

# NEUTRAL GERMICIDAL CLEANER

Disinfectant · Cleaner · Mildewstat · Fungicide · Virucide\* · Deodorizer

Neutral Quaternary Disinfectant Cleaner

Neutral Germicidal Cleaner is a non-alkaline disinfectant that cleans and deodorizes in one step. It is formulated to a neutral pH which will not dull high gloss floor finishes with repeated use.

Disinfectant  
Cleaner  
Mildewstat  
Fungicide  
Virucide  
Deodorizer

## Advantages

Neutral Germicidal Cleaner is a phosphate-free concentrated disinfectant which provides effective cleaning, deodorizing and disinfection specifically for hospitals, nursing homes, hotels, schools, restaurants and other institutions where housekeeping is of prime importance in controlling cross-contamination from treated surfaces.

## Claims

When used as directed, this formulation will clean and disinfect non-porous, inanimate environmental surfaces such as floors, walls, metal surfaces, stainless steel surfaces, porcelain, glazed ceramic tile, plastic surfaces, bathrooms, shower stalls, bathtubs and cabinets as well as operating rooms, patient care facilities and restrooms. This product will also deodorize those areas that are generally hard to keep fresh-smelling such as garbage storage areas, empty garbage bins and cans, toilet bowls and other areas which are prone to odors caused by microorganisms.



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# Data

## Hospital Disinfection Data

**Test Method:**

Neutral Germicidal Cleaner is bactericidal according to the AOAC Use Dilution Test method on hard inanimate surfaces modified in the presence of 5% organic serum and 400 ppm hard water with a 10 minutes contact time against:

**Test Organisms:**

- Bordetella bronchiseptica
- Enterobacter aerogenes
- Enterobacter cloacae
- Enterococcus faecalis
- Enterococcus faecalis Vancomycin Resistant (VRE)
- Escherichia coli
- Escherichia coli Tetracycline Resistant
- Fusobacterium necrophorum
- Klebsiella pneumoniae
- Listeria monocytogenes
- Pasturella multocida
- Proteus vulgaris ATCC 13315
- Proteus vulgaris ATCC 9920
- Pseudomonas aeruginosa
- Salmonella enterica ATCC 10708
- Salmonella enterica ATCC 23564
- Salmonella enterica ATCC 4931
- Salmonella enterica serotype pullorum
- Salmonella typhi
- Serratia marcescens
- Shigella flexneri
- Shigella sonnei
- Staphylococcus aureus ATCC 6538
- Staphylococcus aureus ATCC 14154
- Staphylococcus aureus ATCC 25923
- Staphylococcus aureus sub species aureus
- Staphylococcus aureus Methicillin Resistant (MRSA)
- Staphylococcus aureus Community Associated Methicillin Resistant (CA-MRSA)
- Staphylococcus aureus Vancomycin Intermediate Resistant (VISA)
- Staphylococcus epidermidis
- Staphylococcus epidermidis Antibiotic resistant
- Streptococcus pneumoniae Penicillin Resistant
- Streptococcus pyogenes
- Vibrio cholera

**Results:**

Test Organisms	Carrier Population	702 Sample	# Carriers	# Positive
Bordetella bronchiseptica	9.4 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Enterobacter aerogenes	2.35 X 10 <sup>7</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Enterobacter cloacae	3.3 X 10 <sup>7</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Enterococcus faecalis	6.2 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Enterococcus faecalis Vancomycin Resistant (VRE)	1.3 X 10 <sup>7</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Escherichia coli	1.3 X 10 <sup>7</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Escherichia coli Tetracycline Resistant	3.1 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Fusobacterium necrophorum	5.8 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

**Results  
(continued):**

Test Organisms	Carrier Population	702 Sample	# Carriers	# Positive
Klebsiella pneumoniae	1.2 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Listeria monocytogenes	7.7 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Pasturella multocida	1.32 X 10 <sup>7</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Proteus vulgaris ATCC 13315	1.9 X 10 <sup>4</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Proteus vulgaris ATCC 9920	1.24 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Pseudomonas aeruginosa	3.9 X 10 <sup>4</sup> CFU/Carrier	A (60 Days Old)	60	0/60
		B	60	0/60
		C	60	1/60
Salmonella enterica ATCC 10708	1.03 X 10 <sup>6</sup> CFU/Carrier	A (60 Days Old)	60	1/60
		B	60	1/60
		C	60	0/60
Salmonella enterica ATCC 23564	9.2 X 10 <sup>4</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Salmonella enterica ATCC 4931	1.3 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Salmonella enterica serotype pullorum	7.1 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Salmonella typhi	8.3 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Serratia marcescens	6.0 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Shigella flexneri	1.99 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Shigella sonnei	1.04 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus aureus ATCC 6538	7.0 X 10 <sup>4</sup> CFU/Carrier	A (60 Days Old)	60	0/60
		B	60	0/60
		C	60	0/60
Staphylococcus aureus ATCC 14154	9.2 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus aureus ATCC 25923	6.6 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus aureus sub species aureus	7.2 X 10 <sup>4</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

