product (product name) per 3.5 gallons of water (or equivalent use dilution) (200 ppm active quaternary) for the exterior application for the filler and closing machine. Allow surfaces to remain wet for at least 60 seconds. Drain thoroughly and allow to air dry before reuse. No rinse required.

Storage Tank Sanitizer Directions: For sanitizing beer fermentation and holding tanks, citrus and food processing storage and holding tanks. Thoroughly wash surfaces with a compatible detergent or cleaner, then rinse thoroughly with potable water. Prepare a solution of 2 ounces of this product (product name) per 3.5 gallons of water (or equivalent use dilution) (200 ppm active quaternary) for mechanical or automated systems. Allow surfaces to remain wet for at least 60 seconds. Drain thoroughly before reuse. No rinse required. For mechanical operations or automated systems, the used sanitizing solution must not be reused for sanitizing.

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 potable water, then rinse equipment with sanitizing solution. To sanitize the belt, apply this product at a 200 ppm quaternary level (2 ounces per 3.5 gallons of water) (or equivalent use dilution) to conveyors with suitable feeding equipment. Do not allow this use-solution to be sprayed directly on food. Controlled volumes of sanitizer are applied to the return portion of conveyor through nozzles so located as to permit maximum drainage of sanitizer from equipment and to prevent puddles on top of the belt. During interruptions in operation, coarse spray the equipment, peelers, collators, slicers and saws with this product at a dilution of 200 ppm active quaternary. Conveyor equipment must be free of product when applying this coarse spray.

For Sanitizing In Fisheries, Milk, Citrus, Potato and Ice Cream Processing Plants: For use as a sanitizer on conveyor belts and equipment to reduce or eliminate odors in the processing area. Also, for use on filling equipment to reduce bacteria associated with condensation on equipment and pipes. Follow directions for sanitizing food contact surfaces.

(Not for use in California)

WATER AND SMOKE DAMAGE RESTORATION AGAINST ODOR-CAUSING BACTERIA AND FUNGI FOR INSTITUTIONAL, INDUSTRIAL AND HOSPITAL USE: This product (product name) is particularly suitable for use in water damage restoration situations against odor causing bacteria on the following porous and semi-porous materials: carpets, carpet cushion, sub floors, drywall, trim and frame lumber, tackless strip and paneling. Mix 2 ounces of this product (product name) per gallon of water, saturate affected materials with enough use-solution to remain wet for at least 10 minutes. Use proper ventilation.

Sewer backup & river flooding: During mitigation procedures, dilute 2 to 4 ounces of this product (product name) per gallon of water allowing for the diluting effect of absorbed water within saturated materials. Remove gross filth or heavy soil along with non-salvageable materials. Saturate all affected areas with a sprayer using a coarse spray tip, before and after cleaning and extraction.

Carpets, carpet cushions and other porous materials such as sub floors, drywall, trim and frame lumber, tackless strip and paneling: For water damage from a clean water source, extract excess water. Test hidden area for colorfastness. Mix 2 to 4 ounces of this product (product name) per gallon of water, allowing for the diluting effect of absorbed water within saturated materials. Remove gross filth or heavy soil. Apply directly with a sprayer using a coarse spray tip, to fully saturate affected materials. Roll, brush or agitate into materials and allow the materials to remain damp for 10 minutes. Follow with a thorough extraction. Dry rapidly and thoroughly.

Special Instructions for Cleaning Carpet Against Odor Causing Bacteria: This product (product name) is for use in industrial and institutional areas: motels and hotels, nursing homes, schools and hospitals. For use on wet cleanable synthetic fibers, do not use on wool. Vacuum carpet thoroughly prior to cleaning. Test fabric for colorfastness.

For portable extraction units: Mix 2 ounces of this product (product name) per gallon of water.

For truck mounted extraction machines: Mix 48 ounces of this product (product name) per gallon of water and meter at 4 gallons per hour.

For rotary floor machines: Mix 4 ounces of this product (product name) per gallon of water and apply at the rate of 300-500 sq. ft. per gallon.

Do not mix this product (product name) with other cleaning products. Follow the cleaning procedures as specified by the manufacturer of the cleaning equipment. After using this product, set the carpet pile and protect the carpet from furniture legs and bases while drying. Do not over wet. If applied to stain resistant nylon carpet, apply a fabric protector according to the carpet manufacturer's directions.

Carpet Deodorizer against Odor-Causing Bacteria for Institutional, Industrial and Hospital Use: This product (product name) deodorizes the carpet by controlling/reducing the growth of odor-causing bacteria. It is for use in industrial and institutional areas: motels, hotels chains, nursing homes and hospitals.

Vacuum carpet thoroughly prior to application. Mix 2 ounces of this product (product name) per gallon of water. Follow the Injection and/or Extraction procedures as specified for any conventional steam cleaning equipment you are using. For rotary floor machines, mix 4 ounces per gallon of water and spray on carpet at a rate of 300-500 sq. ft. per gallon.

