

ECONOMICAL

It just takes 1/2 ounce of Vindicator per gallon of water for regular cleaning and all disinfecting claims. Its economical use dilution saves unnecessary product inventory.

VERSATILE

Vindicator can be used effectively on any non-porous surface that water will not harm — floors, walls, ceilings, woodwork, furniture, fixtures.

ELIMINATES ODORS

Vindicator has a clean, pleasant fragrance coupled with mildewstat properties that actually destroys odors at their source. It leaves surfaces sparkling clean with a fresh scent.

NO HARMFUL RESIDUE

Vindicator is effective in water up to 400 ppm hardness in the presence of 5% serum contamination so it doesn't leave "Calcium Soap" or soap scum buildup to dull colors, catch dirt or create unsightly soap buildup. Your disinfecting cleaning operation is fast, easy and efficient so you save time, labor and money.

U.L. CLASSIFIED.

Vindicator is classified by Underwriter's Laboratories, Inc.* as to electrical conductivity when used on conductive floors and spontaneous heating, 941P. For use with vinyl type electrically conductive flooring. It's also U.L. classified as to slip resistant.

EPA REGISTERED

Vindicator is registered by the Environmental Protection Agency EPA REG. NO. 1658-26.

*Virucidal: Influenza A/Brazil, Herpes Simplex and Vaccinia Virus at .5 oz. per gallon use level on inanimate environmental surfaces.

TECHNICAL DATA - VINDICATOR

1. Nonvolatile matter.32.5% minimum	8. Flash point (T.C.C.)	142°F.
2. Color	Yellow	9. Freezing point	Below 30°F.
3. Odor	Lemon	10. Freeze-thaw stability	Stable after agitation
4. Clarity	Clear	11. pH, concentrate	12.9 - 13.9
5. Sediment	None	12. Germicide type	Quaternary (Four)
6. Viscosity, Gardner, 25°C.	A-3 - A-4	13. Synthetic detergent	Present
7. Weight per gallon, 25°C.	8.5 lbs. (3.86 kg.)	14. Soap	None

TEST METHODS:

- 1. ASTM D2834
- 5. ASTM D1290
- 7. ASTM D1475
- 8. ASTM D56
- 11. ASTM E70

APPROVALS:

CLASSIFIED BY UNDERWRITERS LABORATORIES, INC.® AS TO ELECTRICAL CONDUCTIVITY WHEN USED ON CONDUCTIVE FLOORS AND SPONTANEOUS HEATING, 941P. FOR USE WITH ELECTRICALLY CONDUCTIVE FLOORING OF THE VINYL TYPE. ALSO CLASSIFIED AS TO SLIP RESISTANCE.

EPA Reg. No. 1658-26
EPA Est. No. 1658-MO-1

582 (#164)

Manufactured by HILLYARD CHEMICAL COMPANY, St. Joseph, Missouri 64502 U.S.A.

LABEL INFORMATION

ACCEPTED
with COMMENTS
to EPA Label Panel

APR 07 1983

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
1658-26

EPA Reg. No.
1668 26



EPA Est. No.
1668 MO 1

For Sale For Use And Storage
By Maintenance Personnel Only

CLASSIFIED BY UNDERWRITERS LABORATORIES
INC. AS TO ELECTRICAL CONDUCTIVITY WHEN
USED ON CONDUCTIVE FLOORS AND SPONTANEOUS
HEATING 941P FOR USE WITH ELECTRICALLY
CONDUCTIVE FLOORING OF THE VINYL TYPE
ALSO CLASSIFIED AS TO SLIP RESISTANCE

Precautionary Statements

Hazards to Humans and domestic animals

DANGER

KEEP OUT OF REACH OF CHILDREN

Corrosive. Causes 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 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 RINSE WATER THAT CANNOT BE USED ACCORDING TO LABEL INSTRUCTIONS MUST BE DISPOSED OF ACCORDING TO FEDERAL OR APPROVED STATE PROCEDURES UNDER SUBTITLE C OF THE RESOURCE CONSERVATION AND RECOVERY ACT.

CONTAINER DISPOSAL

TRIPLE RINSE (OR EQUIVALENT) THEN OFFER FOR RECYCLING OR RECONDITIONING OR DISPOSE OF IN A SANITARY LANDFILL OR BY INCINERATION IF ALLOWED BY STATE AND LOCAL AUTHORITIES.

