

**DIRECTIONS FOR USE**  
General Classification

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. BI-PHEX detergent/disinfectant has been designed specifically for hospitals, nursing homes, schools, food processing plants, food service establishments and other institutions where housekeeping is of prime importance.

**DISINFECTION** - To disinfect hard inanimate surfaces (such as walls, floors, table tops), add 1/2 ounce BI-PHEX detergent/disinfectant per gallon of water. Apply solution with mop, cloth, sponge or mechanical sprayer so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes and then let air dry.

To disinfect toilet bowls, flush toilet, add 1/2 ounce BI-PHEX detergent/disinfectant 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 and recommended. Prepare a fresh solution for each use.

**MILDEWSTAT** - To control mold and mildew on pre-cleaned, hard non-porous surfaces (such as floors, walls, table tops) add 1/2 ounce BI-PHEX 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 reappears.

**SANITIZATION** - To sanitize previously cleaned and rinsed non-porous food contact surfaces, prepare 200ppm active quaternary BI-PHEX solution by adding 1 ounce to 5 gallons of water.

To sanitize immobile items (such as tanks, chopping blocks, counter tops), flood the area with 200ppm BI-PHEX solution or apply with a cloth or sponge, making sure to wet all surfaces completely for at least 60 seconds. Let air dry. Prepare a fresh solution for each use.

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

**PRECAUTIONARY STATEMENTS**  
Hazard to Human and Domestic Animals  
**DANGER**

Keep out of Reach of Children. Causes severe eye and skin damage. Do not get in eyes, skin or on clothing. Harmful if swallowed. Wear goggles or face shield and rubber gloves when handling. Avoid contamination of food. Remove and wash contaminated clothing.

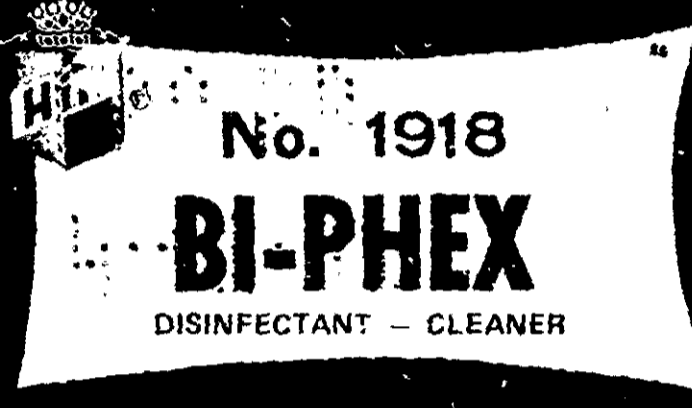
**STATEMENT OF PRACTICAL TREATMENT**

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash all contaminated clothing before reuse. If swallowed, drink milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Call a physician.

**NOTE TO PHYSICIAN**

Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

RECEIVED  
MAY 1 1981  
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 402-120



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

**ACTIVE INGREDIENTS:**  
n-Alkyl (60%C14, 36%C16, 5%C12, 5%C18) dimethyl benzyl ammonium chlorides . . . . . 6.25%  
n-Alkyl (C8%C12, 32%C14) dimethyl ethylamyl ammonium chlorides . . . . . 6.25%  
**INERT INGREDIENTS:** . . . . . 87.50%  
**TOTAL 100.00%**

**KEEP OUT OF REACH OF CHILDREN**  
**DANGER**

SEE SIDE PANELS FOR ADDITIONAL  
PRECAUTIONARY AND PRACTICAL TREATMENT

EPA REG. NO. 402-120  
EPA EST. NO. 402-GA-1

NET CONTENTS \_\_\_\_\_

**HILL** manufacturing co., inc.

1500 JOHNSBURY RD., N.E., ATLANTA, GA. 30315

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BI-PHEX is a phosphate based cleaning, disinfecting, and deodorizing agent. BI-PHEX is formulated to disinfect, deodorize, and clean. BI-PHEX is of prime importance in controlling odors.

BI-PHEX when diluted with water kills the organism Pseudomonas aeruginosa. BI-PHEX is formulated to disinfect, deodorize, and clean. BI-PHEX is of prime importance in controlling odors.

In addition, BI-PHEX disinfects garbage storage areas, emptying odors caused by microorganisms.

**DISINFECTION** - At 1/2 ounce per gallon of water kills the following:

- Pseudomonas aeruginosa
- Escherichia coli
- Klebsiella pneumoniae
- Salmonella schurtmulleri
- Salmonella choleraesuis
- Streptococcus salivarius

At this level the product is effective against all of the above organisms.

**VIRUCIDAL\* ACTIVITY**

per gallon of water exhibits activity against common flu virus, Herpes virus, and Adenovirus. Efficacy tests have demonstrated the presence of organic solids.

