

JUL 25 2006

Mr. Thomas Isaac
Sr. Regulatory Specialist
Stepan Company
22 W. Frontage Rd
Northfield, IL 60093

Subject: NP 4.5 (D&F) Detergent/Disinfectant
EPA Registration No.: 1839-95
Application Date: 3/3/06
Receipt Date: 3/6/06

Dear Mr. Isaac:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable with the conditions listed below:

- Addition of public health organisms: SARS associated Coronavirus
- Addition of non-public health organism: Avian Influenza A Virus
- Addition of use sites
- Additional environmental surfaces

LABEL COMMENTS

1. The species name of the organism, *Salmonella choleraesuis*, has been changed by ATCC. The new designation is *Salmonella enterica*. You must revise the label, accordingly.
2. The proposed label indicates this product is an effective disinfectant in the presence of 5% serum against SARS-associated Coronavirus and Avian Influenza A for a contact time of 10 minutes at a dilution of 2 ounces per gallon of water (i.e., a 1:64 dilution).
3. The animal viruses must be deleted from "Virucidal Activity" because the label's organization implies that hard nonporous surfaces in "hospitals, dental offices, nursing homes, and other health care facilities" will mitigate the organisms listed below. However, the animal viruses listed under "Virucida Activity" are not indicative of these use sites. Therefore, you must relocate the following organisms to the "Poultry (and Swine) Premise section:

Avian Influenza A		Bovine Viral Diarrhea Virus (BVDV)		Feline calicivirus (FCV)		CONCURRENCES	
SYMBOL							
SURNAME							
DATE							

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4. On page 2, the addition of "Artificial Turf" as a surface for disinfecting or sanitizing is unacceptable. You must provide specific directions as to how much product over specific area will be treated.
5. Please make the following changes:
 - On page 5, under "Hatcheries," add the statement, "For heavily soiled areas, a pre-cleaning step is required."
 - On page 8, revise the "Reusable Container Statement" to read "A container, such as a spray bottle, can be reused once empty. First prepare an appropriate use solution from concentrate. A dilution dispenser (or name specific equipment such as the Dynamix dispenser) can be used to prepare the use solution. Remove cap/spray nozzle from empty container. Fill empty container with a newly prepared use solution. Replace cap/spray nozzle. Place correct use dilution label on the newly filled container."
 - On page 9, Change "Keep out Reach of Children" statement to read "Keep out of Reach of Children."

General Comments

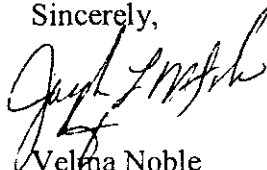
A stamped copy of the accepted labeling is enclosed. Submit one (1) copy of your final printed labeling before distributing or selling the product bearing the revised labeling.

Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3 (c) (5) and section 4 (a) when the Agency requires all registrants of similar products to submit such data.

If the above conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6 (e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

Should you have any questions concerning this letter, please contact Zenobia Jones at (703) 308-6198.

Sincerely,



Velma Noble

Product Manager (31)

Regulatory Management Branch I

Antimicrobials Division (7510C)

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

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NP 4.5 (D&F) Detergent/Disinfectant

- DISINFECTANT
- CLEANER
- DETERGENT
- *VIRUCIDE
- FUNGICIDE (against pathogenic fungi)
- MILDEWSTAT (on hard non-porous, inanimate surfaces)
- DEODORIZER
- 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 Disinfection
- Formulated for Effective Poultry Premise Disinfection
- Formulated for Effective Swine Premise Disinfection
- Formulated for Effective Veterinary Practice/Animal Care/Animal Laboratory Disinfection
- KILLS GERMS

ACTIVE INGREDIENTS

Alkyl (60% C ₁₄ , 30% C ₁₆ , 5% C ₁₂ , 5% C ₁₈)	
dimethyl benzyl ammonium chlorides	2.25%
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 panel for additional precautionary statements.

