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Advantage 128



**EFFECTIVE
 FOR USE IN
 HOSPITALS AS
 STAPHYLOCIDAL
 PSEUDOMONACIDAL
 BACTERICIDAL
 FUNGICIDAL
 TUBERCULOCIDAL
 VIRUCIDAL***



**IN SOFT OR HARD WATER
 (A.O.A.C. - 500 ppm HARDNESS AS
 CALCIUM CARBONATE) RETAINS EFFEC-
 TIVENESS OF ELECTRICALLY CONDUCTIVE
 FLOORS!**



FIDELITY INDUSTRIAL CHEMICALS
 1000 WEST 10TH AVENUE, NEW YORK, N.Y. 10018
 *See Bulletin FIC-100 for details. New Jersey and other states.

COMPLETE SANITATION SYSTEM IN ONE OPERATION

A soapless, synthetic detergent system with broad spectrum kill of most pathogenic micro-organisms both gram positive and gram negative. For outstanding cleaning and disinfecting in one operation.

Provides "hospital quality of sanitation" to all institutions on which the institutional sanitarian can base an effective program.

SUPPORTING DATA



Staphylocidal - Pseudomonacidal - Bactericidal
 Fungicidal - Tuberculocidal - Virucidal *
 At one single dilution 1:128 (1oz./gal.) in soft or hard water (A.O.A.C. 500 ppm hardness as Ca Co₃).
 Retains effectiveness of electrically conductive floors.

OUTSTANDING

- Triple phenolic system delivers broad spectrum kill in natural water up to 500 ppm hardness
- Triple synthetic detergent system provides superior cleaning in soft or hard water
- Produces a clear use solution (1:128) in up to 400 ppm water hardness to eliminate formation of undesirable film, scum or salts
- Effectively deodorizes surfaces contaminated by bacterial putrefaction.
- Contains biodegradable detergents and is non-flammable
- Safe for use on electrically conductive floors
- Will not dull shiny floor finishes

CHEMICAL AND PHYSICAL PROPERTIES

Detergency - Blend of 3 synthetic detergents lift, emulsify and hold soil in suspension.
Deodorizing - Deodorizes surfaces by killing the vegetative forms of putrefactive bacteria.
Toxicity - Skin and eye tests on rabbits displayed no irritation at 1:64 aqueous dilution, however, the use of protective gloves is recommended for manual application. Concentrate produces eye damage and severe skin irritation.
Use On Conductive Floors - Examination proved no adverse effect.
Film Residue - No scum or other unsightly residue.
Flammability - Non-flammable.
pH Diluted 1:128 - 9.8 ± 0.2

Odor - Pleasant
Color - Medium amber
Discoloration - Non-staining to ordinary surfaces
Solubility - Excellent in hot, cold, hard or soft water
Cold Stability - No separation, 60 days at 34°F
Freeze/Thaw Stability - No separation, 3 cycles
Heat Stability - No separation, 60 days at 125°F
Corrosion Factor - Non-corrosive to metals in normal use exposure
Foam Test - Moderate foam
Viscosity - Free flowing liquid
Weight Per Gallon - 8.67 ± 0.05
Biodegradability - Detergent base classified biodegradable

DIRECTIONS FOR USE:

HOSPITAL:

1. To clean, disinfect and deodorize walls, floors, and other similar non-porous surfaces, use 1 oz. of Cleaner-Disinfectant per gallon of water.
2. To clean, disinfect and deodorize cement block, scarred furniture and other similar porous and heavily contaminated surfaces, use 1 oz. of Cleaner-Disinfectant per gallon of water with special attention given to thorough cleaning.
3. To fog an unoccupied room as an adjunct either preceding or following regular cleaning and disinfecting procedures use a dilution of 1:42 or 3 oz. Cleaner-Disinfectant per gallon of water per average size room. Allow minimum of 2 hours after fogging has stopped before entering room.
4. *Virucidal activity at 1 oz. per gallon disinfects Influenza A₂ (Asian Flu), carried on inanimate environmental surfaces.

GENERAL:

1. To clean, disinfect and deodorize walls, floors, tables, drinking fountains, sinks, refrigerators, stoves, restroom fixtures, telephone booths, bird cages, kennels, and garbage cans. Remove gross filth and heavy soil deposits from areas such as kennels and bird cages prior to application of Cleaner-Disinfectant solution. Wash with solution containing 1 oz. of Cleaner-Disinfectant per gallon of water. All food contact surfaces must be rinsed with potable water before reuse.
2. To clean and disinfect such articles as combs, brushes, razors, scissors, instruments and rubber goods. Wipe articles clean and soak for ten minutes in a solution containing 1 oz. of Cleaner-Disinfectant per gallon of water.
3. To disinfect fabrics such as sheets, linens, aprons and uniforms. Soak for 10 minutes in solution containing 1 oz. of Cleaner-Disinfectant per gallon of water.
4. To clean grease laden or grossly contaminated surfaces use 2 oz. of Cleaner-Disinfectant per gallon of water.

