

Efficacy Bulletin

GS High Dilution Disinfectant 256

EPA Reg. No. 1839-167-5741

Disinfection

This product is bactericidal according to the EPA Test Guideline 810.2200: AOAC Use Dilution Test method on hard inanimate surfaces modified in the presence of 5% organic serum. All tests are completed under Good Laboratory Practice (GLP) conditions.

Organism	Sample	Carriers Tested	Carriers Showing Growth	Contact Time	Dilution
<i>Pseudomonas aeruginosa</i>	A	60	0	10 minutes	1/2 oz./gal
	B	60	0		
	C	60	1		
<i>Staphylococcus aureus</i> (ATCC 6538)	A	60	1	10 minutes	1/2 oz./gal
	B	60	1		
	C	60	1		
<i>Salmonella enterica</i> (ATCC 10708)	A	60	0	10 minutes	1/2 oz./gal
	B	60	0		
	C	60	1		
Ampicillin Resistant <i>Acinetobacter baumannii</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
Bactrim Resistant <i>Acinetobacter baumannii</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Bordetella bronchiseptica</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
Cefazolin Resistant <i>Acinetobacter baumannii</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
Ceftazidime Resistant <i>Acinetobacter baumannii</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
Ceftriaxone Resistant <i>Acinetobacter baumannii</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
Ciprofloxacin Resistant <i>Acinetobacter baumannii</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Corynebacterium ammoniagenes</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Enterobacter aerogenes</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Enterobacter cloacae</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Enterobacter cloacae</i> (Clinical Isolate)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Enterococcus faecalis</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Enterococcus faecalis</i> (Clinical Isolate)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Escherichia coli</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		

Disinfection (continued)

Organism	Sample	Carriers Tested	Carriers Showing Growth	Contact Time	Dilution
<i>Escherichia coli</i> (Clinical Isolate)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Fusobacterium necrophorum</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
Gentamicin Resistant <i>Acinetobacter baumannii</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Klebsiella pneumonia</i> subsp. <i>pneumoniae</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Lactobacillus casei</i> subsp. <i>rhamnosus</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
Levofloxacin Resistant <i>Acinetobacter baumannii</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Listeria monocytogenes</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Pasteurella multocida</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Proteus mirabilis</i> (ATCC 9921)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Proteus mirabilis</i> (ATCC 25933)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Proteus vulgaris</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Salmonella enterica</i> subsp. <i>Enterica</i> serotype <i>paratyphi B</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Salmonella enterica</i> subsp. <i>Enterica</i> serotype <i>pullorum</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Salmonella enterica</i> subsp. <i>Enterica</i> serotype <i>typhi</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Salmonella enterica</i> subsp. <i>Enterica</i> serotype <i>typhimurium</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Salmonella enterica</i> subsp. <i>Enterica</i> serotype <i>enteritidis</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Serratia marcescens</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Shigella dysenteriae</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Shigella flexneri</i> Type 2b	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Shigella sonnei</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		

Disinfection (continued)

Organism	Sample	Carriers Tested	Carriers Showing Growth	Contact Time	Dilution
<i>Staphylococcus aureus</i> Methicillin Resistant (MRSA)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Staphylococcus aureus</i> Community Associated Methicillin Resistant (CA-MRSA) (NRS384)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Staphylococcus aureus</i> Community Associated Methicillin Resistant (CA-MRSA) (NRS123)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Staphylococcus aureus</i> Vancomycin Intermediate Resistant (VISA)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Staphylococcus aureus</i> (Clinical Isolate)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Staphylococcus epidermidis</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Staphylococcus epidermidis</i> (Clinical Isolate)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Streptococcus pyogenes</i> Group A	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Streptococcus pyogenes</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
Tobramycin Resistant <i>Acinetobacter baumannii</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
Vancomycin Intermediate Resistant <i>Enterococcus faecalis</i> (VRE)	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		
<i>Xanthomonas maltophilia</i>	A	10	0	10 minutes	1/2 oz./gal
	B	10	0		

Virucidal

This product is virucidal according to the EPA Test Guideline 810.2200: Virucidal Hard Surface Efficacy Test, in the presence of 5% organic serum. All tests are completed under Good Laboratory Practice (GLP) conditions.

