O-SYL®

DISINFECTANT • DETERGENT

GERMICIDAL* • Staphylocidal • Pseudomonacidal • Tuberculocidal
FUNGICIDAL* (Against pathogenic fungi)
VIRUCIDAL* (Against Influenza A_2, Herpes simplex, Vaccinia, and Adenovirus Type 2)

*On Environmental Surfaces

ACTIVE INGREDIENTS: o-Phenylphenol 5.00%, o-Benzyl-p-chlorophenol 4.50%, Tetrasodium Ethylene Diamine Tetraacetate 3.04%, Isopropyl Alcohol 1.50%, p-tert-Amylphenol 1.00%.

INERT INGREDIENTS: 84.96%.

EPA Registration No. 675-24-AA

DANGER: KEEP OUT OF REACH OF CHILDREN

Corrosive. Causes eye damage and skin irritation. Do not get in eyes, on skin or on clothing. Protect eyes and skin when handling concentrate. Harmful or fatal if swallowed. Avoid contamination of food. Rinse empty container thoroughly with water and discard it.

See First Aid statement and other precautions on side panel.

NET CONTENTS ONE GALLON

NATIONAL LABORATORIES
LEHN & FINK INDUSTRIAL PRODUCTS DIVISION
of Sterling Drug Inc.
Montvale, N.J. 07645 Plant: Toledo, Ohio 43612

AB-8092

HOW TO USE HOSPITAL TYPE O-SYL®

DISINFECTANT • DETERGENT

O-SYL IS IN CONCENTRATED FORM, DILUTE ACCORDING TO DIRECTIONS.

ONE TABLESPOON EQUALS ABOUT ½ FLUID OUNCE OR 15 CC.

PURPOSE	Correct Solution Strength	To prepare proper dilutions in required quantities, add full strength O-SYL to water as below: O-SYL	WATER
FOR GERMICIDAL CLEANING AND DEODORIZING: (Including premises occupied by tubercular patients) Floors, Walls, Furniture, Food and linen carts, Garbage cans.	0.78% (1:128)	8 cc. 30 cc. 3 oz. 5 oz.	1 quart 1 gallon 3 gallons 5 gallons
FOR DISINFECTION OF: Thermometers, surgical and dental instruments.	3% (3:100)	30 cc. 4 oz. 12 oz. 20 oz.	1 quart 1 gallon 3 gallons 5 gallons

See brochure for detailed instructions.

FIRST AID:

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, or gelatin solution. If these are not available drink large quantities of water. Avoid alcohol. Call a physician immediately.

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AMERICA'S FOREMOST MANUFACTURER OF
DISINFECTANTS AND DISINFECTANT-DETERGENTS
FOR ENVIRONMENTAL SANITATION

DISINFECTANT-DETERGENT

EPA Registration No. 675-24-AA

A Combination Cleaner and Disinfectant with Broad-Spectrum Antimicrobial Activity

Another of National Laboratories' family
of hospital disinfectants and disinfectant-detergents

Lehn & Fink Industrial Products Division
of Sterling Drug Inc.

America's foremost manufacturer of disinfectants and disinfectant-detergents for environmental sanitation

O-Syl

O-SYL destroys a wide variety of pathogenic organisms, on environmental surfaces, such as Staphylococcus aureus, Pseudomonas aeruginosa, Proteus vulgaris, Candida albicans, and Mycobacterium tuberculosis at a use-dilution of 1:128. It is also virucidal against such common viruses as Influenza A_2, Herpes ..mplex, Vaccinia, and Adenovirus Type 2.

This phenolic disinfectant-detergent can be used for general disinfecting and cleaning the entire hospital — floors, walls, fixtures, thermometers and surgical and dental instruments.

Because O-SYL is *effective in the presence of organic matter,* it is useful for disinfecting areas or articles contaminated by purulent material, blood, serum or excreta, even when the pathogen is the tubercle bacillus. Another major advantage is the low surface tension of O-SYL, which ensures spread and penetration into cracks, crevices and surface breaks where contaminated dust and organic matter may have settled and dried. This phenolic disinfectant-detergent exhibits a microbicidal capacity which contributes importantly to the establishment and maintenance of a sanitary environment throughout the hospital when used regularly on floors and other surfaces to disinfect, clean and deodorize in one operation.

