

CENTER PANEL

FOUR FOLD 256
LEMON FRAGRANCE

Disinfectant-Cleaner-Sanitizer-Fungicide
Mildewstat-Virucide*-Deodorizer
Effective in hard water up to 400 ppm hardness
(calculated as CaCO₃) in the presence of 5% serum
contamination

ACCEPTED
with COMMENTS
to EPA Reg. No.

DEC 13 1982

Insecticide,
Fungicide, and
Mildewstat Act
as a Pesticide
under FIFRA Act
EPA Reg. No.
9232-21

ACTIVE INGREDIENTS

Octyl Decyl dimethyl ammonium chloride	6.510%
Diocetyl dimethyl ammonium chloride	3.255%
Didecyl dimethyl ammonium chloride	3.255%
Alkyl (C ₁₄ 50%, C ₁₂ 40%, C ₁₆ 10%) dimethyl benzyl ammonium chloride	8.680%

INERT INGREDIENTS

78.300%
100.000%

KEEP OUT OF REACH OF CHILDREN

DANGER

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 contaminated clothing before reuse.

If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.

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

SEE LEFT PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS

EPA Registration No.	9232- 21
EPA Establishment No.	9232-

NET CONTENTS:

Manufactured by
FEDERAL INTERNATIONAL CHEMICALS
1191 South Wheeling Road
Wheeling, IL 60090

FOR SALE, FOR USE, AND STORAGE BY
MAINTENANCE PERSONNEL ONLY

RIGHT PANEL

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

This product is recommended for use in hospitals, hotels, motels, industrial plants, schools, animal hospitals, and nursing homes. Specific areas for use are floors, walls, restrooms, examination rooms, cages and runways, kitchen and dining areas, laboratories, locker rooms, shower rooms, swimming pool facilities, exercise facilities, and waste receptacles.

It is bactericidal, fungicidal, mildewstatic, and virucidal when used in water up to 400 ppm hardness and in the presence of 5% horse serum contamination.

Proven effective for hospital use by the following tests:

A.O.A.C. Use Dilution Test (at 1/4 ounce per gallon of water)

Psuedomonas aeruginosa	Enterobacter aerogenes
Staphylococcus aureus	Salmonella shottmuelleri
Salmonella choleraesuis	Streptococcus faecalis
Escherichia coli	Shigella dysenteriae
Streptococcus pyogenes	Salmonella typhi
Klebsiella pneumoniae	Serratia marcescens
Brevibacterium ammoniagenes	

A.O.A.C. Fungicidal Test (at 1/4 ounce per gallon of water)

Trichophyton mentagrophytes (athletes' foot)

*Virucidal Performance (at 1/4 ounce per gallon of water)

Influenza A/Brazil Virus

DIRECTIONS FOR USE

GENERAL

Solutions should be applied to hard, non-porous surfaces with a cloth, mop, or mechanical spray device in order to thoroughly wet the surfaces. Surfaces must remain wet for the periods of time indicated below.

For heavily soiled areas a preliminary cleaning step is necessary. Prepare a fresh solution daily or when use solution becomes visibly dirty.

SPECIFIC

1. Disinfection: Add 1/4 ounce of product to 1 gallon of water. Treated surfaces must remain wet for 10 minutes.
2. Sanitizing: To sanitize porous and non-porous, non-food contact surfaces, add 1/4 ounce of product to 5 1/2 gallons of water. Treated surfaces must remain wet for 60 seconds.
3. Mold and Mildew Control: To inhibit growth, apply a solution of 1/4 ounce per gallon of water. Allow solution to dry on surface and repeat when growth returns.

ACCEPTED
with COMMENTS
by the Board
DEC 18 1992
EPA Reg. No. 7332-21

LEFT PANEL

This product was formulated to aid in reducing the cross-contamination in hospitals, schools, institutions, and industry. It has bactericidal, fungicidal, and virucidal properties that make it effective against a broad spectrum of microorganisms both Gram positive and Gram negative. As a one-step disinfectant cleaner, it will deodorize those odors caused by bacterial growth and inhibit the growth of mold and mildew when used as directed.

