

61178-1

07/24/2008

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JUL 24 2008

Ms. Vickie Forster  
Microgen, Inc.  
33 Clinton Road Suite 102  
West Caldwell, NJ 07006

Subject: D-125  
EPA Registration No. 61178-1  
Application Date March 3, 2008  
EPA Received Date March 28, 2008

Dear Ms. Foster:

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

**Proposed Labeling:**

- add efficacy claims
- modify the Storage and Disposal statement per PR-Notice 2007-4

**Efficacy Review:**

1. The proposed label claims that the product, D-125, is an effective disinfectant on hard, non-porous surfaces against the following microorganisms in the presence of hard water up to 300 ppm hardness and 5% blood serum for a 10-minute contact time at a 1:64 dilution:

***Staphylococcus aureus* (CA-MRSA Genotype USA 400)**  
***Staphylococcus aureus* (Vancomycin Resistant - VRSA)**  
***Staphylococcus aureus* (Community Associated Methicillin Resistant CA-MRSA, PVL Positive)**  
**Feline calicivirus\***

CONCURRENCES								
SYMBOL								
SURNAME								
DATE								

These claims are **acceptable** as they are supported by the submitted data.

\*Note: Feline calicivirus was listed on the last accepted label (dated May 17, 2007). The new proposed label does not list **Norovirus**, for which appropriate surrogate testing was conducted within this submission. The applicant may add this claim under the above use conditions if desired.

2. The proposed label claims that the product, D-125, is an effective disinfectant on hard, non-porous surfaces against ***Clostridium difficile*** in the presence of hard water up to 300 ppm hardness and 5% blood serum for a 10-minute contact time at a 1:64 dilution. These claims are **unacceptable**. The Agency is no longer accepting claims for effectiveness against *Clostridium difficile* (vegetative cells). The Agency has re-evaluated its acceptance of the *Clostridium difficile* (vegetative form) on previously accepted claims and requests for new claims. Peer-reviewed scientific literature and case studies have consistently demonstrated that the *Clostridium difficile* spore is the source of public-health concern. In light of scientific guidance and supporting documentation, the Agency is certain that claims against the vegetative form of *Clostridium difficile* are true statements, but are used in such a way as to give a false or misleading impression to the purchaser (40 CFR 156.10(a)(5)(vii)). The Agency considers antimicrobial pesticides to be unique because of the critical nature of the threat to public health that may result from ineffective use of the products due to obsolete or misleading labeling. As a result, any reference to claims of effectiveness against *Clostridium difficile* (vegetative) or *Clostridium difficile* (without having supporting data against *Clostridium difficile* spores) is unacceptable. To address the growing need for products in hospital/medical setting, the Agency is moving expeditiously to develop an appropriate test system and performance standards for *Clostridium difficile* spores. References to *Clostridium difficile* must be removed from the proposed label.
3. The proposed label claims that the product, D-125, is an effective disinfectant on hard, non-porous surfaces against ***Staphylococcus aureus* (CA-MRSA Genotype USA 300)** in the presence of hard water up to 300 ppm hardness and 5% blood serum for a 10-minute contact time at a 1:64 dilution. This claim is **not acceptable** as it is not supported by the submitted data (see conclusions section and results). References to *Staphylococcus aureus* (CA-MRSA Genotype USA 300) must be removed from the proposed label.

4. Regarding the proposed label, the following actions are as follows.
- a. In accordance with DIS/TSS-15 requirements, you must revise the proposed label to identify the types of surfaces (e.g., glass, stainless steel, vinyl) on which the product is recommended for use.
  - b. You must follow the ATCC number policy by **listing ATCC numbers for all organisms** appearing on the product label (See ATCC Letter, soon to be posted online). You must list ATCC numbers for the tested organisms in one of the following locations:
    - i. On the data matrix,
    - ii. On the master label (as optional text) with the listing of the organisms claimed, or
    - iii. As the final page of the master label (as optional text).
  - c. On pages 5 and 12 of the proposed label, change "*Salmonella choleraesuis*" to read "*Salmonella enterica*." The ATCC has formally changed the nomenclature for this organism.
  - d. On page 7 of the proposed label, change "Human coronovirus" to read "Human coronavirus."
  - e. On page 12 of the proposed label, change "*Burkholderia picketK.ii*" to read "*Burkholderia pickettii*."
  - f. On page 12 of the proposed label, change "*Enterococcus faecalts*" to read "*Enterococcus faecalis*."
  - g. On page 12 of the proposed label, change "*Streptococcus pneumiciae* (PRSP)" to read "*Streptococcus pneumoniae* (PRSP)."
  - h. On page 12 of the proposed label, change "*Staphylococcus auras*" to read "*Staphylococcus aureus*."
  - i. On page 12 of the proposed label, correct the numbering sequence. There are two entries for 96.