EPA REG. NO. 1839-95
EPA EST. NO. 1839-IL-01

STEPAN COMPANY
22 West Frontage Road
Northfield, IL 60093

NET CONTENTS

ACCEPTED
WITH COMMENTS
In EPA Letter Dated:
JUL 25 2006
EPA REG. NO. 1839-95
EPA EST. NO. 1839-IL-01
amended, for the purpose of
registered under EPA Reg. No.
1839-95

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NP 4.5 (D&F) Detergent/Disinfectant is a phosphate free formulation designed to provide effective cleaning, deodorization, 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 (D&F) Detergent/Disinfectant (this product or 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.
- Institutional facilities, laboratories, factories, business and office buildings, restrooms, hotels and motels and transportation terminals.
- Institutional kitchens and bathrooms.
- 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, hog farms, poultry and turkey farms and egg processing plants.
- Veterinary clinics, animal life science laboratories, kennels, breeding and grooming establishments, pet animal quarters, zoos, pet shops, and other animal care facilities.
- Automotive garages, boats, ships, campers, trailers, mobile homes, cars, buses, trains, taxis and airplanes.
- Health clubs, spas, tanning spas, massage/facial salons, hair/nail salons, barber/beauty shops, tattoo parlors

(This product or 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 or product name), when used as directed, is formulated to disinfect the following hard non-porous inanimate environmental surfaces: floors, walls, metal surfaces, stainless steel surfaces, glazed porcelain, glazed ceramic tile, plastic surfaces, artificial turf surfaces, vanity tops, shower stalls, bathtubs, and cabinets.

- Non-food contact glass, metal, stainless steel, glazed porcelain, glazed ceramic, granite, marble, plastic, chrome and vinyl.
- Tables, chairs, desks, bed frames, walls, cabinets, doorknobs and garbage cans.
- Non-wooden picnic tables 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, vinyl and plastic shower curtains, tubs and glazed tiles, toilets, urinals, porcelain tile and restroom fixtures.
- Kennels and cages.
- Windows and mirrors.
- For larger areas such as operating rooms and patient care facilities, (this product or product name) is designed to provide both general cleaning and disinfecting.
- Large inflatable non-porous plastic (rubber) (advertising) structures: animals, promotional items, moonwalk, slides, obstacle course play equipment, exercise equipment, exercise mats, wrestling mats.

(This product or 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.

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

When used as directed, (this product or 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 or product name) cleans, shines, deodorizes and disinfects all hard non-porous surfaces listed on the label. It inhibits the growth of mold and mildew, leaving bathrooms and kitchens clean and fresh smelling.

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

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

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Use (this product or 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, silicone rubber or PVC hearing protectors and vinyl covered 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 recommended 120°F temperature will avoid overheating and distortion of the personal safety equipment that would necessitate replacement.)

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

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

When used as directed, (this product or 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 or product name) may be relied on to deodorize coolers, buckets, garbage pails and other areas where obnoxious odors may develop.

Use (this product or 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 or product name) may be used 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 or product name) is recommended for Poultry Premise Disinfection (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 or product name) is recommended for Swine Premise Disinfection:

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

When used as directed, (this product or product name) is formulated to disinfect hard, non-porous, inanimate, environmental 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 or 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 or 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 or product name) is a non-abrasive (non-scratch) cleaner for showers, tubs, shower doors, vinyl and plastic shower curtains, fixtures and toilet bowls.

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

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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.

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

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

DISINFECTION - To disinfect inanimate, hard, non-porous surfaces add 2 ounces of (this product or 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. 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 or 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 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: floors, walls, and storage areas, add 2 ounces of (this product or 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. Before using this product, food products and packaging materials must be removed from the area or carefully protected. After use, all surfaces in the area must be thoroughly rinsed with potable water.

To disinfect food service establishment food contact surfaces: countertops, appliances, tables, add 2 ounces of (this product or 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.

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

MILDEWSTAT - To control mold and mildew on pre-cleaned, hard, non-porous surfaces, add 2 ounces of (this product or 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.

FUNGICIDAL ACTIVITY - At the 2 ounces per gallon dilution, (this product or product name) is also fungicidal against the pathogenic fungi, *Trichophyton mentagrophytes* (causative agent of 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.

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***VIRUCIDAL ACTIVITY** – (This product or 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 Coronavirus (ATCC VR-740, Strain 229E), Human Immunodeficiency Virus Type I (HIV-1), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Norovirus (Norwalk Virus), Bovine Viral Diarrhea Virus (BVDV), Feline calicivirus (FCV), SARS Associated Coronavirus and Avian Influenza A.

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, or eye coverings.

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

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

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

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 or product name) to soiled area with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer. (This product or 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 or product name) as indicated under the heading DISINFECTION.

Cleaning/Deodorizing Directions:

Add 1 to 2 ounces per gallon of water to clean and deodorize windows, mirrors and glass surfaces.