**MOLD AND MILDEWSTAT** - On hard non-porous inanimate surfaces.

**SANITIZATION** - When diluted with water to a concentration of 200ppm BI-PHEX is an effective sanitizer.

**DO NOT CONTAMINATE OPEN DUMPING ISLANDS. DO NOT REUSE EMPLOYERS.**

**PESTICIDE DISPOSAL** - Dispose of in a landfill approved for pesticide disposal.

**CONTAINER DISPOSAL** - Approved for pesticide disposal.



No. 1918

# BI-PHEX

DISINFECTANT - CLEANER

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

ACTIVE INGREDIENTS:  
n-Alkyl (60%C14, 30%C16, 5%C12, 5%C18) dimethyl  
benzyl ammonium chlorides . . . . . 6.25%  
n-Alkyl (68%C12, 32%C14) dimethyl ethylbenzyl  
ammonium chlorides . . . . . 6.25%  
INERT INGREDIENTS: . . . . . 87.50%  
TOTAL 100.00%

**KEEP OUT OF REACH OF CHILDREN  
DANGER**

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PRECAUTIONARY AND PRACTICAL TREATMENT

EPA REG. NO. 402-120  
EPA EST. NO. 402-GA-1

NET CONTENTS \_\_\_\_\_

**HILL** manufacturing co., inc.

1500 JOSEBORO RD., S.E., ATLANTA, GA. 30315

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BI-PHEX is a phosphate free concentrated detergent/disinfectant which provides effective cleaning, deodorizing, disinfection and sanitization. BI-PHEX detergent/disinfectant has been designed specifically for hospitals, nursing homes, schools, food processing plants and other institutions where housekeeping is of prime importance in controlling the hazard of cross contamination.

BI-PHEX when diluted at the rate of 1/2 ounce per gallon of water is an effective disinfectant against the organism *Pseudomonas aeruginosa* and meets all requirements for hospital use. When used as directed, BI-PHEX is formulated to disinfect inanimate hard surfaces such as walls, floors, sink tops, toilet bowls, tables, chairs, telephones and bed frames. For larger areas such as operating rooms, patient care facilities and rest-rooms, the product is designed to provide both general cleaning and disinfecting.

In addition, BI-PHEX deodorizes those areas which generally are hard to keep fresh smelling, such as garbage storage areas, empty garbage bins and cans, toilet bowls and any other areas which are prone to odors caused by microorganisms.

**DISINFECTION** - At 1/2 ounce per gallon dilution, BI-PHEX exhibits effective disinfectant activity against the following:

- |                                      |                                    |
|--------------------------------------|------------------------------------|
| <i>Pseudomonas aeruginosa</i> F7J-10 | <i>Brevibacterium ammoniagenes</i> |
| <i>Escherichia coli</i>              | <i>Streptococcus faecalis</i>      |
| <i>Xylebsiella pneumoniae</i>        | <i>Shigella dysenteriae</i>        |
| <i>Salmonella schuttmuelleri</i>     | <i>Staphylococcus aureus</i>       |
| <i>Salmonella choleraesuis</i>       | <i>Enterobacter aerogenes</i>      |
| <i>Streptococcus salivarius</i>      |                                    |

At this level the product is also fungicidal against the pathogenic fungi, *Trichophyton mentagrophytes*.

**VIRUCIDAL\* ACTIVITY** - The product when used on environmental inanimate hard surfaces at 1/2 ounce per gallon of water exhibits effective virucidal\* activity against Influenza A2 - Asian (representative of the common flu virus), Herpes simplex (causative agent of fever blisters and mononucleosis), Adeno virus type 5 (causative agent of upper respiratory infections), and Vaccinia virus (representative of the pox virus group).

Efficacy tests have demonstrated that BI-PHEX is an effective bactericide, fungicide, and virucide\* in the presence of organic soil (5% blood serum).

**MOLD AND MILDEWSTAT** - BI-PHEX prevents and controls mold and mildew and the odors they cause on hard non-porous inanimate surfaces.

**SANITIZATION** - When used for sanitization of previously cleaned food equipment or food contact items limit active quaternaries to 200ppm. At this level **NO POTABLE WATER RINSE** is required.

BI-PHEX is an effective sanitizer when diluted in water up to 600ppm hardness (CaCO3).

#### STORAGE AND DISPOSAL

**DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL  
OPEN DUMPING IS PROHIBITED  
DO NOT REUSE EMPTY CONTAINER**

**PESTICIDE DISPOSAL** - Pesticides that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place.

**CONTAINER DISPOSAL** - Triple rinse (or equivalent) and dispose in an incinerator or landfill approved for pesticide containers, or bury in a safe place.

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