Finally, O-SYL in the recommended dilutions is nonstaining and odorless. It is soluble in water in all proportions. Supplied in a highly concentrated form, one gallon — when diluted 1:128 — is enough to disinfect and clean all the floor space in one and one-third hospitals of 100 beds each.

Despite resistant staph, the tubercle bacillus, and the increasingly threatening Pseudomonas aeruginosa, there is no reason why our hospitals should be faced with the prospect of becoming repositories for pathogenic micro-organisms. With a carefully planned and diligently executed contamination control program, any hospital can reduce the prevalence of pathogens on the environmental surfaces within its confines.

BACTERIOLOGY

O-SYL® is staphylocidal, pseudomonacidal, tuberculocidal, fungicidal and virucidal on environmental surfaces.

TEST PROCEDURE

Use-Dilution Method—Official—as described by Official Methods of Analysis of the Association of Official Analytical Chemists: pages 61-63, 11th Edition, Washington, D. C., 1970. The number of tests shown is that required for registration with the E.P.A. as described by Stuart, L. S., Testing Sterilizers, Disinfectants, Sanitizers and Bacteriostatic Chemicals, Proceedings of the Chemical Specialties Manufacturers Association: pages 123-125, May 1969.

Number Cylinders + of Those Tested

Sample	Dilution of O-SYL	Staphylococcus aureus			Salmonella choleraesuis		
1	1:128	0 of 60			0 of 30		
2	1:128	0 of 60			0 of 30		
3	1:128	0 of 60			0 of 30		
Phenol Resistance		**5′**	**10′**	**15′**	**5′**	**10′**	**15′**
	1:60	+	—	—			
	1:70	+	+	+			
	1:80	+	+	+	—	—	—
	1:90				+	—	—
	1:100				+	+	+

Number Cylinders + of Those Tested

Sample	Dilution of O-SYL®	Pseudomonas aeruginosa		
1	1:128	0 of 30		
2	1:128	0 of 30		
3	1:128	0 of 30		
Phenol Resistance		**5′**	**10′**	**15′**
	1:80	+	—	—
	1:85	+	—	—
	1:90	+	+	+

Tests against various organisms (O-SYL at a Use-Dilution of 1:128)

TEST PROCEDURE:

As described by Official Methods of Analysis of the Association of Official Analytical Chemists: 61-63, 11th Edition, Washington, D.C., 1970, but modified where necessary for the specific microorganism.

Test Organism	Subculture Media	Result of 10 min. Use-Dilution (No. of cylinders + of each 20 tested.)
*Salmonella choleraesuis ATCC 10708	Letheen Broth	0
Salmonella paratyphi ATCC 9281	Letheen Broth	0
Salmonella schottomuelleri ATCC 10719	Letheen Broth	0
Shigella dysenteriae ATCC 11835	Letheen Broth	0
Enterobacter aerogenes ATCC 13048	Letheen Broth	0
Proteus vulgaris ATCC 9920	Letheen Broth	0
Escherichia coli AMC 198 (ATCC 11229)	Letheen Broth	0
*Pseudomonas aeruginosa ATCC 15442	Letheen Broth	0
Klebsiella pneumoniae ATCC 9997	Letheen Broth	0
Neisseria elongata ATCC 25295	Letheen Broth	0
Serratia marcescens ATCC 8195	Letheen Broth	0
*Staphylococcus aureus 209 ATCC 6538	Letheen Broth	0
Staphylococcus aureus 80/81 (Penicillin resistant)	Letheen Broth	0
Streptococcus faecalis ATCC 828	TSB w/Letheen	0
Streptococcus pyogenes ATCC 12384	TSB w/3% sheep blood	0
Streptococcus salivarius ATCC 9222	TSB w/3% sheep blood	0
Corynebacterium diphtheriae ATCC 11913	TSB w/Letheen	0
Candida albicans ATCC 10231	F-Broth w/Letheen	0
Trichophyton interdigitale ATCC 640	F-Broth w/Letheen	0