**Results (cont.):**

Test Organisms	Carrier Population	702 Sample	# Carriers	# Positive
Staphylococcus aureus Methicillin Resistant (MRSA)	5.4 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus aureus Methicillin Resistant Community Associated (CA-MRSA)	1.60 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus aureus Vancomycin Intermediate Resistant (VISA)	3.2 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus epidermidis	1.56 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus epidermidis Antibiotic resistant	8.6 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Streptococcus pneumonia Penicillin Resistant	9.6 X 10 <sup>4</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Streptococcus pyogenes	4.7 X 10 <sup>4</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Vibrio cholera	1.0 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

**Data****Virucidal Data****Test Method:**

Neutral Germicidal Cleaner was evaluated in the presence of 5% serum and 400 ppm hard water with a 10 minute contact time and found to be effective against the following viruses on hard nonporous environmental surfaces.

**Test Organisms:**

Avian Influenza A (H5N1) virus  
 Avian Influenza A (H3N2) virus  
 Canine Coronavirus  
 Canine Distemper virus  
 Canine Parvovirus (CPV)  
 Feline Picornavirus  
 Hepatitis B virus (HBV)  
 Hepatitis C virus (HCV)  
 Herpes Simplex Type 1  
 Herpes Simplex virus Type 2  
 Human Coronavirus  
 Human Immunodeficiency virus Type 1 (HIV 1)  
 Influenza A H1N1 virus  
 Influenza A virus  
 Pseudorabies virus  
 Rabies  
 Respiratory Syncytial virus  
 SARS-associated Coronavirus

**Results:**

Test Organisms	Dried Virus Control	Sample	Result	Log Reduction
Avian Influenza A (H3N2) virus	4.75 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥4.25 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥4.25 Log <sub>10</sub>
		C	≤0.5 Log <sub>10</sub>	≥4.25 Log <sub>10</sub>
Avian Influenza A (H5N1) virus	6.75 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥6.25 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥6.25 Log <sub>10</sub>
Canine Coronavirus	4.5 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
	4.75 Log <sub>10</sub>	C	≤0.5 Log <sub>10</sub>	≥4.25 Log <sub>10</sub>
Canine Distemper virus	6.25 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥5.75 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥5.75 Log <sub>10</sub>
	6.75 Log <sub>10</sub>	C	≤0.5 Log <sub>10</sub>	≥6.25 Log <sub>10</sub>
Feline Picornavirus	4.5 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
	5.75 Log <sub>10</sub>	C	≤0.5 Log <sub>10</sub>	≥5.25 Log <sub>10</sub>
Hepatitis B Virus	5.06 Log <sub>10</sub>	A	≤0.27 Log <sub>10</sub>	≥4.79 Log <sub>10</sub>
	5.20 Log <sub>10</sub>	B	≤0.41 Log <sub>10</sub>	≥4.79 Log <sub>10</sub>
	5.06 Log <sub>10</sub>	Confirmatory B	≤0.27 Log <sub>10</sub>	≥4.79 Log <sub>10</sub>
Hepatitis C Virus	6.21 Log <sub>10</sub>	A	≤0.24 Log <sub>10</sub>	≥5.97 Log <sub>10</sub>
	6.21 Log <sub>10</sub>	B	≤0.42 Log <sub>10</sub>	≥5.79 Log <sub>10</sub>
	6.06 Log <sub>10</sub>	Confirmatory B	≤0.13 Log <sub>10</sub>	≥5.93 Log <sub>10</sub>
Herpes Simplex Virus Type 1	5.5 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>
	6.0 Log <sub>10</sub>	C	≤0.5 Log <sub>10</sub>	≥5.5 Log <sub>10</sub>
Herpes Simplex Virus Type 2	6.0 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥5.5 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥5.5 Log <sub>10</sub>
	5.75 Log <sub>10</sub>	C	≤0.5 Log <sub>10</sub>	≥5.25 Log <sub>10</sub>
Human Coronavirus	4.5 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
	4.5 Log <sub>10</sub>	C	≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
Human Immunodeficiency Virus type 1 (HIV 1)	5.75 Log <sub>10</sub>	A	≤1.5 Log <sub>10</sub>	≥4.25 Log <sub>10</sub>
		B	≤1.5 Log <sub>10</sub>	≥4.25 Log <sub>10</sub>
		C	≤1.5 Log <sub>10</sub>	≥4.25 Log <sub>10</sub>
Influenza A H1N1 virus	5.5 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>
Influenza A virus	6.5 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥6.0 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥6.0 Log <sub>10</sub>
	6.0 Log <sub>10</sub>	C	≤0.5 Log <sub>10</sub>	≥5.5 Log <sub>10</sub>