GENERAL

CONSULT FEDERAL, STATE OR LOCAL DISPOSAL AUTHORITIES FOR APPROVED ALTERNATIVE PROCEDURES.

#164

VINDICATOR

Disinfectant-Cleaner-Sanitizer-Fungicide-Mildewstat-Virucide*
Deodorizer for Hospitals, Institutional and Industrial Use
Effective in hard water up to 400 ppm hardness (calculated as CaCO₃) in the presence of 5% serum contamination.

ACTIVE INGREDIENTS:

Cetyl decyl dimethyl ammonium chloride 6.510%
Dioctyl dimethyl ammonium chloride 3.255%
Didecyl dimethyl ammonium chloride 3.255%
Alkyl (C₁₄, 50%, C₁₂, 40%, C₁₆, 10%)
dimethyl benzyl ammonium chloride 8.680%

INERT INGREDIENTS:

78.300%

TOTAL 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, gelatine 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

Manufactured by
HILLYARD CHEMICAL COMPANY, St. Joseph, Missouri 64502

1668 MO 1

DIRECTIONS FOR USE

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

Vindicator is a proven "one-step" disinfectant-cleaner-sanitizer-fungicide-mildewstat-virucide which is effective in water up to 400 ppm hardness in the presence of 5% serum contamination. Apply Vindicator to walls, floors and other hard (non-porous) surfaces such as tables, chairs, countertops, porcelain, and bedframes with a cloth, mop or mechanical spray device so as to thoroughly wet surfaces. For heavily soiled areas, a preliminary cleaning is required. Prepare a fresh solution daily or when use solution becomes visibly dirty.

Disinfection - To disinfect hard, non-porous surfaces, add 0.5 oz. per gallon of water. Treated surfaces must remain wet for 10 minutes. The activity of Vindicator has been evaluated in the presence of 5% serum and 400 ppm hard water by the AOAC use dilution test and found to be effective against a broad spectrum of gram negative and gram positive organisms as represented by:

- | | |
|-------------------------|-----------------------------|
| Pseudomonas aeruginosa | Salmonella schottmuelleri |
| Staphylococcus aureus | Streptococcus faecalis |
| Salmonella choleraesuis | Shigella dysenteriae |
| Escherichia coli | Brevibacterium ammoniagenes |
| Streptococcus pyogenes | Salmonella typhi |
| Klebsiella pneumoniae | Serratia marcescens |
| Enterobacter aerogenes | |

Fungicidal Performance - Vindicator is an effective fungicide against Trichophyton mentagrophytes (the athlete's foot fungus) when used on surfaces in areas such as locker rooms, dressing rooms, shower and bath areas, exercise facilities, etc., at 0.5 oz./gallon.

Mold and Mildew Control. At 0.5 oz./gallon, Vindicator will effectively inhibit the growth of mold and mildew and the odors caused by them when applied to hard, non-porous surfaces (as indicated in general instructions above). Allow to dry on surface and repeat when mildew growth returns.

Virucidal Performance. At 0.5 oz. per gallon use level, Vindicator was evaluated in the presence of 5% serum and 400 ppm hard water and found to be effective against the following viruses: Influenza A/Brazil, Herpes Simplex and Vaccinia on inanimate environmental surfaces.

Sanitizing-Non-Food Contact Surfaces (such as floors, walls, tables, etc.). At 0.5 oz. per 5.5 gallon use level, Vindicator is an effective sanitizer against Staphylococcus aureus and Klebsiella pneumoniae on hard porous and non-porous environmental surfaces. Treated surfaces must remain wet for 60 seconds.

GERMICIDAL-DETERGENT EVALUATION CHART

(Use the space provided to compare germicidal-detergents).

