

Buckeye®



QUAT 128™

ONE-STEP DISINFECTANT, GERMICIDAL DETERGENT
AND DEODORANT



for use against SARS-CoV-2



Available Packaging



The US Environmental Protection Agency (EPA) has approved Sanicare Quat-128 for use against SARS-Related Coronavirus 2 (SARS-CoV-2) [cause of COVID-19] with a one-minute contact time and a 1 oz./gal. dilution rate.

The SANICARE QUAT128 Difference

Buckeye **Sanicare Quat 128** is a germicidal detergent and deodorant designed for use in industrial, institutional, and health care settings at 1 oz. per gallon of water.

Buckeye **Sanicare Quat 128** is effective in up to 200 ppm hard water plus 5% organic serum. It offers labor saving, one-step cleaning, disinfecting and deodorizing.

Effectively Kills: HIV-1 (AIDS virus) • HBV (Hepatitis B Virus) • HCV (Hepatitis C Virus) • Herpes simplex 1 & 2 • German Measles • Athlete's Foot Fungus • Influenza • Vaccinia • Adenovirus • Vancomycin Resistant Enterococcus faecalis (VRE) • Methicillin Resistant Staphylococcus aureus (MRSA) • Pandemic 2009 H1N1 Influenza A Virus (formerly called Swine Flu) • Gram-negative & Gram-positive pathogens

FEATURES

- Disinfectant
- Bactericidal
- Fungicidal
- *Virucidal
- Mildewstatic
- Pseudomonacidal
- Salmonellacidal
- Staphylocidal
- One-step cleaning, disinfecting and deodorizing
- Effective in 200 ppm hard water in the presence of 5% organic soil load
- No rinse formula
- pH neutral
- Safe on floor finish
- E.P.A. registered
- Pleasant fragrance
- Economical
- For use on hard, nonporous surfaces
- Easy-to-use
- Solvent free

Bactericidal Gram-Negative

Bactericidal against several gram-negative pathogens, according to the AOAC Use Dilution Test (current edition), modified in the presence of 5% organic serum and 200 ppm water hardness (calculated as CaCO_3). Dilution 1:128

Organism	Sample	# Carriers	# of Positives	Neutralization Control
Pseudomonas aeruginosa	A	60	0	+
	B	60	0	+
	C	60	0	+
Salmonella choleraesuis	A	60	0	+
	B	60	0	+
	C	60	0	+
Enterobacter aerogenes	A	10	0	+
	B	10	0	+
Enterobacter cloacae	A	10	0	+
	B	10	0	+
Salmonella enteritidis	A	10	0	+
	B	10	0	+
Salmonella typhimurium	A	10	0	+
	B	10	0	+
Salmonella typhi	A	10	0	+
	B	10	0	+
Legionella pneumophila	A	10	0	+
	B	10	0	+
Klebsiella pneumoniae	A	10	0	+
	B	10	0	+
Proteus vulgaris	A	10	0	+
	B	10	0	+
Proteus mirabilis	A	10	0	+
	B	10	0	+
Serratia marcescens	A	10	0	+
	B	10	0	+
Shigella flexneri	A	10	0	+
	B	10	0	+
Shigella sonnei	A	10	0	+
	B	10	0	+
Escherichia coli	A	10	0	+
	B	10	0	+
Acinetobacter calcoaceticus	A	10	0	+
	B	10	0	+
Bordetella bronchiseptica	A	10	0	+
	B	10	0	+
Chlamydia psittaci	A	10	0	+
	B	10	0	+
Fusobacterium necrophorum	A	10	0	+
	B	10	0	+
Listeria monocytogenes	A	10	0	+
	B	10	0	+
Pasteurella multocida	A	10	0	+
	B	10	0	+

*Virucidal

Sanicare Quat 128 acts as a virucidal against:

HIV-1 (AIDS virus)
 Hepatitis B Virus (HBV)
 Hepatitis C Virus (HCV)
 Herpes Simplex Virus Type 1
 Herpes Simplex Virus Type 2
 Human Coronavirus
 Influenza Type A Virus / Hong Kong
 Adenovirus Type 4
 Respiratory Syncytial Virus (RSV)
 Rubella (German Measles)
 Vaccinia
 SARS Associated Coronavirus
 [SARS] [cause of Severe Acute Respiratory Syndrome]
 according to the Virucidal Qualification Test, modified in the presence of 5% organic serum and 200 ppm water hardness (calculated as CaCO_3). Dilution 1:128

Note: + = Virus present; 0 = No Virus present; T = Toxic

Bactericidal Gram-Negative

Bactericidal against several gram-positive pathogens, according to the AOAC Use Dilution Test (current edition), modified in the presence of 5% organic serum and 200 ppm water hardness (calculated as CaCO_3). Dilution 1:128

Organism	Sample	# Carriers	# of Positives	Neutralization Control
Staphylococcus aureus	A	60	0	+
	B	60	0	+
	C	60	0	+
Streptococcus pyogenes	A	10	0	+
	B	10	0	+
	C	10	0	+
Streptococcus faecalis	A	10	0	+
	B	10	0	+
	C	10	0	+

Bactericidal Antibiotic Resistant

Sanicare Quat 128 is also bactericidal against the following antibiotic resistant bacteria, according to the AOAC Use Dilution Test, in hard water up to 200 ppm (calculated as CaCO_3) in the presence of 5% organic serum.
 Dilution 1:128