METHODS OF APPLICATION:

- To guarantee complete disinfection and satisfactory cleaning, apply a fresh clean solution of Cleaner-Disinfectant in each new area to be cleaned.
- Clean solution should be in contact with surface for a period of 10 minutes if sprayed, wet mopped or sponged manually.
- To insure clean solution during entire operation, these two methods of application are recommended:
 1. Spray, followed by mopping or brushing and wet vacuum pick-up of excess dirty solution.
 2. Mop, using two buckets. Wring excess dirty solution into empty bucket and return wrung out mop to fresh solution bucket.



BACTERICIDAL EFFICIENCY AT 1:128 (1 oz/gal)

SUPPORTING DATA

PROCEDURE: The sample was tested in conformance with the Use Dilution Test Method, A.O.A.C., 11th Edition, Chapter 4, 4.007-4.011 adding the criterion of hard water by diluting the sample with A.O.A.C. synthetic hard water of 500 ppm hardness as calcium carbonate.

CONCLUSION: Complete kill was obtained when the product is used at the recommended use dilution of 1:128 on both the official E.P.A. Required Bacteria and other clinically significant bacteria.

ATCC#	Bacteria	Pos Tubes	Neg Tubes	Gram Reaction	Appearance of Bacteria	Other Clinically Significant Bacteria
E.P.A. Required Bacteria						
6538	<i>Staphylococcus aureus</i>	0	60	-	coccus	14154 <i>Staphylococcus aureus</i> , antibiotic resistant
PRD 10						6539 <i>Salmonella typhosa</i>
15442	<i>Pseudomonas aeruginosa</i>	0	30	-	rod	11229 <i>Escherichia coli</i>
10708	<i>Salmonella choleraesuis</i>	0	30	-	rod	8043 <i>Streptococcus fecalis</i>
						8427 <i>Proteus vulgaris</i>
						6303 <i>Diplococcus pneumoniae</i>
						9342 <i>Streptococcus hemolyticus</i>

• Positive tubes indicate growth and lack of kill
 • Negative tubes indicate no growth and complete kill

Further germicidal activity that it was obtained through duplication of the above tests on the E.P.A. Required Bacteria on two additional batch samples.

In addition chemical and germicidal stability has been confirmed by successfully testing 60 day shelf life samples against *S. aureus* 6538.

PROCEDURE: The phenol coefficient of the sample was determined in conformance with the Phenol Coefficient Method A.O.A.C., 11th Edition, Chapter 4, 4.001-4.006 adding the criterion of hard water by diluting the sample with A.O.A.C. synthetic hard water of 500 ppm hardness as calcium carbonate. The bacteria employed were

Staphylococcus aureus ATCC 6538 and *Salmonella typhosa* ATCC 6539

CONCLUSION: Duplicate test results support the conservative phenol coefficient claims of *Salmonella typhosa* 11:1 and *Staphylococcus aureus* 10:0

Sample Identification	Organism	Critical Killing Dilution Sample	Phenol	Phenol Coefficient
Sample 1	<i>S. aureus</i> ATCC No. 6538	1:805	1:70	11.5
Sample 2	<i>S. aureus</i>	11:605	1:60	10.0

FUNGICIDAL EFFICIENCY

PROCEDURE: The fungicidal activity of the sample was determined in conformance with the Fungicidal Test A.O.A.C., 11th Edition, Chapter 4, 4.018-4.022 adding the additional criterion of hard water by diluting the sample with A.O.A.C. synthetic hard water of 500 ppm hardness as calcium carbonate. The fungus employed was *Trichophyton merdignale* ATCC 9533 (N14640)

CONCLUSION: Duplicate test results demonstrate complete kill at a use dilution of 1:154 providing a margin of safety when the product is

used at the recommended use dilution of 1:128

Sample Identification	Critical Killing Dilution Sample	Phenol
Sample 1	1:154	1:50
Sample 2	1:203	1:60

TUBERCULOCIDAL EFFICIENCY AT 1:128 (1 oz/gal)

PROCEDURE: The tuberculocidal activity was determined in conformance with the A.O.A.C., 11th Edition, Chapter 4, 4.048-4.050 adding the criterion of hard water by diluting the sample with A.O.A.C. synthetic hard water of 500 ppm hardness as calcium carbonate. The

test organism used was *Mycobacterium tuberculosis* var. bovis (BCG)