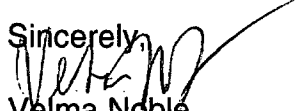
**Product Chemistry:**

1. The requirements of PR Notice 91-2 were satisfied. The nominal concentration of the active ingredients, given in the existing Alternate Formulations #17, dated 10/02/2006, agreed with the percentages declared on the revised product label dated 3/26/08. The Alternate Formulation #17 was previously reviewed (2/8/08) and found to be acceptable.
2. The revised/updated product label "Storage and Disposal Statement" was found acceptable.
3. The product label involving additional claims regarding Clostridium difficile and antibiotic resistant gram positive bacteria were supported by efficacy studies under MRID # 473865-01 through MRID # 473865-05.

**General Comments:**

Should you have any questions or comments concerning this letter, please contact Drusilla Copeland at (703) 308-6224.

Sincerely,



Velma Noble

Product Manager (31)  
Regulatory Management Branch I  
Antimicrobials Division (7510P)

Enclosure: Efficacy Review data approve date June 26, 2008 and Product Chemistry Review approve date May 30, 2008

# CENTER PANEL

## D-125

BROAD SPECTRUM DISINFECTANT, HOSPITAL DISINFECTANT, ANTIMICROBIAL, BROAD SPECTRUM CLEANER & DISINFECTANT, GERMICIDAL, GERMICIDE, GERMICIDAL CLEANER, CLEANS AS IT DISINFECTS, ANTIBACTERIAL, BACTERICIDE, HIV & HBV VIRUCIDE\*, KILLS COMMON HOUSEHOLD GERMS, HOSPITAL VIRUCIDAL\* DISINFECTANT, CONCENTRATED DISINFECTANT CLEANER, CONCENTRATED FORMULA , REDEFINING CLEAN, CARPET SANITIZER AGAINST ODOR CAUSING BACTERIA, CLAIMS AGAINST 110+ ORGANISMS, PSEUDOMONACIDAL

CLEANER, DISINFECTANT, SANITIZER, DETERGENT, FUNGICIDE, DEODORIZER, VIRUCIDE\*, MILDEWSTAT

**ACTIVE INGREDIENTS:**

Alkyl (60% C <sub>14</sub> , 30% C <sub>16</sub> , 5% C <sub>12</sub> , 5% C <sub>18</sub> ) dimethyl benzyl ammonium chloride .....	2.37%
Alkyl (68% C <sub>12</sub> , 32% C <sub>14</sub> ) dimethyl ethylbenzyl ammonium chloride .....	2.37%
INERT INGREDIENTS.....	95.26%
TOTAL.....	100.00%

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

NET CONTENTS: Varies

Microgen Inc.  
33 Clinton Road Suite  
102 West Caldwell, NJ  
07006

EPA Reg. No. 61178-1  
EPA Est. No. Varies

**ACCEPTED  
with COMMENTS  
in EPA Letter Dated:  
JUL 24 2008**

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No. 61178-1

Contains DISNFX-125 Brand Hospital Disinfectant Formula Exclusively from MICROGEN, INC

# LEFT PANEL- NUMBER 1

## 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. Harmful if swallowed. Wear protective eyewear (goggles, face shield or safety glasses). Wear protective clothing and rubber gloves. Avoid contamination of food. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

## STATEMENT OF PRACTICAL TREATMENT — FIRST AID

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF 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 SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a 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 mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For additional medical advice, call the following emergency phone number: 000-000-0000.**

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

**If container is 5 gallons or more, the following statement must be used:**

## ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. 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 into sewer

systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

# LEFT PANEL- NUMBER 2

## STORAGE and DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

### STORAGE

Do not store on side. Avoid creasing or impacting of side walls. Store securely in closed original container. Avoid storage at temperature extremes or in sunlight. Avoid shipping or storing below freezing. If product freezes, thaw at room temperature and shake gently to remix components. Use locked storage in an area that will prevent cross-contamination of other pesticides, fertilizer, food and feed. Store in locked area inaccessible to children.

