

# QUAT 256

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

Quat 256 is a phosphate-free disinfectant that does not contain phenol, bleach or VOCs.

## Advantages

Quat 256 is a phosphate-free concentrated disinfectant which provides effective cleaning, deodorizing and disinfection. It has been designed specifically for hospitals, nursing homes, schools, food service establishments and other institutions where housekeeping is of prime importance in controlling the hazards of cross-contamination.

## Claims

When used as directed, Quat 256 is formulated to disinfect non-porous, inanimate environmental surfaces such as walls, floors, sink tops, toilet bowls, tables, chairs, telephones and bed frames as well as operating rooms, patient care facilities and restrooms. Quat 256 will also deodorize those areas which 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.

Disinfectant  
Cleaner  
Deodorizer  
Mildewstat  
Fungicide  
(against pathogenic fungi)  
Virucide

Concentrated Quaternary Disinfectant Cleaner



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# Data

## Hospital and General Disinfection Data

**Test Method:**

Quat 256 is bactericidal according to the AOAC Use Dilution Test method on hard inanimate surfaces modified in the presence of 5% organic serum at a ½ ounce of this product per gallon of water (488ppm active). Treated surfaces must remain wet for 10 minutes

**Test Organisms:**

Brevibacterium ammoniagenes ATCC 6872  
Enterococcus faecalis ATCC 29212  
Enterococcus faecium Vancomycin Resistant (VRE) ATCC 51299  
Escherichia coli ATCC 11229  
Klebsiella pneumoniae ATCC 4532  
Legionella pneumophila ATCC 33153  
Proteus mirabilis ATCC 9240  
Pseudomonas aeruginosa PRD-110 ATCC 15442  
Salmonella choleraesuis ATCC 10708  
Salmonella schottmuelleri ATCC 8759  
Serratia marcescens ATCC 14756  
Shigella dysenteriae ATCC 11835  
Staphylococcus aureus ATCC 6538  
Staphylococcus aureus (Methicillin Resistant) ATCC 33592  
Staphylococcus aureus (Vancomycin Resistant) VISA HIP 5836  
Streptococcus salivarius ATCC 7073

**Results:**

Test Organisms	Carrier Population	Quat 44-HBV Sample	# Carriers	# Positive
Brevibacterium ammoniagenes	1.22 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Enterococcus faecalis	9.4 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Enterococcus faecium Vancomycin Resistant (VRE)	9.7 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Escherichia coli	8.7 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Klebsiella pneumoniae	1.96 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Legionella pneumophila	1.45 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
	4.5 X 10 <sup>7</sup> CFU/Carrier	B	10	0/10
Proteus mirabilis	2.2 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

**Results  
(continued):**

Test Organisms	Carrier Population	Quat 44-HBV Sample	# Carriers	# Positive
Pseudomonas aeruginosa	5.6 X 10 <sup>4</sup> CFU/Carrier	A (60 days old)	60	1/60
		B	60	1/60
		C	60	1/60
Salmonella choleraesuis	1.28 X 10 <sup>5</sup> CFU/Carrier	A (60 days old)	60	1/60
		B	60	0/60
		C	60	0/60
Salmonella schottmuelleri	1.03 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Serratia marcescens	6.9 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Shigella dysenteriae	1.4 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
	1.89 X 10 <sup>6</sup> CFU/Carrier	B	10	0/10
Staphylococcus aureus	2.0 X 10 <sup>5</sup> CFU/Carrier	A (60 days old)	60	0/60
		B	60	0/60
		C	60	1/60
Staphylococcus aureus (Methicillin Resistant)	6.4 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus aureus (Vancomycin Resistant)	8.6 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10
Streptococcus salivarius	3.1 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

# Data

## Virucidal Data (at 1/2 ounce)

**Test Method:**

Quat 256 was evaluated at 1/2 ounce per gallon use level (488 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:**

- |  |   |
|--|---|
| Herpes Simplex Type 1<br>(causative agent of fever blisters)                 | Human Immunodeficiency Virus type 1 (HIV 1) |
| Herpes Simplex Type 2  | Influenza A2/Japan Virus                    |
| Human Coronavirus  | Vaccinia virus                              |
| *NEW* Adenovirus Type 2<br>(causative agent of upper respiratory infections) | (representative of the pox virus group)     |

**Results  
(continued):**

Test Organisms	Dried Virus Control	Quat 44-HBV Sample	Result	Log Reduction
Canine Coronavirus	4.75 Log <sub>10</sub>	A	≤1.5 Log <sub>10</sub>	≥3.25 Log <sub>10</sub>
		B	≤0.5 Log <sub>10</sub>	≥4.25 Log <sub>10</sub>
Herpes Simplex Type1	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>
Herpes Simplex Type 2	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>
Human Coronavirus	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>
Human Immunodeficiency Virus type 1 (HIV 1)	4.75 Log <sub>10</sub>	A	≤1.5 Log <sub>10</sub>	≥3.25 Log <sub>10</sub>
		B	≤1.5 Log <sub>10</sub>	≥3.25 Log <sub>10</sub>
Influenza A 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>
Vaccinia virus	5.5 Log <sub>10</sub>	A	≤1.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>
		B	≤1.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub>

## Virucidal Data (at ¾ ounce)

**Test Method:**

Quat 256 was evaluated at 3/4 ounces per gallon use level (732 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:**

Hepatitis B Virus (HBV)  
Hepatitis C Virus (HCV)

**Results  
(continued):**

Test Organisms	Dried Virus Control	Quat 44-HBV Sample	Result	Log Reduction
Hepatitis B Virus	6.84 Log <sub>10</sub>	A	≤1.78 Log <sub>10</sub>	≥5.06 Log <sub>10</sub>
	6.84 Log <sub>10</sub>	B	≤2.05 Log <sub>10</sub>	≥4.79 Log <sub>10</sub>
	7.14 Log <sub>10</sub>	Confirmatory A	≤2.35 Log <sub>10</sub>	≥4.79 Log <sub>10</sub>
Hepatitis C Virus	6.84 Log <sub>10</sub>	A	≤1.28 Log <sub>10</sub>	≥5.56 Log <sub>10</sub>
	6.84 Log <sub>10</sub>	B	≤1.05 Log <sub>10</sub>	≥5.79 Log <sub>10</sub>
	7.14 Log <sub>10</sub>	Confirmatory B	≤1.06 Log <sub>10</sub>	≥5.79 Log <sub>10</sub>

# Data

## Fungicidal Data

**Test Method:**

Quat 256 was evaluated at 1/2 ounce 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 ATCC 9533	9.7 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

# Data

## Mold and Mildew Control Data

**Test Method:**

Use Quat 256 at 1/2 ounce 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 ATCC 6275	1	Growth 95%	No Growth 0%	No Growth 0%
	2	Growth 90%	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%

**Results:**

Sample	Tile Number	Untreated After 7 Days	Sample A After 7 Days	Sample B After 7 Days
Aspergillus niger	6	Growth 55%	No Growth 0%	No Growth 0%
	7	Growth 95%	No Growth 0%	No Growth 0%
	8	Growth 90%	No Growth 0%	No Growth 0%
	9	Growth 80%	No Growth 0%	No Growth 0%
	10	Growth 95%	No Growth 0%	No Growth 0%

## Neutral Germicidal Cleaner Properties

Appearance .....Blue Liquid  
Odor .....Odorless  
pH .....11.3 - 12.3  
pH 1% .....9.3  
Typical Dilution .....1:256  
Weight per Gallon .....8.72 lbs.  
Viscosity .....32 - 40 cps.

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