PRODUCT NAME	HILLYARD VINDICATOR	<hr/>	<hr/>	<hr/>
EPA REGISTRATION NUMBER	1658-26	<hr/>	<hr/>	<hr/>
USE DILUTION (Per label information)	1:256	<hr/>	<hr/>	<hr/>
EFFICIENCY (Per label information)				
GERMICIDAL QUALIFICATIONS	Yes	<hr/>	<hr/>	<hr/>
HARD WATER EFFECTIVENESS (as CaCO ₃)	Yes (400 ppm)	<hr/>	<hr/>	<hr/>
5% BLOOD SERUM	Yes	<hr/>	<hr/>	<hr/>
TUBERCULOCIDAL QUALIFICATIONS	No	<hr/>	<hr/>	<hr/>
HARD WATER EFFECTIVENESS (as CaCO ₃)	No	<hr/>	<hr/>	<hr/>
5% BLOOD SERUM	No	<hr/>	<hr/>	<hr/>
FUNGICIDAL QUALIFICATIONS	Yes	<hr/>	<hr/>	<hr/>
HARD WATER EFFECTIVENESS (as CaCO ₃)	Yes (400 ppm)	<hr/>	<hr/>	<hr/>
5% BLOOD SERUM	Yes	<hr/>	<hr/>	<hr/>
VIRUCIDAL QUALIFICATIONS	Yes	<hr/>	<hr/>	<hr/>
HARD WATER EFFECTIVENESS (as CaCO ₃)	Yes (400 ppm)	<hr/>	<hr/>	<hr/>
5% BLOOD SERUM	Yes	<hr/>	<hr/>	<hr/>
SPRAYABLE (Per label information)	Yes	<hr/>	<hr/>	<hr/>
TOXICOLOGY (Concentrate)				
CAUSES EYE DAMAGE	Yes	<hr/>	<hr/>	<hr/>
CAUSES SKIN DAMAGE	Yes	<hr/>	<hr/>	<hr/>
ORALLY TOXIC (Fatal if swallowed)	Yes	<hr/>	<hr/>	<hr/>
CONTENTS (Per label information)				
PARA-TERTIARY-AMYLPHENOL CONTENT*	N.A.	<hr/>	<hr/>	<hr/>
PARA-TERTIARY-BUTYLPHENOL CONTENT*	N.A.	<hr/>	<hr/>	<hr/>
QUATS (Number)	4 (21.7%)	<hr/>	<hr/>	<hr/>
ENVIRONMENTAL CONSIDERATIONS				
DETERGENT BIODEGRADABLE	Yes	<hr/>	<hr/>	<hr/>
PHOSPHATE CONTENT	None	<hr/>	<hr/>	<hr/>
FRAMMABLE LIQUID				
TAG CLOSED CUP FLASH POINT	Yes (142°F.)	<hr/>	<hr/>	<hr/>
pH CONCENTRATE	12.9 - 13.9	<hr/>	<hr/>	<hr/>
U. L. CLASSIFIED	Yes	<hr/>	<hr/>	<hr/>
(For hazardous locations-conductive floors)				
SLIP RESISTANCE (Per label information)	Yes (U. L.)	<hr/>	<hr/>	<hr/>

* THESE ARE THE PHENOLS which Dr. Guinter Kahn, MD of the University of Colorado Medical Center indicates are probable causative agents in the depigmentation of skin ("Depigmentation of Skin Caused by Phenolic Detergent Germicides" - Arch Derm.-Vol. 102, August 1970).

30 North Main Street
St. Joseph, Mass. 01862



Hillyard Chemical Company
Telephone: 233-1331



GERMICIDAL-DETERGENT EVALUATION CHART

(Use the space provided to compare germicidal detergents).