### 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 according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### CONTAINER DISPOSAL

**Triple rinse container (or equivalent) promptly after emptying.** Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available.**

**BATCH CODE:**

# RIGHT PANEL-NUMBER 1

## DIRECTIONS FOR USE

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

To be used in hospitals in the following areas as a disinfectant: operating rooms, patient care rooms & facilities, recovery, anesthesia, ER, radiology, X-ray cat labs, newborn nurseries, orthopedics, respiratory therapy, surgi-centers, labs, blood collection rooms, central supply, housekeeping & janitorial rooms, nursing homes, doctor's offices & labs, dentists offices & labs (dental operatories).

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

In addition, this product may be used as a disinfectant in Mortuaries, Cosmetic Manufacturing Facilities, Medical Device Manufacturing Facilities, Biotechnology Firms, Shipping Terminals, Police Stations, Bus Stations, Train Stations, Laundromats, Trucks, Photocopier Centers, Exercise Rooms, Museums, Art Galleries, Bicycle Shops, Computer Manufacturing Sites, Post Offices, Performance/Theater Centers, Banks, Libraries, Recycling Centers, Toy Factories, Gift Shops, Tatoo Parlors, Gyms, Gymnasiums, Tanning Spas, Massage/Facial Salons, Hair/Nail Salons, Video Centers, Public Transportation, Physician Offices, EMS & Fire Facilities, Pharmaceutical Manufacturing Facilities, Auto Repair Centers, Cruise Lines, Airlines Terminals, Log Cabins, Coffee Shops, Department Stores, Retail Stores, Bagel Stores, Court Houses, Municipal Government Buildings, Colleges, Universities, Community Colleges, Campgrounds, Travel Rest Areas, Recreational Facilities, Sports Arenas, Donut Shops, Boats/Ships, Hotels/Motels, Dormitories, Movie Houses, Pizza Parlors, Lifecare Retirement Communities, Hospices, Book Stores, Convenient Stores, Liquor Stores, Day Care Centers; Acute Care Institutions, Alternate Care Institutions, Home Health Care Institutions, Food Establishments, Shopping Malls, Churches, Picnic Facilities, Schools, Barber/Beauty Shops, Salons, Health Clubs, Spas, Sick Rooms, Rest Rooms, Shower Rooms, Shower Stalls, Bathrooms, Veterinary Clinics, Restaurants, Cafeterias, Bars, Meat/Poultry/Food Processing Plants, Meat/Poultry Producing Establishments, Dairies, Farms, Poultry Houses, Swine Farms, Dog/Cat Animal Kennels, Airplanes, Industries and Homes.

This product can be used to disinfect the following inanimate, hard, non-porous nonfood environmental surfaces: walls, floors, sink tops, toilet bowls, table tops, counters, countertops, barber shop instruments and tools, appliances, tables, chairs, benches, telephones, chair arms, bed frames, cabinets, bathtubs, and urinals.

Meat/Poultry/Food Processing plants: Do not use on food contact/processing surfaces or before using this product, food products and packaging materials must be removed from the room or carefully protected. After use, all food contact surfaces in the area must be thoroughly rinsed with potable water. This product may be used in inedible product processing areas, non-processing areas and/or exterior areas without a rinse.

Restaurants, Cafeterias, Bars: Use a potable rinse on the following specific food contact surfaces: counters, tables, picnic tables, appliances and/or stovetops. This product should not be used to disinfect or clean utensils, glassware, dishes and cookware.



