

JUL 21 2003

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

Subject: CD 4.5 Detergent/Disinfectant  
EPA Registration No. 1839-47  
Application Date: 4/21/03  
Receipt Date: 4/22/03

Dear Mr. Isaac:

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

- . Update First Aid Statements and Precautionary Statements
- . Addition of expanded, specific environmental surfaces
- . Addition of Environmental Hazards Statement
- . Addition of Food Processing Premises Disinfection Directions
- . Addition of Food Service Establishment
- . Expanded Fungicidal Activity
- . Addition of Deodorization Directions
- . Addition of Terminal Sterilant Statement
- . Replace "mechanical sprayer" mode of delivery with "hand pump trigger sprayer"
- . Addition of Wisconsin State Division of Health
- . Addition of Directions for Sanitizing Food Processing Equipment, Utensils & Food, Contact Articles

**GENERAL COMMENTS**

1. On the left panel-1, under "To disinfect food service establishment food contact surfaces" insert the following statement: Before using this product, food products and packaging materials must be removed from area or carefully protected, after the word "water" and before the word "For".

A stamped copy of the accepted labeling is enclosed. Submit three (3) copies of your final printed labeling before distributing or selling the product bearing the revised labeling.

**CONCURRENCES**

|         |          |  |  |  |  |  |  |
|---------|----------|--|--|--|--|--|--|
| SYMBOL  | 75101    |  |  |  |  |  |  |
| SURNAME | A. Jones |  |  |  |  |  |  |
| DATE    | 7-17-03  |  |  |  |  |  |  |

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

Sincerely,



Velma Noble  
Product Manager 31  
Regulatory Management Branch 1  
Antimicrobial Division (7510C)

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# CD 4.5 Detergent/Disinfectant

|   |                |
|---|----------------|
| CLEANER ✓                               | DISINFECTANT ✓ |
| DETERGENT ✓                             | DEODORIZER ✓   |
| SANITIZER                               | *VIRUCIDE ✓    |
| FUNGICIDE (against pathogenic fungi)    |                |
| MILDEWSTAT (on hard inanimate surfaces) |                |

**ACTIVE INGREDIENTS**

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

KEEP OUT OF REACH OF CHILDREN

## DANGER

See side panels for additional precautionary statements.

EPA REG. NO. 1839-47  
EPA EST. NO. 1839-IL-01

**ACCEPTED**  
with **COMMENTS** ✓  
in EPA Letter Dated:

JUL 21 2003

**STEPAN COMPANY**  
22 West Frontage Road  
Northfield, IL 60093

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No. *1839-47*

NET CONTENTS

### DIRECTIONS FOR USE

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

CD 4.5 Detergent/Disinfectant has been designed to provide effective cleaning, deodorizing, disinfection, and sanitization, specifically for hospitals, nursing homes, schools, food processing plants and food service establishments where housekeeping is of prime importance in controlling the hazard of cross contamination.

This product, when used as directed, is formulated to disinfect inanimate, hard, non-porous surfaces: walls, floors, metal surfaces, stainless steel surfaces, glazed porcelain, glazed ceramic tile, plastic surfaces, bathrooms, shower stalls, bathtubs, sink tops, toilet bowls, cabinets, tables, chairs, telephones, and bed frames. For larger areas such as operating rooms, patient care facilities, and restrooms, this product is designed to provide both general cleaning and disinfecting.

This product 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 will sanitize previously cleaned and rinsed non-porous food contact surfaces such as tanks, chopping blocks, counter tops, drinking glasses and eating utensils.

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

This product is not 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 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 medical device surfaces.

**DISINFECTION** - To disinfect hard, non-porous, inanimate surfaces, add 2 ounces of this product per gallon of water. Apply solution with a mop, cloth, sponge or hand pump trigger sprayer so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, remove excess liquid.

**To disinfect toilet bowls:** flush toilet, add 2 ounces of this product 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.

For heavily soiled areas, a pre-cleaning step is required. Prepare a fresh solution for each use.

**To disinfect food processing premises:** floors, walls, and storage areas, add 2 ounces of this product per gallon of water. For heavily soiled areas, a pre-cleaning step is required. Apply solution with a mop, cloth, sponge or hand pump trigger 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.

