

# RESTROOM CLEANER AND DISINFECTANT

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

Concentrated Quaternary Disinfectant Cleaner

This product is a phosphate-free disinfectant that does not contain phenol, bleach or VOCs.

## Advantages

Restroom Cleaner and Disinfectant is a phosphate-free concentrated disinfectant which provides effective cleaning, deodorizing and disinfection specifically for hospitals, nursing homes, schools, food-processing plants, food service establishments and other institutions where housekeeping is of prime importance in controlling the hazards of cross-contamination.

Cleaner  
Disinfectant  
Deodorizer  
Fungicide  
Mildewstat  
Virucide

## Claims

When used as directed on non-food contact surfaces, this formulation will clean and disinfect inanimate hard surfaces such as walls, floors, sink tops, toilet bowls, tables, chairs and telephones as well as operating rooms, patient care facilities and restrooms. Restroom Cleaner and Disinfectant 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 that are prone to odors caused by microorganisms.



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# Data

## Hospital and General Disinfection Data

**Test Method:**

Quat 44 is bactericidal according to the AOAC Use Dilution Test method on hard inanimate surfaces modified in the presence of 5% organic serum at 2 ounces of this product per gallon of water (703 ppm active). Treated surfaces must remain wet for 10 minutes

**Test Organisms:**

Campylobacter jejuni  
Corynebacterium ammoniagenes  
Enterobacter aerogenes  
Enterococcus faecalis  
Escherichia coli  
Klebsiella pneumoniae  
Listeria monocytogenes  
Pseudomonas aeruginosa  
Salmonella enterica  
Salmonella schottmuelleri  
Salmonella typhi  
Shigella dysenteriae  
Staphylococcus aureus (Methicillin Resistant)  
Staphylococcus aureus  
Streptococcus salivarius

**Results:**

Test Organisms	Carrier Population	Quat 44 Sample	# Carriers	# Positive
Campylobacter jejuni ATCC 29428	4.0 X 10 <sup>4</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Corynebacterium ammoniagenes ATCC 6871	9.6 X 10 <sup>4</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Enterobacter aerogenes ATCC 13048	4.1 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Enterococcus faecalis ATCC 19433	3.5 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Escherichia coli ATCC 11229	3.5 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Klebsiella pneumoniae ATCC 13883	4.2 X 10 <sup>4</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Listeria monocytogenes ATCC 984	4.5 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

**Results  
(continued):**

Test Organisms	Carrier Population	Quat 44 Sample	# Carriers	# Positive
Pseudomonas aeruginosa ATCC 15442	8.2 X 10 <sup>6</sup> CFU/Carrier	A (60 days old)	60	0/60
	4.3 X 10 <sup>6</sup> CFU/Carrier	B	60	1/60
	9.7 X 10 <sup>5</sup> CFU/Carrier	C	60	1/60
Salmonella enterica ATCC 10708	1.4 X 10 <sup>4</sup> CFU/Carrier	A (60 days old)	60	0/60
	7.3 X 10 <sup>4</sup> CFU/Carrier	B	60	0/60
	4.8 X 10 <sup>5</sup> CFU/Carrier	C	60	0/60
Salmonella schottmuelleri ATCC 8759	9.6 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Salmonella typhi ATCC 6539	1.7 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Shigella dysenteriae ATCC 9361	3.7 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus aureus (Methicillin Resistant) (MRSA) ATCC 33591	1.3 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus aureus ATCC 6538	1.4 X 10 <sup>6</sup> CFU/Carrier	A (60 days old)	60	1/60
	2.8 X 10 <sup>5</sup> CFU/Carrier	B	60	1/60
	9.2 X 10 <sup>5</sup> CFU/Carrier	C	60	1/60
Streptococcus salivarius ATCC 13419	1.5 X 10 <sup>4</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

# Data

## Virucidal Data

**Test Method:**

Quat 44 was evaluated at 2 ounces per gallon use level (703 ppm quat active), in the presence of 5% serum with a 10 minute contact time and found to be effective against the following viruses on hard nonporous environmental surfaces.