# RIGHT PANEL-NUMBER 2

## **BOTTLE USE-DILUTION:**

**OPTION 1:** With both caps closed and the front label facing you, tilt the bottle counter-clockwise so the concentrate fills the measuring chamber. Tilt the bottle clockwise to allow any excess concentrate to return to the bottle leaving the desired amount in the measuring chamber. (The angular pour-back lines on the right side of the measuring scale may be used as a guide when tilting bottle clockwise to adjust to the desired amount.) Open the left (slanted) cap to pour concentrate. **Use at a dilution of 1:64 (2 ounces per gallon of water or 16 ml per liter).**

**OPTION 2:** Remove outer cap. While holding bottle by the neck, twist off inner cap and discard. Replace outer cap loosely. Gently squeeze the lower chamber until the upper reservoir is filled to the desired level. **Use at a dilution of 1:64 (2 ounces per gallon of water or 16 ml per liter).**

## **BACTERICIDAL STABILITY OF USE-DILUTION:**

Tests confirm that this product, when diluted in 400 ppm hard water and in the presence of 5% soil load, remains effective against *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Salmonella choleraesuis* for up to 64 days when stored in a sealed container at room temperature.

If the use-dilution product becomes visibly dirty or contaminated, the use-dilution must be discarded and a fresh product prepared. Always use clean, properly labeled dry containers when diluting the product. Bactericidal stability of the use-dilution does not apply to open containers such as buckets or pails. Use-dilution product in open containers must be prepared daily or more often if the solution becomes visibly dirty or diluted or contaminated.

## **DISINFECTION:**

Add two ounces D-125 per gallon of water. Remove gross filth or heavy soil. For heavily soiled areas, a pre-cleaning step is required. Apply solution with a cloth, mop, sponge, hand pump trigger sprayer or other mechanical sprayer devices such that all surfaces remain wet for 10 minutes. Let air dry. Prepare a fresh solution for each use. D-125 is effective in hard water up to 300 ppm hardness (calculated as CaCO<sub>3</sub>) and in the presence of organic soil (5% blood serum).

This product, in the presence of a 98 % organic soil load, diluted 1:64 (2 ounces per gallon) in 791 ppm Hard Water, demonstrated efficacy within 10 minutes against the following organisms:

*Staphylococcus aureus*, *Salmonella choleraesuis*. Note that the organisms referenced in the above statement are not associated with blood spills. For blood spills, the surface must be thoroughly cleaned before applying the disinfectant.

## RIGHT PANEL-NUMBER 3

**DISINFECT TOILET BOWLS** Flush toilet and add 2 ounces D-125 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.

### **DISINFECTION OF BARBER AND BEAUTY SHOP INSTRUMENTS & TOOLS:** Thoroughly

Pre-clean. Completely immerse brushes, combs, scissors, clipper blades, razors, tweezers, manicure and other shop tools for 10 minutes (or longer as required by local authorities). Fresh solution should be prepared daily or more often when the solution becomes diluted or soiled. After disinfection, wipe dry the product as appropriate. **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 soaking may cause damage to metal instruments.

### **FOR VETERINARY, DOG/CAT ANIMAL KENNEL, FARM PREMISE, SWINE FARM, DAIRY DISINFECTANT USE**

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

### **FOR POULTRY HOUSE DISINFECTANT USE**

1. Remove all poultry and feeds from premises, trucks, coops and crates.
2. Remove all litter and droppings from floors, walls and surfaces of facilities occupied or traversed by poultry.
3. Empty all troughs, racks, and other feeding and watering appliances.
4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
5. Saturate all surfaces with the recommended disinfecting solution for a period of 10 minutes.
6. Ventilate buildings, coops, and other closed spaces. Do not house poultry or employ equipment until treatment has been absorbed, set or dried.
7. Thoroughly scrub all treated feed racks, troughs, automatic feeders, fountains, and waterers with soap or detergent, and rinse with potable water before reuse.

# RIGHT PANEL-NUMBER 4

**FUNGICIDE** - At 2 ounces per gallon, D-125 is effective against the pathogenic fungus *Trichophyton mentagrophytes* in 5% organic soil load. **Contact time - 10 minutes.** Surfaces where this fungus is found: shower areas & stalls, bathroom floors, bathroom benches.

This product, in the presence of a ~100 % organic soil load, diluted 1:64 (2 ounces per gallon) in 395 ppm Hard Water, demonstrated efficacy within 10 minutes against the following pathogenic fungus: *Trichophyton mentagrophytes*. Note that the organism referenced in the above statement is not associated with blood spills. For blood spills, the surface must be thoroughly cleaned before applying this product.