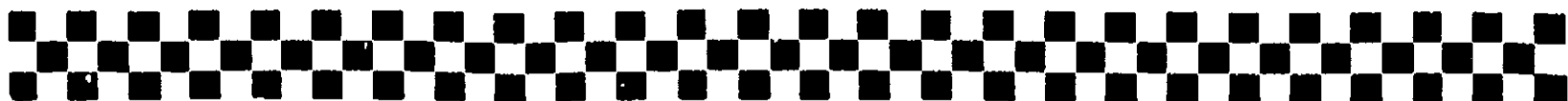
PRODUCT NAME	HILLYARD VINDICATOR	<hr/>	<hr/>	<hr/>
EPA REGISTRATION NUMBER	1658-26	<hr/>	<hr/>	<hr/>
USE DILUTION (Per label information)	1:256	<hr/>	<hr/>	<hr/>
EFFICIENCY (Per label information)				
GERMICIDAL QUALIFICATIONS	Yes	<hr/>	<hr/>	<hr/>
HARD WATER EFFECTIVENESS (as CaCO ₃) 5% BLOOD SERUM	Yes (400 ppm) Yes	<hr/>	<hr/>	<hr/>
TUBERCULOCIDAL QUALIFICATIONS	No	<hr/>	<hr/>	<hr/>
HARD WATER EFFECTIVENESS (as CaCO ₃) 5% BLOOD SERUM	No No	<hr/>	<hr/>	<hr/>
FUNGICIDAL QUALIFICATIONS	Yes	<hr/>	<hr/>	<hr/>
HARD WATER EFFECTIVENESS (as CaCO ₃) 5% BLOOD SERUM	Yes (400 ppm) Yes	<hr/>	<hr/>	<hr/>
VIRUCIDAL QUALIFICATIONS	Yes	<hr/>	<hr/>	<hr/>
HARD WATER EFFECTIVENESS (as CaCO ₃) 5% BLOOD SERUM	Yes (400 ppm) Yes	<hr/>	<hr/>	<hr/>
SPRAYABLE (Per label information)	Yes	<hr/>	<hr/>	<hr/>
TOXICOLOGY (Concentrate)				
CAUSES EYE DAMAGE	Yes	<hr/>	<hr/>	<hr/>
CAUSES SKIN DAMAGE	Yes	<hr/>	<hr/>	<hr/>
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PARA-TERTIARY-BUTYLPHENOL CONTENT*	N.A.	<hr/>	<hr/>	<hr/>
QUATS (Number)	4 (21.7%)	<hr/>	<hr/>	<hr/>
ENVIRONMENTAL CONSIDERATIONS				
DETERGENT BIODEGRADABLE PHOSPHATE CONTENT	Yes None	<hr/>	<hr/>	<hr/>
FRAMMABLE LIQUID		<hr/>	<hr/>	<hr/>
JAG CLOSED CUP FLASH POINT	Yes (142°F.)	<hr/>	<hr/>	<hr/>
pH CONCENTRATE	12.9 - 13.9	<hr/>	<hr/>	<hr/>
U. L. CLASSIFIED (For hazardous locations-conductive floors)	Yes	<hr/>	<hr/>	<hr/>
SLIP RESISTANCE (Per label information)	Yes (U. L.)	<hr/>	<hr/>	<hr/>

* THESE ARE THE PHENOLS which Dr. Guinter Kahn, MD of the University of Colorado Medical Center indicates are probable causative agents in the depigmentation of skin ("Depigmentation of Skin Caused by Phenolic Detergent Germicides" - Arch Derm--Vol. 102, August 1970).

302 North Fourth Street
St. Louis 1, Missouri 64602



Hillyard Chemical Company
Telephone: 816-231-1511



07 APR 1983

Hillyard Chemical Company
302 N. Fourth Street
P.O. Box 907
St. Joseph, MO 64502

Attention: Mr. James G. Poss

Gentlemen:

Subject: Vindicator
EPA Registration No. 1658-26
Your Submission Dated February 7, 1983

The Product Information Sheet referred to above, submitted in connection with registration under FIFRA is acceptable, provided that you:

1. Make the labeling changes listed below before you release the product for shipment ~~under~~ bearing the amended labeling:
 - (a) Replace the word "Infection" with the word "Contamination" as "...Controls/reduces the hazard of cross contamination from environmental surfaces."
 - (b) On the first page, in the "Sprayable" paragraph, delete the final phrase "without rinsing" because this would confuse, ~~if~~ not nullify, the U.S.D.A. A-4 classification.
 - (c) Replace the word "Eliminates" with the word "Controls" in the heading "Eliminates Odors." Also, in these paragraphs, delete the word "Fresh" in "...Fresh (floral) scent."
 - (d) On the "Germicidal Detergent Evaluation Chart" delete the "Para Tertiary Amylphenol" and "Para Tertiary Butyl Phenol" categories, and the attendant paragraph at the bottom of the page, because we cannot allow product comparison comments.
 - (e) To prevent misuse of your product on the human body, add the phrase "on hard environmental surfaces" to the heading "Kills Athletes Foot Fungi."
 - (f) Delete the word "Harmful" from the heading "No Harmful Residue."

CONCURRENCES							
SYMBOL ▶							
ALIAS NAME ▶							
DATE ▶							