*also using  
as product...*

**To disinfect food service establishment food contact surfaces:** countertops, appliances, tables, add 2 ounces of this product per gallon of water. For heavily soiled areas, a pre-cleaning step is required. Apply solution with a cloth, sponge or hand pump trigger 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 2 ounces per gallon of water, this product exhibits effective disinfectant activity against the organisms: Pseudomonas aeruginosa, Salmonella choleraesuis, Staphylococcus aureus and meets all requirements for hospital use.

**FUNGICIDAL ACTIVITY** - At the 2 ounces per gallon dilution, this product is also fungicidal against the pathogenic fungi, Trichophyton mentagrophytes (Athlete's Foot Fungus), 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 when used on environmental inanimate hard surfaces at 2 ounces per gallon of water exhibits effective virucidal activity against Influenza A<sub>2</sub>/Asian (representative of the common flu virus), Herpes simplex type 1 (causative agent of fever blisters), Adenovirus type 2 (causative agent of upper respiratory infections), and Vaccinia virus (representative of the pox virus group).

**MILDEWSTAT** - To control mold and mildew and the odors they cause on pre-cleaned, hard, non-porous surfaces add 2 ounces of this product per gallon of water. Apply solution with a cloth, mop or sponge 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.

**DEODORIZATION** - To deodorize, apply this product as indicated under the heading **DISINFECTION**.

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

**SANITIZATION** - 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 to 3.5 gallons of water. When used as directed, this product is an effective sanitizer against *Escherichia coli* and *Staphylococcus aureus*.

To sanitize immobile items such as tanks, chopping blocks, and counter tops, flood the area with a 200 ppm active quaternary solution making sure to wet all surfaces completely for at least 60 seconds. Remove, drain the use solution from the surface, and air dry. Prepare a fresh solution daily or more frequently as soil is apparent.

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, drain the use solution from the surface, and 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 quaternary to 200 ppm. **NO POTABLE WATER RINSE IS REQUIRED.** This product is an effective sanitizer when diluted in water up to 500 ppm hardness (CaCO<sub>3</sub>).

**DIRECTIONS FOR SANITIZING FOOD PROCESSING EQUIPMENT, UTENSILS, AND FOOD CONTACT ARTICLES REGULATED BY 21CFR sec 178.1010: b(16), c(11).**

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 per 3.5 gallons of water (200 ppm active quaternary). Articles that can be immersed in solution should remain in solution for 60 seconds. Articles too large for immersion should be thoroughly wetted by rinsing, spraying or swabbing.
5. Remove immersed items from solution to drain and then air dry. Non-immersed items should also be allowed to air dry.

**WISCONSIN STATE DIVISION OF HEALTH - DIRECTIONS FOR EATING ESTABLISHMENTS:**

1. Scrape and pre-wash utensils and glasses whenever possible.
2. Wash with a good detergent or compatible cleaner.
3. Rinse with potable water.
4. Sanitize in a solution of 2 ounces per 3.5 gallons of this product (200 ppm active quaternary). Immerse all utensils for at least two minutes or for contact time specified by governing sanitary code.
5. Place sanitized utensils on a rack or drain board to air dry.
6. Fresh sanitizing solution should be prepared at least daily or when visibly soiled or diluted.

**NOTE:** A clean potable water rinse following sanitization is not permitted under Section HSS 196.13 of the Wisconsin Administrative Code.

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

**WISCONSIN STATE DIVISION OF HEALTH - DIRECTIONS FOR EATING ESTABLISHMENTS**

1. Scrape and pre-wash utensils and glasses whenever possible.
2. Wash with a good detergent or compatible cleaner.
3. Rinse with potable water.
4. Sanitize in a solution from the Closed Loop Dilution Center (200 ppm active quaternary). Immerse all utensils at least two minutes or for contact time specified by governing sanitary code.
5. Place sanitized utensils on a rack or drain board to air-dry.
6. Fresh sanitizing solution should be prepared at least daily or when visibly soiled or diluted.

**NOTE:** A clean potable water rinse following sanitization is not permitted under Section HSS 196.13 of the Wisconsin Administrative Code.

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## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS.

### DANGER

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

### 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.

(Note: If container size is 5 gallons or greater, the following Environmental Hazards statement must be used.)

### ENVIRONMENTAL HAZARDS

This product 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 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.

### 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 then 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.

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.