**VIRUCIDAL\***: When used on inanimate, hard, non-porous, environmental surfaces at 2 ounces per gallon of water for a 10 minute contact time (5% organic soil), except for Poliovirus type 1 (Chat strain): which requires a 30 minute contact time (5% organic soil) and HIV-1 which requires only a 30 second contact time.

This product, in the presence of a 98 % organic soil load, diluted 1:64 (2 ounces per gallon) in 400 ppm Hard Water, demonstrated efficacy within 10 minutes against the following virus: Human Coronavirus. Note that the organism referenced in the above statement is not associated with blood spills. For blood spills, the surface must be thoroughly cleaned before applying this product.

**\*KILLS HCV, HBV AND HIV-1 ON PRE-CLEANED ENVIRONMENTAL SURFACES /OBJECTS PREVIOUSLY SOILED WITH BLOOD/BODY FLUIDS** in health care settings 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 HCV (Hepatitis C Virus), HBV (Hepatitis B Virus) or HIV-1 (AIDS virus).

**SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HCV, HBV AND HIV-1 OF SURFACES/OBJECTS SOILED WITH BLOOD/BODY FLUIDS: PERSONAL PROTECTION:**

Specific barrier protection items to be used when handling items soiled with blood or body fluids are disposable latex gloves, gowns, masks or eye coverings.

**CLEANING PROCEDURE:** Blood and other body fluids must be thoroughly cleaned from surfaces and objects before application of the disinfectant.

**DISPOSAL OF INFECTIOUS MATERIALS:** Blood and other body fluids should be autoclaved and disposed of according to Federal, State and local regulations for infectious waste disposal. **CONTACT TIME:** Leave surfaces wet for 30 seconds for HIV-1 and 10 minutes for HCV and HBV. The contact time for the viruses, fungi and bacteria listed on this label is 10 minutes except for Polio virus Type 1 (Chat strain) which is 30 minutes.

**SANITIZATION - NON-FOOD CONTACT SURFACES:** Remove all gross filth or heavy soil prior to applying sanitizing solution. To sanitize walls, floors and other hard, nonporous surfaces in such areas as schools, institutions, and industries, use a mop, cloth or immerse item in a solution containing 2 ounces per gallon so as to wet all surfaces thoroughly for 1 minute. Drain or air dry. Prepare a fresh solution daily or when solution gets visible dirty.

**MILDEWSTAT** - Thoroughly clean surfaces prior to treatment. To control mold and mildew on pre-cleaned, hard, non-porous surfaces (such as floors, walls, table tops) add 2 ounces D-125 per gallon of water. Apply solution with a cloth, mop, or sponge making sure to wet all surfaces completely. Let air dry. Prepare fresh solution for each use. Repeat application at weekly intervals or when mildew growth reappears.

**CLEANING AND DEODORIZATION** - D-125 deodorizes garbage storage areas, empty garbage bins and cans, toilet bowls and any other odor-causing areas. Mix 2 ounces per gallon of water and apply solution to surfaces. Be sure to thoroughly wet surfaces, allow to air dry.

# RIGHT PANEL-NUMBER 5

## **SANITIZATION - FOOD CONTACT SANITIZER**

To be used in the following areas as a food contact sanitizer: Cruise Lines, Airlines Terminals, Log Cabins, Coffee Shops, Department Stores, Retail Stores, Bagel Stores, Court Houses, Municipal Government Buildings, Colleges, Universities, Community Colleges, Campgrounds, Travel Rest Areas, Recreational Facilities, Sports Arenas, Donut Shops, Boats/Ships, Hotels/Motels, Dormitories, Movie Houses, Pizza Parlors, Lifecare Retirement Communities, Hospices, Book Stores, Convenient Stores, Liquor Stores, Day Care Centers, Acute Care Institutions, Alternate Care Institutions, Home Health Care Institutions, Food Establishments, Shopping Malls, Churches, Picnic Facilities, Homes, Schools, Institutions, Industries, Meat/Poultry/Food Processing Plants, Dairies, Bars, Restaurants and Cafeterias to sanitize hard, nonporous food contact surfaces as listed and identified below. Use a mop, sponge or cloth to apply sanitizing solution or immerse item in sanitizing solution. This product is an effective sanitizer when diluted in tap water.