CONCLUSION: Complete kill was obtained when the product is used at the recommended use dilution of 1:128

Sample Identification	Dilution	Carriers Exposed	Number of Carriers Showing Growth in Medium	Total Number of Positive Carriers*
			#1 #2 #3	
Sample 1	1:128	10	0 0 0	0
Phenol	1:50	10	0 0 0	0

Medium #1 Middlebrook 7H9 broth as specified in Section 4.048 of the Official Method of Analysis of the A.O.A.C.
 Medium #2 Modified Proskauer Beck, reference as #1 above
 Medium #3 Kirchner's Medium Difco, reference as #1 above
 * Total number of carriers showing growth in one or more subculture media

VIRUCIDAL EFFICIENCY AT 1:128 (1 oz/gal)

PROCEDURE: Virucidal potency was determined by following the outline of the United States Food & Drug Administration for evaluation of bactericidal potency, except that the activity of Influenza Type A (Human Subtype A₂ Taiwan Strain) was determined in 9 day chick embryos and Herpes Simplex WI 38 was determined in Hep 2 (Epidermoid carcinoma, larynx human). An additional criterion of

water hardness was added by diluting the sample with A.O.A.C. synthetic hard water of 500 ppm hardness as calcium carbonate

CONCLUSION: Complete virucidal inactivation was obtained in duplicate tests when product was used at the recommended use dilution of 1:128 on both Influenza Type A and Herpes Simplex WI 38

Sample Identification	Dilution	No of Carriers Per Test	No Embryos Inoculated Per Test	Deaths Within 24 Hours	Total Survival
Sample #1	1:128	10	(4)	0	60
Sample #2	1:128	10	(4)	1**	59

* LD₅₀ is lethal dose (1/50) of the egg embryos
 ** Considered to be non specific death due to trauma of inoculation

Sample Identification	Dilution	No of Carriers Per Test	No Tissue Culture Flask Inoculated Per Test	Number Showing CPE**
Sample #1	1:128	10	60	0
Sample #2	1:128	10	60	0

* TCID is Tissue Culture Infectious Dose
 ** CPE is Cytopathic Effect

USE ON ELECTRICALLY CONDUCTIVE FLOORS

PROCEDURE: The recommended use solution of 1:128 (1 oz/gal) was applied by multiple wet mopping technique without rinsing to conform with the requirements of the National Fire Protection Association, Bulletin No. 56. Following wet mopping applications the floor was allowed to air dry and electrical resistance readings were

taken
CONCLUSION: Electrical resistance readings, taken following multiple wet mopping applications were in the conformance "safe range" of 25,000 ohms to 1,000,000 ohms set by the National Fire Protection Association

TOXICITY
SKIN IRRITATION.

PROCEDURE The primary skin irritative potential of a 1:64 aqueous dilution was evaluated in accordance with the Regulations for the Enforcement of the Federal Insecticide, Fungicide and Rodenticide Act, Interpretation 18 (Revised *Federal Register*, Sept. 17, 1964) Section 362.116(c).

CONCLUSION Following patch application of a 1:64 aqueous dilution of the sample, the Primary Irritation Index was found to be 0. Concentrate produces severe skin irritation.

EYE IRRITATION

PROCEDURE The eye irritation potential of a 1:64 aqueous dilution of the test material was evaluated in accordance with the above cited Regulations, Section 362.116(d).

CONCLUSION Eye application of 0.1 milliliter of a 1:64 aqueous dilution of the sample produced no eye irritative effects in any of the six test rabbits. Concentrate produces eye damage.

ORAL TOXICITY

PROCEDURE The acute oral toxicity of this product at 2 times the concentrate strength shown on the label was determined in accordance with the above cited Regulations, Section 362.116(b).

CONCLUSION The acute oral LD₅₀ for male albino rats was found to be 2.71 ml/kg of body weight and 3.16 ml/kg of body weight for female albino rats.

HOSPITAL USE AREAS AND SPECIFIC RECOMMENDATIONS

AUTOPSY ROOM — Mop floors and clean tables and equipment by sponge or spray with a solution of 1 oz. Cleaner-Disinfectant per gallon of water. For persistent odors apply solution of 1 oz. Cleaner-Disinfectant per gallon of water to problem area. To cold disinfect instruments, clean and immerse in solution of 1 oz. Cleaner-Disinfectant per gallon of water for 10 minutes.