**Test Organisms:**

- |  |   |
|--|---|
| Avian Influenza Turkey/Wisconsin ATCC VR-798 | Human Coronavirus ATCC VR-740               |
| Avian Influenza A (H5N1) virus               | Human Immunodeficiency virus type 1 (HIV-1) |
| Hepatitis B Virus (HBV)                      | Influenza A2/Japan ATCC VR-100              |
| Hepatitis C Virus (HCV) ATCC CCL-22          | Norwalk/Norovirus ATCC VR-782               |
| Herpes Simplex Type 1 ATCC VR-266            |   |

**Results:**

Test Organisms	Dried Virus Control	Quat 44 Sample	Result	Log Reduction
Avian Influenza Turkey/Wisconsin	7.5 Log <sub>10</sub>	A	≤1.8 Log <sub>10</sub>	≥5.7 Log <sub>10</sub>
		B	≤1.8 Log <sub>10</sub>	≥5.7 Log <sub>10</sub>
Avian Influenza A (H5N1) 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>
Hepatitis B Virus	6.84 Log <sub>10</sub>	A	≤1.78 Log <sub>10</sub>	≥5.06 Log <sub>10</sub>
		B	≤2.05 Log <sub>10</sub>	≥5.79 Log <sub>10</sub>
Hepatitis C Virus	7.14 Log <sub>10</sub>	Confirmatory B	≤2.35 Log <sub>10</sub>	≥4.79 Log <sub>10</sub>
		A	≤1.29 Log <sub>10</sub>	≥5.56 Log <sub>10</sub>
	6.85 Log <sub>10</sub>	B	≤1.06 Log <sub>10</sub>	≥5.79 Log <sub>10</sub>
Herpes Simplex Type 1	6.8 Log <sub>10</sub>	Confirmatory B	≤1.06 Log <sub>10</sub>	≥5.79 Log <sub>10</sub>
		A	≤1.8 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>
Human Coronavirus	4.5 Log <sub>10</sub>	B	≤1.8 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>
		A	≤1.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub>
Human Immunodeficiency virus type 1	6.0 Log <sub>10</sub>	B	≤1.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub>
		A	≤2.5 Log <sub>10</sub>	≥3.5 Log <sub>10</sub>
Influenza A2/Japan	7.5 Log <sub>10</sub>	B	≤2.5 Log <sub>10</sub>	≥3.5 Log <sub>10</sub>
		A	≤1.8 Log <sub>10</sub>	≥5.7 Log <sub>10</sub>
Norwalk/Norovirus	5.75 Log <sub>10</sub>	B	≤1.8 Log <sub>10</sub>	≥5.7 Log <sub>10</sub>
		A	≤1.5 Log <sub>10</sub>	≥4.25 Log <sub>10</sub>
	5.5 Log <sub>10</sub>	Confirmatory B	≤0.5 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>

# Data

## Fungicidal Data

**Test Method:**

Quat 44 was evaluated at 2 ounces per gallon 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
Trichophyton mentagrophytes	1.1 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

# Data

## Mold and Mildew Control Data

**Test Method:**

Use Quat 44 at 2 ounces per gallon 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 80%	No Growth 0%	No Growth 0%
	2	Growth 100%	No Growth 0%	No Growth 0%
	3	Growth 80%	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 80%	No Growth 0%	No Growth 0%
	7	Growth 80%	No Growth 0%	No Growth 0%
	8	Growth 100%	No Growth 0%	No Growth 0%
	9	Growth 100%	No Growth 0%	No Growth 0%
	10	Growth 80%	No Growth 0%	No Growth 0%

## Quat 44 Properties

Appearance .....Pink Liquid  
Odor .....Citrus  
pH .....10.4 - 11.4  
pH 1% .....9.0  
Typical Dilution .....1:64  
Weight per Gallon .....8.64 lbs.  
Viscosity .....3-7 cps.  
USDA Rating .....C1

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