*Tested in both 400 ppm hard water and distilled water

TEST PROCEDURE

Tuberculocidal Activity — Official — Final Action — as described by Official Methods of Analysis of the Association of Official Analytical Chemists: pages 71-72, 11th Edition, Washington, D. C., 1970. The number of tests shown is that required for registration with the E.P.A. as described by Stuart, L. S., Testing Sterilizers, Disinfectants, Sanitizers and Bacteriostatic Chemicals, Proceedings of the Chemical Specialties Manufacturers Association: pages 123-125, May 1969.

Mycobacterium tuberculosis var. bovis (BCG)

Dilution of O-SYL®		Number Rings Tested	Number Tubes +		
			Proskauer-Beck	Middlebrook	Kirchner
	1:128	10	0	0	0
Phenol	1:50	10	0	0	0
	1:75	10	0	4	2

TEST PROCEDURE

Fungicidal Activity — Official — as described by Official Methods of Analysis of the Association of Official Analytical Chemists: pages 65-66, 11th Edition, Washington, D. C., 1970. The number of tests shown is that required for registration with the E.P.A. as described by Stuart, L. S., Testing Sterilizers, Disinfectants, Sanitizers and Bacteriostatic Chemicals, Proceedings of the Chemical Specialties Manufacturers Association: pages 123-125, May 1969.

Trichophyton interdigitale

Dilution of O-SYL®		Test 1			Test 2		
		5′	10′	15′	5′	10′	15′
	1:128	—	—	—	—	—	—
	1:150	—	—	—	—	—	—
	1:200	—	—	—	—	—	—
	1:400	—	—	—	+	—	—
	1:600	+	+	—	+	+	+
	1:800	+	+	+	+	+	+
Phenol	1:45	—	—	—	—	—	—
	1:60	+	+	—	+	+	—
	1:70	+	+	+	+	+	+

TEST PROCEDURE

Virucidal Activity — 0.9 ml. of O-SYL , diluted 1:128, was mixed with 0.1 ml. of undiluted viruses. The contact time was 10 minutes at room temperature. The titer of the treated virus was compared with that of untreated viral controls. The number of tests shown is that required for registration with the E.P.A. as described by Stuart, L. S., Testing Sterilizers, Disinfectants, Sanitizers and Bacteriostatic Chemicals, Proceedings of the Chemical Specialties Manufacturers Association: pages 123-125, May 1969.

Test Viruses	Titer	Grown In
Herpes simplex	10^7 TCID/50	Rabbit kidney cells
Vaccinia	10^7 TCID/50	Rabbit kidney cells
Adenovirus Type 2	10^6 TCID/50	HeLa cells
Influenza A_2	10^7 TCID/50	Chick embryo

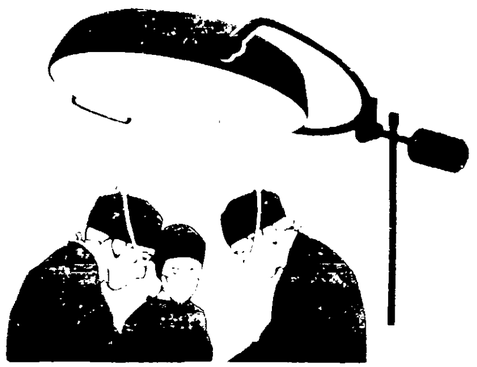
RESULTS:

All viruses treated with O-SYL diluted 1:128 were completely inactivated. Complete inactivation indicates at least 3 logs of virus were inactivated with no residual virus detected within limits allowed by the toxicity of the germicide.

HOUSEKEEPING

There is no substitute for efficient, thorough, and regular housekeeping to reduce the dangers of cross-contamination. No area should be neglected. All floors, walls, furniture, and other hard surfaces must be thoroughly cleaned and disinfected. O-SYL can accomplish the job in one step because it is a combination disinfectant and detergent.