Use a coarse spray device. Spray 6-8 inches from surface, rub with sponge or cloth. Do not breathe spray mist.

POULTRY (AND SWINE) PREMISE DISINFECTION

Site Preparation: The first step in any on-going sanitation program should be the removal of gross contamination and debris. This may be accomplished using a shovel, broom, or vacuum depending on the area to be disinfected. The efficacy of even the most efficient germicidal cleaner is reduced in the presence of heavy organic matter. Once the heavy debris is eliminated, thoroughly clean all surfaces with soap or detergent and rinse with water.

Cleaning And Disinfection: For all general cleaning and disinfection use 2 ounces of (this product or product name) per gallon of water. Apply (this product or product name) using a cloth, mop, hand pump trigger sprayer or low pressure coarse sprayer so as to thoroughly wet surface to be disinfected. Allow to remain wet for 10 minutes and then let air dry. For heavily soiled areas, a pre-cleaning step is required. Prepare a fresh solution after each use.

APPLICATIONS AND USE DILUTION

Poultry (And Swine) Premise: Remove all 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 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 or product name) per gallon of water. Saturate surfaces with the recommended disinfecting solution for a period of 10 minutes. Ventilate buildings, coops and other closed spaces. Do not house 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 animals, as well as forks, shovels, and scrapers used for removing litter and manure.

Hatcheries: Use 2 ounces of (this product or product name) per gallon of water to treat the following hard non-porous surfaces: hatching, 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.

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Vehicles: Clean all vehicles including mats, crates, cabs, and wheels with high pressure water and (this product or 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 Directions: Shoe baths containing one inch of freshly made solution should 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 or product name) per gallon of water solution for 10 minutes 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 recommended use-solution, 2 ounces of (this product or 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 or product name) to five parts water (2 gallons of (this product or product name) to 5 gallons 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 or 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 or 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 should 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.

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 or 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.

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 or 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.

Ultrasonic Bath Disinfectant Directions: Use (this product or product name) to disinfect hard non-porous non-critical objects compatible with Ultrasonic cleaning units. Pour fresh solution at 2 ounces of (this product or 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.

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Disinfection of Hard Non-Porous Surfaces in 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 or 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 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 recommended and 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.

(Not for use in California)

WATER AND SMOKE DAMAGE RESTORATION AGAINST ODOR-CAUSING BACTERIA AND FUNGI FOR INSTITUTIONAL, INDUSTRIAL AND HOSPITAL USE

(This product or 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 or 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 or 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 color fastness. Mix 2 to 4 ounces of (this product or 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 or product name) may be used 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 color fastness.

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

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

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

Do not mix (this product or product name) with other cleaning products. Follow the cleaning procedures 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 or product name) deodorizes the carpet by controlling/reducing the growth of odor-causing bacteria. It can be used in industrial and institutional areas: motels, hotels chains, nursing homes and hospitals.

Vacuum carpet thoroughly prior to application. Mix 2 ounces of (this product or 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 color fastness 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 should 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 should not be mixed with other cleaning products.

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(Not for use in California)

Smoke Damage Restoration: (This product or product name) is effective against odor causing bacteria and fungi in institutional, industrial and medical premises. (This product or 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. Using solutions recommended, saturate affected materials with enough product to remain wet for at least 10 minutes. Use proper ventilation.

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.

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

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and 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 - Do not reuse empty container. Triple rinse empty container with water. Return metal drum or offer for reconditioning or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers may be disposed of in a sanitary landfill, incinerated, or if allowed by local authorities, by burning. If burned, stay out of smoke.

For containers 1 gallon or less: Do not reuse empty container (bottle, can, bucket). Wrap container and put in trash.

(Reusable Container Statement) Container can be reused once the container is empty. Empty container of concentrate into dilution dispenser (specific equipment such as "Dynamix dispenser" can be named to replace "dilution dispenser"). Dispenser will automatically dilute a disinfectant solution. Remove concentration label. Refill container with use dilution of concentrate from the dispenser. Replace cap with spray nozzle provided. Place correct use dilution label on the spray bottle.

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.

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

MIX EACH PACKET WITH 1 GALLON OF WATER

NP 4.5 (D&F) DETERGENT/DISINFECTANT

EPA Reg. No. 1839-95
EPA Est. No. 1839-IL-1

NET CONTENTS (2) FLUID OZ.

ACTIVE INGREDIENTS:

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

KEEP OUT 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
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