Precautionary Statements

Hazards to Humans and domestic animals

DANGER

Keep out of reach of children. Corrosive. Causes severe eye and skin damage. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Harmful or fatal if swallowed or absorbed through the skin. Avoid contamination of food.

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

Pesticide, spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies.

CONTAINER DISPOSAL

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

GENERAL

Consult Federal, State, or local disposal authorities for approved alternative procedures.

ACCEPTED
WATER TREATMENT
PLANT
DECEMBER 1962
Pesticide, spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies.
registered under EPA Reg. No.
9233 21

PRODUCT INFORMATION

FOUR FOLD 256

FEDERAL INTERNATIONAL CHEMICALS
1191 South Wheeling Road
Wheeling, IL 60090

SPECIFICATION FOR QUATERNARY BASED 1:256 CLEANER-DISINFECTANT

DESCRIPTION

A general purpose cleaner-disinfectant and deodorant formulated for routine maintenance that is bactericidal, fungicidal, mildew-static, and virucidal at a single use dilution of 1/4 ounce per gallon of water with a hardness of up to 400 ppm (calculated as CaCO₃) and in the presence of 5% serum contamination.

ACCREDITED
with...
for EPA...
DEC 18 1982
...
regulated under EPA Reg. No.
9232-21

MICROBIOLOGICAL PERFORMANCE PROPERTIES

1. The product shall be bactericidal at a use dilution of 1:256 (1/4 ounce per gallon of water) when tested with 60 carriers against Staphylococcus aureus ATCC #6538 and 60 carriers each against Salmonella choleraesuis ATCC #10708 and Pseudomonas aeruginosa ATCC #15442 according to the Use Dilution Method given in the OFFICIAL METHODS OF ANALYSIS of the A.O.A.C., 13th Edition, Section 4 - Disinfectants.

2. The product shall be fungicidal at a dilution 1:256 (1/4 ounce per gallon of water) when tested against Trichophyton mentagrophytes (athletes' foot) ATCC #9533 according to the Fungicidal Test method given in the OFFICIAL METHODS OF ANALYSIS of the A.O.A.C., 13th Edition, Section 4 - Disinfectants.

3. The product shall be virucidal at a dilution of 1:256 (1/4 ounce per gallon of water) when tested according to the current EPA accepted protocol against Influenza Virus A/Brazil, 11/78 (H1 N1) E-7 1/8/79.

4. The product shall be bactericidal against the following organisms when tested with 20 carriers according to the Use Dilution Method given in the OFFICIAL METHODS OF ANALYSIS of the A.O.A.C., 13th Edition, Section 4 - Disinfectants.

	<u>ATCC No.</u>	<u>ATCC No.</u>
Escherichia coli	11229	Streptococcus pyogenes, 12384
Enterobacter aerogenes	13048	Salmonella schottmuelleri 10719
Salmonella typhi	6539	Shigella dysenteriae 9380
Klebsiella pneumoniae	4352	Streptococcus faecalis 11700
Serratia marcescens	274	Brevibacterium ammoniagenes 6871

5. The product shall be fungistatic (mold and mildew control) at 1:256 (1/4 ounce per gallon of water) when tested against Aspergillus niger ATCC #6275 according to the method for evaluation of mildew-stats on hard surfaces given in the OFFICIAL METHODS OF ANALYSIS of the A.O.A.C., 13th Edition, Section 4 - Disinfectants.

6. This product shall sanitize at $\frac{1}{2}$ ounce per 5 $\frac{1}{2}$ gallons of water (150 ppm active quaternary) when tested against Staphylococcus aureus ATCC #6538 and Klebsiella pneumoniae ATCC #4352 according to current EPA protocol for sanitizers on both porous and non-porous surfaces.

7. $\frac{1}{2}$ ounce of this product per gallon of water shall yield 848 ppm active quaternary.