By paying particular attention to the high hazard areas discussed in other sections of this brochure, dissemination of contamination throughout the hospital can be minimized.



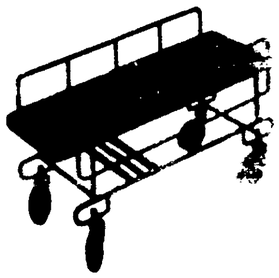
OPERATING ROOMS

By using O-SYL at a use-dilution of 1:128 on all surfaces of the operating room, cleanliness can be maintained. Between-case decontamination will be rapidly accomplished since O-SYL disinfects as it cleans.

Surgical instruments and glassware should be disinfected after use by immersion in a 3% O-SYL solution for at least 15 minutes prior to routine cleaning and resterilization.

O-SYL has no adverse effect on conductive flooring.*

*Tested by Electrical Testing Laboratories, New York City.



RECOVERY ROOMS

Because of the volume of traffic and the multitude of cases in the recovery room, cross-contamination hazards are high. O-SYL solution is a powerful weapon to prevent the spread of contamination.

Floors, walls and other hard surfaces may be cleaned and disinfected with O-SYL at a use-dilution of 1:128. Carts used to transport surgical patients into the recovery room should be wiped down with O-SYL after each use.

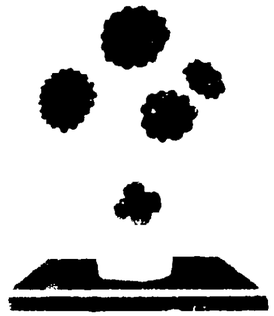
ISOLATION UNITS

Isolation units are designed to contain pathogens within the unit, destroy them there and thereby prevent their being carried throughout the hospital. The infected patient continuously sheds these organisms into his environment. Because of gravity, these tend to settle on the floor and then they are moved by air flow to walls, furniture and fixtures. These surfaces must, therefore, be cleaned and disinfected daily. O-SYL, at its recommended use-dilution, maintains these surfaces in a sanitary condition.

PEDIATRICS

Children with respiratory diseases are often admitted to the pediatric department. Their infectious organisms are discharged to the air and settle to the floors. From here they may be spread to other children who pick up toys from the floor or when they play on it. The regular use of O-SYL on floors, furniture and fixtures will help hold cross-contamination to a minimum.

OBSTETRICS
MATERNITY
DELIVERY



Organic matter, which is usually present in the delivery room, plus soil carried in by the shoes of medical personnel, lead to heavy contamination of the floors. O-SYL effectively cleans the floors and destroys pathogenic bacteria simultaneously. Particular attention should also be given to the delivery table.

Daily cleaning and disinfecting of all maternity rooms and wards with O-SYL will aid in keeping puerperal sepsis a rare occurrence.

Staphylococcus aureus, a constant threat to newborn infants, is destroyed by O-SYL on environmental surfaces. All floors, surfaces, furniture, and equipment in the nursery should be washed down at least once a day with O-SYL at 1:128.

EMERGENCY ROOMS

A wide variety of microorganisms finds its way into the emergency room because of the many different cases which pass through it. A broad-spectrum disinfectant is therefore required to destroy as many of these as possible. O-SYL is staphylocidal, pseudomonacidal, tuberculocidal, fungicidal and virucidal on environmental surfaces.

DIRECTIONS FOR USE

O-SYL disinfectant-detergent is supplied as a concentrated liquid. To avoid waste and insure efficiency, use in dilutions recommended for the purpose. To make the strength solution required, add concentrated O-SYL to water in the proportions indicated below:

0.78% (1:128)

O-SYL	WATER
8 cc	1 Quart
30 cc	1 Gallon
3 oz.	3 Gallons
5 oz.	5 Gallons

3% (3:100)

O-SYL	WATER
30 cc	1 Quart
4 oz.	1 Gallon
12 oz.	3 Gallons
20 oz.	5 Gallons

General Disinfection — recommended dilution, 1:128.