**Results (cont.):**

Test Organisms	Dried Virus Control	Sample	Result	Log Reduction
Pseudorabies virus	6.25 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥5.75 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥5.75 Log <sub>10</sub>
	5.5 Log <sub>10</sub>	C	≤0.5 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>
Rabies virus	5.75 Log <sub>10</sub>	A	≤2.5 Log <sub>10</sub>	≥3.25 Log <sub>10</sub>
		B	≤2.5 Log <sub>10</sub>	≥3.25 Log <sub>10</sub>
Respiratory Syncytial virus	4.5 Log <sub>10</sub>	A	≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
	5.0 Log <sub>10</sub>	C	≤0.5 Log <sub>10</sub>	≥4.5 Log <sub>10</sub>
SARS-associated Coronavirus	6.5 Log <sub>10</sub>	A	≤3.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub>
		B	≤3.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub>

**Results (continued):**

**Virucidal against (at 4 ounces per gallon)**

This product was evaluated in the presence of 5% serum and 400 ppm hard water with a 10 minute contact time and found to be effective against the following viruses on hard, non-porous environmental surfaces.

(Testing is performed per EPA Guidance (DIS/TSS-7). Two separate lots are tested. Inactivation of virus must be demonstrated at all dilutions when no cytotoxicity is observed or at all dilutions above the cytotoxic level when it is observed. The data must demonstrate a 3-log reduction in viral titer for both lots.) (3 lots and 4-Log reduction for Canada).

Test Organisms	Dried Virus Control	Sample	Result	Log Reduction
Canine Parvovirus Type 2b	7.5 Log <sub>10</sub>	A	≤3.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
		B	≤3.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
Rabies virus	5.75 Log <sub>10</sub>	A	≤2.5 Log <sub>10</sub>	≥3.25 Log <sub>10</sub>
		B	≤2.5 Log <sub>10</sub>	≥3.25 Log <sub>10</sub>

**Data**

**Fungicidal Data**

**Test Method:**

Neutral Germicidal Cleaner was evaluated in the presence of 5% serum and 400 ppm hard water with a 10 minute contact time and found to be effective against the following fungi on hard nonporous environmental surfaces.

**Results:**

Sample	Carrier Population	Sample	# Carriers	# Positive
Candida albicans	1.57 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Trichophyton mentagrophytes	1.10 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

# Data

## Mold and Mildew Control Data

**Test Method:**

Use Neutral Germicidal Cleaner to control the growth of mold and mildew and their odors on hard, non-porous surfaces. Thoroughly wet all treated surfaces completely. Let air dry. Repeat application weekly or when growth or odor reappears.

**Results:**

Sample	Tile Number	Untreated After 7 Days	Sample A After 7 Days	Sample B After 7 Days
Aspergillus niger	1	Growth 90%	No Growth 0%	No Growth 0%
	2	Growth 70%	No Growth 0%	No Growth 0%
	3	Growth 90%	No Growth 0%	No Growth 0%
	4	Growth 80%	No Growth 0%	No Growth 0%
	5	Growth 80%	No Growth 0%	No Growth 0%
	6	Growth 90%	No Growth 0%	No Growth 0%
	7	Growth 80%	No Growth 0%	No Growth 0%
	8	Growth 70%	No Growth 0%	No Growth 0%
	9	Growth 90%	No Growth 0%	No Growth 0%
	10	Growth 70%	No Growth 0%	No Growth 0%

## Neutral Germicidal Cleaner Properties

Appearance .....Green Liquid  
Odor .....Herbal  
pH .....7.2 - 8.2  
pH 1% .....7.3  
Typical Dilution .....1:128  
Weight per Gallon.....8.38 lbs.  
Viscosity .....12-18 cps.  
USDA Rating.....C1

EPA Registration Number 10324-155-3838