## **SANITIZATION - FOOD CONTACT SURFACES: (glassware, utensils, cookware and dishware)**

1. Scrape and pre-wash utensil, glassware, cookware, and dishware.
2. Wash with a good detergent.
3. Rinse with potable water.
4. Sanitize in a solution of 4 oz. of product per 7 gallons of water (200 ppm active solution). Immerse all utensils for 1 minute or longer if specified by government sanitary code.
5. Place sanitized utensils on a rack or drain board to air dry. Do not rinse or wipe.

## **SANITIZATION - FOOD CONTACT IMMOBILE SURFACES: (food processing equipment, counter tops, tables, picnic tables, appliances, stovetops and food work areas)**

1. Remove all gross food particles and soil by pre-flush or pre-scrape.
2. Clean all surfaces thoroughly using a good detergent or cleaner. Tilt movable surfaces for proper drainage. Rinse with potable water.
3. Mix 4 oz. of product per 7 gallons of water (200 ppm active solution).
4. Wet surfaces thoroughly for 1 minute.
5. Let surfaces drain and air dry. Do not rinse or wipe.
6. Fresh sanitizing solution should be prepared daily or more often if solution becomes diluted or soiled.

For mechanical operations: The prepared use solution may be used once for sanitizing and re-used for other purposes such as cleaning.

# BACK PANEL-NUMBER 1

## **CARPET SANITIZER AGAINST ODOR-CAUSING BACTERIA, FOR HOME, INSTITUTIONAL, INDUSTRIAL AND HOSPITAL USE**

This product sanitizes the carpet by controlling/reducing the growth of odor-causing bacteria. It can be used in industrial and institutional areas such as homes, motels, hotel chains, nursing homes and hospitals.

Vacuum carpet thoroughly prior to application. Mix 1 ounce of product 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 2 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. 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.

## **LAUNDRY ADDITIVE (RESIDUAL BACTERIOSTATIC AND RESIDUAL SELF SANITIZING ACTIVITY UNDER CONDITIONS OF HIGH RELATIVE HUMIDITY OR WET CONTAMINATION) AGAINST ODOR-CAUSING BACTERIA FOR INSTITUTIONAL, INDUSTRIAL AND HOSPITAL USE.**

This product sanitizes laundry such as bedspreads, sheets, pillowcases, diapers, towels, and other wet linens by controlling and/or reducing the growth of odor-causing bacteria. It can be used in industrial and institutional areas such as motels, hotel chains, nursing homes and hospitals. This product is used as an addition to the final rinse cycle.

Add 8 fluid ounces of this product per 100 lbs. of dry laundry to the final rinse cycle water (200 ppm). If the product is to be diluted prior to adding it to the final rinse cycle, use 1 ounce per gallon of water and then add to the washwheel in the final rinse cycle.

## BACK PANEL-NUMBER 2

### WATER DAMAGE RESTORATION

#### **SANITIZER AGAINST ODOR-CAUSING BACTERIA AND FUNGI FOR HOME, INSTITUTIONAL, INDUSTRIAL AND HOSPITAL USE**

This product is particularly suitable for use in water damage restoration situations to sanitize against odor causing bacteria on the following porous and semi-porous materials: carpets, carpet cushion, subfloors, drywall, trim and frame lumber, tackless strip and paneling. Using solutions recommended, saturate affected materials with enough product to remain wet for at least 10 minutes. Use proper ventilation.

**Sewer Backup & River Flooding:** During mitigation procedures, dilute 2-4 ounces of the product 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 course spray tip, before and after cleaning and extraction.

**Carpets, Carpet Cushions and Other Porous Materials such as Subfloors, 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. Dilute 2-4 ounces of the product 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 course spray tip, to fully saturate affected materials. Roll, brush or agitate into the materials and allow the materials to remain damp for 10 minutes. Follow with a thorough extraction. Dry rapidly and thoroughly.