8. All disinfectant claims must be registered in conformance with the current regulations of the U.S. Environmental Protection Agency and the EPA Registration number must appear on all container labels.

PHYSICAL PROPERTIES

1. The pH of the product concentrate shall be 13.0.
2. The pH of the product diluted with water at 1:64 shall be 10.8.
3. The product shall remain chemically stable and germicidal to fulfill label claims when stored under normal storage conditions for a minimum of 1 year.
4. The nonionic detergent ingredient must be classified a biodegradable in conformance with currently acceptable test procedures.
5. The product shall be phosphate-free.
6. Detergency of the product in use solution shall be satisfactory in routine maintenance and equally effective in hard, soft, hot or cold water to lift, emulsify and hold soil in suspension.
7. The product shall impart a significant degree of antistatic properties when applied to plastic or fiber surfaces in use solution.
8. The product shall not be harmful to painted or varnished surfaces, fabrics, terrazzo or resilient flooring in use solution. Further, the use solution shall not be deleterious to wax or synthetic protective floor polishes.
9. The freeze/thaw stability of the undiluted product must display no separation through 3 cycles.
10. The product in use solution shall be odorless or display a pleasant mint fragrance.
11. The product shall display true deodorant properties against odors arising from surfaces contaminated by organic putrefaction such as vomit, urine, feces and putrifying food.
12. The product shall not contain arsenicals, formaldehydes, iodines, mercury compounds, phenols, abrasives or free acid.

ACCEPTED
 WITH COMMENTS
 In 1982

DEC 13 1982
 1.0000
 Federal Insecticide, Fungicide, and Rodenticide Act
 as amended by the FIFRA Act
 registered under EPA Reg. No.
 9232-21

TYPICAL SPECIFICATIONS

Weight per gallon	8.40 lbs
pH Undiluted	13.0
pH Diluted 1:64	10.8
Viscosity	Free flowing liquid
Color	Light straw
Odor	None or lemon
Foam	Moderate

ACCEPTED
with COMMENTS
In EPA File Dated:

DEC 13 1982

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

7232-21

- c. It should be noted that the EPA Establishment No. will be added at the time of printing.
- d. Correct the spelling of the word "Staphylococcus aureus" (middle right panel).
- e. Revise the statement (middle right panel):

(athletes' foot)

to read:

(athletes' foot fungus.)

- f. Add the statement (Virucidal Performance section):
on inanimate environmental surfaces.
- g. Revise the statement (middle right panel):

"...a preliminary cleaning step is necessary."

to read:

"...a preliminary cleaning step is required."

3. Make the following revisions to the product information bulletin before you release the product for shipment.

- a. Revise the statement (page 1, item #2):

(athletes' foot)

to read:

(athletes' foot fungus.)

- b. Revise the statement (page 2, item #6):

"This product shall sanitize at..."

to read:

"This product shall sanitize (non-100% contact surfaces) at..."

- c. Revise the statement (page 1, item #5):

"... according to the method for evaluation of mildew stains on hard surfaces given in the other methods of Analysis of the A.O.A.C. 13th Edition, Section 4 Disinfectants."

to read:

"... according to EPA test method for
evaluation of mildew stains on hard surfaces."

- d. Revise the statement (page 2, item #10):

"...display a pleasant mint fragrance"

to read:

"...display a pleasant lemon fragrance."

- e. Delete the statement (page 2 item #7 physical properties):

"...or fiber surfaces..."

this product is only for use on hard, nonporous surfaces.

- f. Delete the statement: (page 2, item #6, physical properties):

"...fabrics...."

This product is only for use on hard, nonporous surfaces.

4. The confirmatory data submitted for the above referenced product is acceptable and has been assigned the Accession Number 248570.

5. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

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

A stamped copy of the label is enclosed for your records.

James M. Lee
John H. Lee
Product Manager (31)
Disinfectants Branch
Registration Division (RS-767)

Enclosures