

EPA NUMBER: 10324-59-42403

**USES**

Cleaner, Disinfectant, Sanitizer, Fungicide, Mildewstat, Virucide\*, For Hospitals, Nursing Homes, Hotels & Motels, Institutional, Industrial, Schools, Food Handling and Process Areas, and Institutional Kitchens.

**USE DILUTIONS**

		Quat Active	Hard Water
Hospital Disinfectant	2 oz. per gal of water	703 ppm	
Virucidal*	2 oz. per gal of water	703 ppm	
Fungicidal	2 oz. per gal of water	488 ppm	
Mold and Mildew	2 oz. per gal of water	488 ppm	
Sanitation Food Contact	2- 4 oz. per 3.5 gal	200 ppm	250 ppm

**EFFICACY DATA****Hospital and General Disinfection**

This product 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

(Testing is performed per the AOAC UDT/GST method (DIS/TSS-1). Sixty carriers are required on 3 separate lots, one of which must be > 60 days old against *Pseudomonas aeruginosa*, *Salmonella enterica* and *Staphylococcus aureus*. Killing of 59 out of 60 carriers is required (total carriers = 540).)

Organism	Carrier Population	Sample	# Carriers	# Positive
<i>Pseudomonas aeruginosa</i> 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
<i>Salmonella enterica</i> 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
<i>Staphylococcus aureus</i> 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

## Supplemental Organisms

(Testing is performed per the AOAC UDT/GST method. Ten carriers are required on 2 separate lots against each supplemental organism. Killing of 10 out of 10 carriers is required (total carriers = 20).)

Organism	Carrier Population	Sample	# Carriers	# Positive
<i>Escherichia coli</i> O157:H7 ATCC 35150	3.1 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
	3.4 X 10 <sup>6</sup> CFU/Carrier	B	10	0/10
<i>Staphylococcus aureus</i> (Methicillin Resistant) (MRSA) ATCC 33591	1.3 X 10 <sup>5</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

## Virucidal against (at 2 ounces)

This product 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.

(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.)

Organism	Dried Virus Control	Sample	Result	Log Reduction
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>
Avian influenza/ Turkey/Wisconsin ATCC VR-798	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>
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>	≥4.79 Log <sub>10</sub>
	7.14 Log <sub>10</sub>	Confirmatory B	≤2.35 Log <sub>10</sub>	≥4.79 Log <sub>10</sub>
Hepatitis C Virus ATCC CCL-22	6.85 Log <sub>10</sub>	A	≤1.29 Log <sub>10</sub>	≥5.56 Log <sub>10</sub>
		B	≤1.06 Log <sub>10</sub>	≥5.79 Log <sub>10</sub>
	6.85 Log <sub>10</sub>	Confirmatory B	≤1.06 Log <sub>10</sub>	≥5.79 Log <sub>10</sub>
Herpes Simplex Type 1 ATCC VR-266	6.8 Log <sub>10</sub>	A	≤1.8 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>
		B	≤1.8 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>
Human Coronavirus ATCC VR-740	4.5 Log <sub>10</sub>	A	≤1.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub>
		B	≤1.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub>
Human Immunodeficiency Virus type 1 (HIV 1) HTLV-III <sub>B</sub>	6.0 Log <sub>10</sub>	A	≤2.5 Log <sub>10</sub>	≥3.5 Log <sub>10</sub>
		B	≤2.5 Log <sub>10</sub>	≥3.5 Log <sub>10</sub>
Influenza A (H1N1) Virus ATCC VR-1469	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>
Influenza A2/Japan/305 ATCC VR-100	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>
Norwalk/Norovirus ATCC VR-782	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>
	5.5 Log <sub>10</sub>	Confirmatory A	≤0.5 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>

**Food Contact Sanitizer (No Rinse)**

At 2 ounces per 3.55 gallons (200 ppm) this product is an effective food-contact surface sanitizer eliminating 99.999% of the of the following bacteria in 60 seconds in 250 ppm hard water (calculated as CaCO<sub>3</sub>) according to the AOAC Germicidal and Detergent Sanitizing Action of Disinfectants test.

Testing is performed per the AOAC method (AOAC Germicidal and Detergent Sanitizers) on 3 separate lots, one of which must be > 60 days old, against both *Escherichia coli* and *Staphylococcus aureus*. Acceptable results must demonstrate a 99.999% reduction in the number of test microorganisms within 30 seconds.

Organism	Dried Virus Control	Sample	30 Sec. Kill	60 Sec. Kill
<i>Escherichia coli</i> ATCC #11229	7.47 Log <sub>10</sub>	A	7.47 Log <sub>10</sub>	7.47 Log <sub>10</sub>
		B	7.47 Log <sub>10</sub>	7.47 Log <sub>10</sub>
		C	7.47 Log <sub>10</sub>	7.47 Log <sub>10</sub>
<i>Staphylococcus aureus</i> ATCC #6538	7.0 Log <sub>10</sub>	A	7.0 Log <sub>10</sub>	7.0 Log <sub>10</sub>
		B	7.0 Log <sub>10</sub>	7.0 Log <sub>10</sub>
		C	7.0 Log <sub>10</sub>	7.0 Log <sub>10</sub>

**Mold and Mildew Control**

Use this product 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.

Organism	Tile Number	Untreated After 7 Days	Sample A After 7 Days	Sample B After 7 Days
<i>Aspergillus niger</i> ATCC #6275	1	Growth 80%	No Growth 0%	No Growth 0%
	2	Growth 100%	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 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%

**Fungicidal against**

This product 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.

(Testing is performed per the AOAC fungicidal method (DIS/TSS-6). Two separate lots are tested against *Trichophyton mentagrophytes* in a suspension test. Killing of all fungal spores in 10 minutes is required.)

Organism	Carrier Population	Sample	# Carriers	# Positive
<i>Trichophyton mentagrophytes</i> ATCC #9533	1.1 X 10 <sup>6</sup> CFU/Carrier	A	10	0/10
		B	10	0/10

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