**Special Instructions for Cleaning/Sanitizing Carpet Against Odor Causing Bacteria:** The product may be used in industrial and institutional areas such as homes, motels, hotels, chains, nursing homes, schools and hospitals. For use on wet-cleanable synthetic fibers. Do not use on wool. Vacuum carpet thoroughly prior to cleaning/sanitizing. Test fabric for color fastness. **For portable extraction units:** Mix 1 ounce of the product per gallon of water. **For truck mounted extraction machines:** Mix 24 ounces of the product per gallon of water and meter at 4 gallons per hour. **For rotary floor machines:** Mix 2 ounces of the product per gallon of water and apply at the rate of 300-500 sq. ft. per gallon. Do not mix this product with other cleaning products. Follow the cleaning procedures specified by the manufacturer of the cleaning equipment. After using the 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.

**MICROORGANISM LIST INSERT**

**This product is effective against the following microorganisms: Contact time is 10 minutes unless noted as below.**

**Isolates From AIDS Patients**

- 1 *Aspergillus niger*
- 2 *Candida albicans*
- 3 *Cryptococcus neoformans*
- 4 *Pseudomonas aeruginosa*
- 5 *Staphylococcus aureus*
- 6 *Streptococcus pneumoniae*

**Gram Positive Clinical Isolates**

- 7 *Clostridium difficile*
- 8 *Enterococcus faecalis*
- 9 *Micrococcus luteus*
- 10 *Staphylococcus aureus*
- 11 *Staphylococcus aureus* (Toxic shock)
- 12 *Staphylococcus epidermidis*
- 13 *Staphylococcus saprophyticus*
- 14 *Streptococcus haemolyticus*
- 15 *Streptococcus pyogenes*

**Gram Negative Clinical Isolates**

- 16 *Acinetobacter calcoaceticus* var. *anitratus*
- 17 *Acinetobacter calcoaceticus* var. *lwoffii*
- 18 *Bordetella bronchiseptica*
- 19 *Brevundimonas diminuta*
- 20 *Burkholderia cepacia*
- 21 *Enterobacter agglomerans*
- 22 *Enterobacter cloacae*
- 23 *Enterobacter gergoviae*
- 24 *Enterobacter liquefaciens*
- 25 *Escherichia coli* (Urinary)
- 26 *Escherichia coli* (Wound)
- 27 *Flavobacterium meningosepticum*
- 28 *Hafnia alvei*
- 29 *Klebsiella oxytoca*
- 30 *Klebsiella pneumoniae*
- 31 *Morganella morganii*
- 32 *Proteus mirabilis*
- 33 *Proteus vulgaris*
- 34 *Pseudomonas aeruginosa*
- 35 *Pseudomonas fluorescens*
- 36 *Pseudomonas pseudomallei*
- 37 *Pseudomonas putida*
- 38 *Pseudomonas stutzeri*
- 39 *Serratia marcescens*
- 40 *Sphingomonas paucimobilis*

**Other Bacteria**

- 41 *Actinobacillus pleuropneumoniae*
- 42 *Actinomyces pyogenes*
- 43 *Bacillus cereus*
- 44 *Bacteroides fragilis*
- 45 *Corynebacterium ammoniagenes* (*Brevibacterium ammoniagenes*)
- 46 *Bordetella bronchiseptica*
- 47 *Burkholderia picketK.ii*
- 48 *Campylobacter jejuni*
- 49 *Chryseomonas luteola*
- 50 *Corynebacterium pseudotuberculosis*
- 51 *Enterobacter aerogenes*
- 52 *Enterococcus faecalis*
- 53 *Enterococcus faecium*
- 54 *Enterococcus hirae*
- 55 *Escherichia coli*
- 56 *Escherichia coli strain 0157:H7*
- 57 *Escherichia vulneris*
- 58 *Haemophilus influenzae*
- 59 *Klebsiella pneumoniae*
- 60 *Listeria monocytogenes*
- 61 *Pasteurella haemolytica*
- 62 *Pseudomonas aeruginosa*
- 63 *Rhodococcus equi*
- 64 *Salmonella choleraesuis*
- 65 *Salmonella schottmuelleri*
- 66 *Salmonella typhi*
- 67 *Shigella dysenteriae*
- 68 *Staphylococcus aureus*
- 69 *Staphylococcus auricularis*
- 70 *Staphylococcus capitis*
- 71 *Staphylococcus hominis*
- 72 *Staphylococcus simulans*
- 73 *Stenotrophomonas maltophilia*
- 74 *Streptococcus equi var. equi*
- 75 *Streptococcus equi var. zooepidermicus*
- 76 *Streptococcus pneumoniae (PRSP)*
- 77 *Streptococcus pyogenes*
- 78 *Streptococcus salivarius*
- 79 *Yersinia enterocolitica*