Organism	Sample	Log Reduction	Contact Time	Dilution
Avian Influenza A (H3N2) virus (Avian Reassortant)	A	$\geq 4.25 \text{ Log}_{10}$	10 minutes	1/2 oz./gal
	B	$\geq 4.25 \text{ Log}_{10}$		
Avian Influenza A (H9N2)	A	$\geq 4.0 \text{ Log}_{10}$	10 minutes	1/2 oz./gal
	B	$\geq 4.0 \text{ Log}_{10}$		
Bovine Rhinotracheitis, Strain LA	A	$\geq 5.0 \text{ Log}_{10}$	10 minutes	1/2 oz./gal
	B	$\geq 5.0 \text{ Log}_{10}$		

Virucidal (continued)

Organism	Sample	Log Reduction	Contact Time	Dilution
Bovine Viral Diarrhea Virus (BVDV)	A	5.9 Log ₁₀	10 minutes	1/2 oz./gal
	B	5.9 Log ₁₀		
Canine Distemper Virus, Strain Lederle	A	≥6.25 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥6.25 Log ₁₀		
Feline Picornavirus, Strain FRV	A	≥4.25 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥4.25 Log ₁₀		
Hepatitis B Virus	A	4.5 Log ₁₀	10 minutes	1/2 oz./gal
	B	4.7 Log ₁₀		
Hepatitis C Virus	A	5.9 Log ₁₀	10 minutes	1/2 oz./gal
	B	5.9 Log ₁₀		
Herpes Simplex Type 1	A	≥5.0 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥5.0 Log ₁₀		
Herpes Simplex Type 2	A	≥6.0 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥6.0 Log ₁₀		
Human Coronavirus	A	≥3.0 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥3.0 Log ₁₀		
Human Immunodeficiency Virus Type 1 (HIV-1)	A	≥3.5 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥3.5 Log ₁₀		
Human Immunodeficiency Virus Type 2 (HIV-2)	A	≥3.25 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥3.25 Log ₁₀		
Influenza A2, Strain Hong Kong	A	≥4.25 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥4.25 Log ₁₀		
Paramyovirus Virus	A	≥3.0 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥3.0 Log ₁₀		
Porcine Respiratory & Reproductive Syndrome Virus	A	≥5.0 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥5.0 Log ₁₀		
Pseudorabies, Strain Aujeszky	A	≥5.25 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥5.25 Log ₁₀		
Rabies Virus	A	3.0 Log ₁₀	10 minutes	1/2 oz./gal
	B	3.0 Log ₁₀		
Rotavirus	A	4.5 Log ₁₀	10 minutes	1/2 oz./gal
	B	4.5 Log ₁₀		
SARS Associated Coronavirus	A	≥3.03 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥3.03 Log ₁₀		
SARS-CoV-2 (USA-WA1/2020)	A	≥3.0 Log ₁₀	1 minute	1/2 oz./gal
	B	≥3.0 Log ₁₀		
	C	≥3.0 Log ₁₀		
Vaccinia, Strain WR	A	≥5.5 Log ₁₀	10 minutes	1/2 oz./gal
	B	≥5.5 Log ₁₀		

Fungicidal

This product is fungicidal according to the EPA Test Guideline 810.2200: AOAC Use-Dilution method modified for fungicidal activity on hard inanimate surfaces modified in the presence of 5% organic serum. All tests are completed under Good Laboratory Practice (GLP) conditions.

Organism	Sample	Carriers Showing Growth	Contact Time	Dilution
<i>Trichophyton mentagrophytes</i>	A	0	10 minutes	1/2 oz./gal
	B	0		
<i>Candida albicans</i>	A	0	10 minutes	1/2 oz./gal
	B	0		

Mildewcidal

This product is mildewcidal according to the EPA Hard Surface Mildew Fungistatic Test. All tests are completed under Good Laboratory Practice (GLP) conditions.

Organism	Sample	Exposed Tiles	Tiles Showing Growth	Dilution
<i>Aspergillus niger</i>	A	10	0	1/2 oz./gal
	B	10	0	
	Control	10	10	