EMERGENCY ROOM — Mop floors and clean and disinfect hard surface areas with a solution of 1 oz. of Cleaner-Disinfectant per gallon of water. Wipe continuous use equipment with a solution of 1 oz. Cleaner-Disinfectant per gallon of water.

CAFETERIA/DINING ROOM/COFFEE SHOP/KITCHEN — Mop floors with a solution of 1 oz. Cleaner-Disinfectant per gallon with special attention being given to heavy traffic areas. Wipe tables, chairs, counters and other working areas with a solution of 1 oz. Cleaner-Disinfectant per gallon. All food contact surfaces must be rinsed with potable water before reuse. Scrub garbage cans and other refuse containers to disinfect and remove offensive odors with a solution of 1 oz. Cleaner-Disinfectant per gallon of water.

FOGGING — Fogging as an adjunct to routine disinfection—for hard to reach areas as an adjunct preceding regular cleaning & disinfecting procedures, surfaces & objects can be treated by fogging unoccupied rooms with a dilution of 1:42 or 3 oz. Cleaner-Disinfectant in a gallon of water. For each sickroom approximately one gallon of fogging solution should be dispensed from a rotating fogger mounted on a 30 to 36 inch high table with the nozzle pointed upwards to a maximum angle after which the operator should allow a minimum of 2 hours after fogging has stopped before entering the room.

ISOLATION UNITS — Concurrent damp mopping of the floor area should be carried out with a solution of 1 oz. Cleaner-Disinfectant per gallon of water. In preparing a room for a new patient fogging is often times recommended as an adjunct to regular cleaning and disinfecting.

LABORATORIES — Scrub or wipe equipment and floors with a solution of 1 oz. Cleaner-Disinfectant per gallon. Immerse instruments, animal cages and other apparatus in a solution of 1 oz. of Cleaner-Disinfectant per gallon water for 10 minutes.

LAUNDRY CHUTE — Spray inside of chute twice each month by employing a garden type sprayer containing a solution of 1 oz. Cleaner-Disinfectant per gallon of water.

LAUNDRY — Presoak soiled linens to reduce incidence of contamination for a minimum of 10 minutes in a solution of 1 oz. Cleaner-Disinfectant per gallon of water.

Presoaking will serve as an adjunct to the regular laundering operation in reducing the micro-organism population.

MATERNITY, NURSERY AND PEDIATRIC WARDS — Mop floors, wash walls with solution of 1 oz. Cleaner-Disinfectant per gallon of water. Sponge or wipe surfaces of furniture or other working areas with solution of 1 oz. Cleaner-Disinfectant per gallon of water.

OBSTETRICS AND OPERATING ROOMS — Between operations apply approximately one quart of a solution prepared with 1 oz. of Cleaner-Disinfectant per gallon on the floor around the operating table. Using a clean laundered mop-head, or a rotary floor machine equipped with scrubbing brush or pad, vigorously clean this area moving gradually to the periphery of the room and adding solution as required. Excess solution should be removed from the floor by wet pick-up vacuum machine. Attention should be given to wiping exposed surfaces such as equipment and walls with a solution of 1 oz. Cleaner-Disinfectant per gallon. Once a week, the walls, ceiling and light fixtures should be sprayed with a solution of 1 oz. Cleaner-Disinfectant per gallon applied with a low pressure, garden type sprayer. A solution of 1 oz. Cleaner-Disinfectant per gallon of water should be used to saturate a layer of plastic sponge in a floor installed foot-type as a bacteriostatic treatment for shoes or shoe coverings and through which all carts would have to be rolled in entering the operating room. The solution in the foot-type bath should be changed daily.

OUT PATIENT DEPARTMENT — Mop floors with solution of 1 oz. Cleaner-Disinfectant per gallon of water and use a like solution to wash furnishings, walls, and equipment of this high traffic area.

PATIENT ROOMS — Mop floors and wipe exposed surfaces such as tables, furnishings and fixtures with a solution of 1 oz. Cleaner-Disinfectant per gallon of water. In preparing a room for a new patient, fogging is recommended as an adjunct to regular cleaning and disinfecting.

PUBLIC ROOMS AND CORRIDORS — Scrub floors by manual mopping or machine scrubber with solution of 1 oz. Cleaner-Disinfectant per gallon of water. Wipe exposed surfaces with solution of 1 oz. Cleaner-Disinfectant per gallon of water.

UTILITY AND WASHROOMS — Mop floors and wash walls and plumbing fixtures with solution of 1 oz. Cleaner-Disinfectant per gallon of water. To complete thorough deodorization the areas surrounding plumbing fixtures as well as toilets and urinals should be sprayed with a solution of 1 oz. Cleaner-Disinfectant per gallon of water and then allowed to dry.