**Pathogenic Fungi**

- 80 *Trichophyton mentagrophytes*

**Environmental Fungi**

- 81 *Aspergillus candidus*
- 82 *Aspergillus niger*
- 83 *Penicillium chermesinum*
- 84 *Penicillium oxalicum*
- 85 *Penicillium spinulosum*
- 86 *Ulocladium sp.*



**Antibiotic Resistant Gram Negative Bacteria**

- 87 *Pseudomonas aeruginosa* (Sulfa, Cefatoxime, Nitrofurantoin, Tetracycline, Amikacin, Ampicillin, Cephalothin and Bactine Resistant)
- 88 *Escherichia coli* (Ampicillin, Tetracycline, Penicillin and Sulfa Resistant)
- 89 *Klebsiella oxytoca* (Ampicillin, Sulfanilimide and Tetracycline Resistant)
- 90 *Klebsiella pneumorHae type 1* (Ampicillin, Tetracycline, Cephalothin and Sulfa Resistant)
- 91 *Morganella morganii* (Penicillin and Tetracycline Resistant)
- 92 *Enterobacter agglomerans* (Ampicillin and Sulfanilimide Resistant)
- 93 *Salmonella choleraesuis* (Antibiotic Resistant)
- 94 *Enterobacteriacia with extended beta-lactamase resistance* (Ampicillin and Piperacillin Resistant)

**Antibiotic Resistant Gram Positive Bacteria**

- 95 *Enterococcus faecalis* (Vancomycin Resistant-VRE)
- 96 *Enterococcus faecium* (Vancomycin Resistant-VRE)
- 96 *Staphylococcus aureus* (Methicillin-MRSA, Community Associated Methicillin Resistant - CA-MRSA PVL Positive, CA-MRSA Genotypes USA 300 and USA 400, Penicillin G, Penicillin, Ampicillin, Cefazolin, Cefatoxime, Chloramphenicol, Ciprofloxacin, Clindimycin, Erythromycin, Oxacillin, Rifampin, Tetracycline Resistant, Vancomycin Resistant - VRSA, Vancomycin Resistant Intermediate-VISA)
- 97 *Staphylococcus epidermidis* (Ampicillin and Drug Resistant)

**Human Viruses**

- 98 Adenovirus type 2
- 99 Cytomegalovirus
- 100 HBV (Hepatitis B Virus)
- 101 HCV (Hepatitis C Virus)
- 102 Herpes Simplex type 1 Virus
- 103 Herpes Simplex type 2 Virus
- 104 HIV-1 (AIDS Virus)
- 105 Human Coronavirus
- 106 Influenza A/Brazil Virus
- 107 Influenza A/Victoria (H3N2) Virus
- 108 Influenza A2-Asian Virus
- 109 Influenza B Virus (Allen strain)
- 110 Influenza C Virus (Taylor strain)
- 111 Measles Virus
- 112 Parainfluenza type 1
- 113 Poliovirus type 1 (Chat strain) 30 minutes contact time
- 114 Respiratory Syncytial Virus
- 115 Rotavirus
- 116 Vaccinia Virus

**Non-Human Viruses**

- 117 Avian Influenza/Turkey/Wisconsin Virus
- 118 Canine Coronavirus
- 119 Canine Distemper Virus
- 120 Canine Herpesvirus
- 121 Equine Herpesvirus
- 122 Equine Influenza
- 123 Feline Calicivirus
- 124 Feline Infectious Peritonitis
- 125 Infectious Bovine Rhinotracheitis (IBR)
- 126 Newcastle Disease Virus
- 127 Porcine Parvovirus
- 128 Porcine Respiratory & Reproductive Syndrome Virus (PRRSV)
- 129 Porcine Rotavirus
- 130 Pseudorabies Virus
- 131 Transmissible Gastroenteritis (TGE)
- 132 T1 bacteriophage
- 133 T4 bacteriophage
- 134 Vesicular Stomatitis Virus (VSV)
- 135 Bovine Viral Diarrhea Virus (BVDV)