Floors: Because any germicidal solution becomes contaminated rapidly when a dirty mop is immersed in it, all mops should be laundered and dried prior to use. Two-bucket mopping is recommended for disinfection of floors. In this procedure, the O-SYL solution is placed in **both** buckets. Beginning with a **clean** mop, dip in first bucket and wring out then mop an area of the floor. It is then placed in the second bucket, wrung out, inserted into first bucket, wrung, and another area of floor is mopped. Repeat this procedure each time the mop requires additional O-SYL solution. Allow floor to dry without rinsing.

Walls: With a cloth dampened in O-SYL solution, begin wiping walls from the baseboard and work upward. This method prevents streaking.

Furniture: For terminal disinfection, wash all furniture with O-SYL solution; wheels, casters and legs of furniture should be drenched with disinfectant solution. For daily disinfection, wipe furniture with cloth dampened in O-SYL solution. Allow to dry without rinsing.

Bathrooms: Wet mop and rinse floors, and wash and rinse tiled and other surfaces and all plumbing fixtures, with O-SYL solution.

Utility Rooms: As above.

Service Closets: Disinfect walls weekly. Wash floors and sinks daily with O-SYL solution. Disinfect pails and wash tanks and allow to stand empty between uses.

Tuberculosis Hygiene — recommended dilutions, 1:128 and 3:100.

Wet mop floors daily with O-SYL (1:128). Wipe walls and furniture daily with cloth dampened in 1:128 solution. For gross contamination from vomitus, sputum, excreta or barium accident, wash and then rinse with 3:100 solution. Wipe oral and rectal thermometers with 3:100 solution then immerse in a similar O-SYL solution for 15 minutes.

Instrument Disinfection — recommended dilution, 3:100.

Surgical Instruments: Rinse off adhering mucus or exudate. Immerse in 3:100 O-SYL for 15 minutes. Rinse with sterile water. To store, place in sterile wrap.

Clinical Thermometers — recommended dilution, 3:100.

Oral: Wipe with O-SYL solution immediately after use, applying friction. Immerse in O-SYL solution. After 15 minutes, remove from disinfectant-cleaning solution, rinse under running water and place in container ready for next use.

Rectal: Proceed as above. Use surgical jelly for lubrication — avoid petrolatum or mineral oil which forms a fatty coating on the thermometer thereby preventing effective contact with the disinfectant solution.

In Patient Area: When thermometer for the individual patient is kept in the patient's room or area, dry wipe immediately after use then store in 3:100 O-SYL ready for next use. Dry with sterile cotton ball before use.

Note: Immersion in the O-SYL solution does not affect permanent thermometer markings. However, markings produced by "wiping-in" of a colored paste may be removed (floated out) by O-SYL's active detergent action. Thermometers may be collected into solution for return to central supply, to avoid spreading contamination en route.

O-Syl

1 gallon bottle (6 to a case)
5 gallon pail
30 gallon drum
55 gallon drum

Environmental Disinfection

Dependable disinfection of all inanimate surfaces in the hospital is an important part of controlling cross-contamination. Other measures are, of course, necessary, but hospitals which have increased environmental disinfection are finding that cross-contamination is prevented from becoming a problem, or, if it was a problem, it has been brought under control.

Let us help you with any disinfection problem you have. Technical assistance is available to your Committee on Cross-Infection or to individual department heads on request.

ACTIVE INGREDIENTS: o-Phenylphenol, 5.00%; o-Benzyl-p-chlorophenol, 4.50%; Tetrasodium Ethylene Diamine Tetraacetate, 3.04%; Isopropyl Alchohol, 1.50%; p-tert-Amylphenol, 1.00%.

INERT INGREDIENTS: 84.96%

GUARANTEE

Modern manufacturing facilities and careful laboratory control assure materials of uniform quality at all times. National Laboratories' products are unconditionally guaranteed to give complete satisfaction, when used as directed, or they may be returned for credit.