

QUAT 44

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

Concentrated Quaternary Disinfectant Cleaner

Quat 44 is a phosphate-free disinfectant that does not contain phenol, bleach or VOCs.

Advantages

Quat 44 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
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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. Quat 44 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 ⁴ CFU/Carrier	A	10	0/10
		B	10	0/10
Corynebacterium ammoniagenes ATCC 6871	9.6 X 10 ⁴ CFU/Carrier	A	10	0/10
		B	10	0/10
Enterobacter aerogenes ATCC 13048	4.1 X 10 ⁵ CFU/Carrier	A	10	0/10
		B	10	0/10
Enterococcus faecalis ATCC 19433	3.5 X 10 ⁶ CFU/Carrier	A	10	0/10
		B	10	0/10
Escherichia coli ATCC 11229	3.5 X 10 ⁵ CFU/Carrier	A	10	0/10
		B	10	0/10
Klebsiella pneumoniae ATCC 13883	4.2 X 10 ⁴ CFU/Carrier	A	10	0/10
		B	10	0/10
Listeria monocytogenes ATCC 984	4.5 X 10 ⁵ 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 ⁶ CFU/Carrier	A (60 days old)	60	0/60
	4.3 X 10 ⁶ CFU/Carrier	B	60	1/60
	9.7 X 10 ⁵ CFU/Carrier	C	60	1/60
Salmonella enterica ATCC 10708	1.4 X 10 ⁴ CFU/Carrier	A (60 days old)	60	0/60
	7.3 X 10 ⁴ CFU/Carrier	B	60	0/60
	4.8 X 10 ⁵ CFU/Carrier	C	60	0/60
Salmonella schottmuelleri ATCC 8759	9.6 X 10 ⁵ CFU/Carrier	A	10	0/10
		B	10	0/10
Salmonella typhi ATCC 6539	1.7 X 10 ⁵ CFU/Carrier	A	10	0/10
		B	10	0/10
Shigella dysenteriae ATCC 9361	3.7 X 10 ⁵ CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus aureus (Methicillin Resistant) (MRSA) ATCC 33591	1.3 X 10 ⁵ CFU/Carrier	A	10	0/10
		B	10	0/10
Staphylococcus aureus ATCC 6538	1.4 X 10 ⁶ CFU/Carrier	A (60 days old)	60	1/60
	2.8 X 10 ⁵ CFU/Carrier	B	60	1/60
	9.2 X 10 ⁵ CFU/Carrier	C	60	1/60
Streptococcus salivarius ATCC 13419	1.5 X 10 ⁴ 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 ₁₀	A	≤1.8 Log ₁₀	≥5.7 Log ₁₀
		B	≤1.8 Log ₁₀	≥5.7 Log ₁₀
Avian Influenza A (H5N1) virus	4.5 Log ₁₀	A	≤0.5 Log ₁₀	≥4.0 Log ₁₀
		B	≤0.5 Log ₁₀	≥4.0 Log ₁₀
Hepatitis B Virus	6.84 Log ₁₀	A	≤1.78 Log ₁₀	≥5.06 Log ₁₀
	7.14 Log ₁₀	B	≤2.05 Log ₁₀	≥5.79 Log ₁₀
Hepatitis C Virus		6.85 Log ₁₀	A	≤1.29 Log ₁₀
	B		≤1.06 Log ₁₀	≥5.79 Log ₁₀
	6.85 Log ₁₀	Confirmatory B	≤1.06 Log ₁₀	≥5.79 Log ₁₀
Herpes Simplex Type 1	6.8 Log ₁₀	A	≤1.8 Log ₁₀	≥5.0 Log ₁₀
		B	≤1.8 Log ₁₀	≥5.0 Log ₁₀
Human Coronavirus	4.5 Log ₁₀	A	≤1.5 Log ₁₀	≥3.0 Log ₁₀
		B	≤1.5 Log ₁₀	≥3.0 Log ₁₀
Human Immunodeficiency virus type 1	6.0 Log ₁₀	A	≤2.5 Log ₁₀	≥3.5 Log ₁₀
		B	≤2.5 Log ₁₀	≥3.5 Log ₁₀
Influenza A2/Japan	7.5 Log ₁₀	A	≤1.8 Log ₁₀	≥5.7 Log ₁₀
		B	≤1.8 Log ₁₀	≥5.7 Log ₁₀
Norwalk/Norovirus	5.75 Log ₁₀	A	≤1.5 Log ₁₀	≥4.25 Log ₁₀
		B	≤1.5 Log ₁₀	≥4.25 Log ₁₀
	5.5 Log ₁₀	Confirmatory B	≤0.5 Log ₁₀	≥5.0 Log ₁₀

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 ⁶ 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

AppearancePink Liquid
OdorCitrus
pH10.4 - 11.4
pH 1%9.0
Typical Dilution1:64
Weight per Gallon8.64 lbs.
Viscosity3-7 cps.
USDA RatingC1

EPA Registration Number 10324-93-3838