For use on washable synthetic fibers. Do not use on wool. Test colorfastness of carpet before use. Apply diluted product to a small concealed spot, then rub with a clean white cloth. If color changes or transfers to cloth, a water-based product must not be used.

After using the product, set carpet pile in one direction with a stiff brush. Place aluminum foil under the legs of furniture while carpet is drying. Over-wetting can cause carpet to shrink. Manufacturer assumes no responsibility for over-wetting misuse.

Note: This product (product name) must not be mixed with other cleaning products.

Smoke Damage Restoration: This product (product name) is effective against odor causing bacteria and fungi in institutional, industrial and medical premises. This product (product name) is particularly suitable for use in smoke damage restoration situations against odor causing bacteria on the following porous and semi-porous materials: carpets, carpet cushion, sub floors, drywall, trim and frame lumber, tackless strip and paneling. Follow directions as outlined in the Water Damage Restoration section. Saturate affected materials with enough product to remain wet for at least 10 minutes. Use proper ventilation.

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Cleansing of Body Surfaces and Body Orifices of Human Remains: To cleanse away skin secretions and accompanying malodor, to insure the removal of all soil and bloodstains, and to remove and reduce surface contamination, apply 8 ounces of this product (product name) to 4 gallons of water (2 ounces per gallon of water) (703 ppm active quaternary) (or equivalent dilution) to the surfaces and body openings, natural or artificial. Allow 10 minute contact time for optimal results. Bathe the entire body using sponge or washcloth. A soft brush may be employed on surfaces other than the face. Prepare a fresh solution for application to each remains.

To Control Mold and Mildew on Large, Inflatable, Non-Porous Plastic and Rubber Structures (animals, promotional items, moonwalk, slides, obstacle course play equipment, exercise equipment, and wrestling mats): Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use-solution of 8 ounces of this product (product name) per 4 gallons of water (2 ounces per gallon of water) (703 ppm active quaternary) (or equivalent dilution) for a period of 10 minutes. Ventilate buildings and other closed spaces. Do not use equipment until treatment has been absorbed, set or dried.

(Alternative language for bag in the box dispensing equipment)

Directions For Bag-In Box Containers:

HOW TO USE THIS PACKAGE: This package is designed to be used with dilution control systems only. Open package and connect to dispense according to directions on the box.

TRIGGER SPRAYERS: Fill bottle from dispenser. Apply to surfaces according to directions above.

MOP BUCKETS: Fill bucket from dispenser. Set up "Wet Floor" signs. Mop floor surfaces as specified in directions above.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. KEEP OUT OF REACH OF CHILDREN. CORROSIVE. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. Wear goggles or face shield, rubber gloves, and protective clothing. Harmful if swallowed. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

(Required for products supplied in containers of 5 gallons or greater.)

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, oysters and shrimp. 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 the 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. Contains no phosphorous.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE - Store in a dry place no lower in temperature than 50°F or higher than 120°F.

CONTAINER DISPOSAL -

(For products with industrial, institutional, and commercial use sites)

Nonrefillable container. Do not reuse empty container. Triple rinse empty container with water. Then offer for recycling if available or puncture and dispose in a sanitary landfill or by other procedures approved by state and local authorities. Follow pesticide disposal instructions for rinsate. If not triple rinsed, these containers are acute hazardous wastes and must be disposed in accordance with local, state and federal regulations. **DO NOT** cut or weld metal containers.

(For products only with household/residential use sites)

Nonrefillable container. Do not reuse; discard empty container (bottle, can bucket). Wrap container and put in trash.

PACKET DISPOSAL - Do not reuse; discard empty container and put in trash.

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.

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2 OUNCE PACKET LABEL TO BE USED WITH MASTER CONTAINER LABEL:

MIX EACH PACKET WITH 1 GALLON OF WATER

NP 4.5 DETERGENT/DISINFECTANT

EPA Reg. No. 1839-79

EPA Est. No. 1839-IL-1

NET CONTENTS: 2 FLUID OZ.

ACTIVE INGREDIENTS:

n-Alkyl (60% C ₁₄ , 30% C ₁₆ , 5% C ₁₂ , 5% C ₁₈)	
dimethyl benzyl ammonium chlorides	2.25%
n-Alkyl (68% C ₁₂ , 32% C ₁₄)	
dimethyl ethylbenzyl ammonium chlorides	2.25%
INERT INGREDIENTS	<u>95.50%</u>
TOTAL	100.00%

KEEP OUT OF REACH OF CHILDREN

DANGER

SEE OUTER CONTAINER FOR PRECAUTIONARY STATEMENTS AND USE DIRECTIONS

DISPOSAL: Do not reuse container. Wrap and put in trash collection.

STEPAN COMPANY

22 W. Frontage Rd.
Northfield, IL 60093