Enterococcus faecalis-Vancomycin resistant (VRE)

Escherichia coli

Klebsiella pneumoniae

Pseudomonas aeruginosa

Staphylococcus aureus-Methicillin Resistant (MRSA) and other antibiotic resistant strains

Staphylococcus aureus-Vancomycin Intermediate Resistant (VISA)

Staphylococcus epidermidis

Streptococcus faecalis

Herpes Simplex Type 2

Serial Dilutions (Test Virus in 5% V/V Organic Biostress Load)	Treated Diluted with 400 ppm Hard Water	Untreated Test Virus Untreated Control	Cytotoxicity Control
10^{-1}	T000	++++	T000
10^{-2}	0000	++++	0000
10^{-3}	0000	++++	0000
10^{-4}	0000	++++	0000
10^{-5}	0000	++++	0000
10^{-6}	0000	++++	0000
10^{-7}	0000	++++	0000
10^{-8}	0000	++++	0000

Conclusion: **Sanicare Quat 128** effectively inactivated the test virus, Herpes Simplex Virus Type 2.

*Virucidal

Herpes Simplex Type 1; HSV-I, VR-3, Hominis

Serial Dilutions (Test Virus in 5% V/V Organic Biostress Load)	Treated Diluted with 400 ppm Hard Water	Untreated Test Virus Untreated Control	Cytotoxicity Control
10 ⁻¹	0000	++++	T000
10 ⁻²	0000	++++	0000
10 ⁻³	0000	++++	0000
10 ⁻⁴	0000	++++	0000
10 ⁻⁵	0000	++++	0000
10 ⁻⁶	0000	++++	0000
10 ⁻⁷	0000	++++	0000
10 ⁻⁸	0000	+000	0000

Conclusion: Sanicare Quat 128 effectively inactivated the test virus, Herpes Simplex 1.

Adenovirus Type 4

Serial Dilutions (Test Virus in 5% V/V Organic Biostress Load)	Treated Diluted with 400 ppm Hard Water	Untreated Test Virus Untreated Control	Cytotoxicity Control
10 ⁻¹	0000	++++	T000
10 ⁻²	0000	++++	0000
10 ⁻³	0000	++++	0000
10 ⁻⁴	0000	++++	0000
10 ⁻⁵	0000	++++	0000
10 ⁻⁶	0000	0000	0000
10 ⁻⁷	0000	0000	0000
10 ⁻⁸	0000	0000	0000

Conclusion: Sanicare Quat 128 effectively inactivated the test virus, Adenovirus, Type 4.

Rubella (German Measles) Virus; Strain M-33

Serial Dilutions (Test Virus in 5% V/V Organic Biostress Load)	Treated Diluted with 400 ppm Hard Water	Untreated Test Virus Untreated Control	Cytotoxicity Control
10 ⁻¹	0000	++++	T000
10 ⁻²	0000	++++	0000
10 ⁻³	0000	++++	0000
10 ⁻⁴	0000	++++	0000
10 ⁻⁵	0000	++++	0000
10 ⁻⁶	0000	0000	0000
10 ⁻⁷	0000	0000	0000
10 ⁻⁸	0000	0000	0000

Conclusion: Sanicare Quat 128 effectively inactivated the test virus, Rubella.

Note: + = Virus present; 0 = No Virus present; T = Toxic

Influenza Virus Type A; Hong Kong/68-H3N2

Serial Dilutions (Test Virus in 5% V/V Organic Biostress Load)	Treated Diluted with 400 ppm Hard Water	Untreated Test Virus Untreated Control	Cytotoxicity Control
10 ⁻¹	0000	++++	0000
10 ⁻²	0000	++++	0000
10 ⁻³	0000	++++	0000
10 ⁻⁴	0000	++++	0000
10 ⁻⁵	0000	++++	0000
10 ⁻⁶	0000	++++	0000
10 ⁻⁷	0000	++++	0000
10 ⁻⁸	0000	++++	0000

Conclusion: Sanicare Quat 128 effectively inactivated the test virus, Influenza Virus, Type A.

Vaccinia Virus; IHD Strain

Serial Dilutions (Test Virus in 5% V/V Organic Biostress Load)	Treated Diluted with 400 ppm Hard Water	Untreated Test Virus Untreated Control	Cytotoxicity Control
10 ⁻¹	0000	++++	0000
10 ⁻²	0000	++++	0000
10 ⁻³	0000	++++	0000
10 ⁻⁴	0000	++++	0000
10 ⁻⁵	0000	++++	0000
10 ⁻⁶	0000	++++	0000
10 ⁻⁷	0000	++++	0000
10 ⁻⁸	0000	0000	0000

Conclusion: Sanicare Quat 128 effectively inactivated the test virus, Vaccinia.

Fungicidal

Fungicidal against Trichophyton mentagrophytes (Athlete's Foot fungus), Candida albicans (Yeast) and Aspergillus niger (aspergillosis, pneumonia, skin infections, ear infections) according to the AOAC Fungicidal Test (current edition), modified in the presence of 5% organic serum and 200 ppm water hardness (calculated as CaCO₃). Dilution 1:128

Organism	# Carriers	# of Positives	Control
Trichophyton mentagrophytes	20	0	+
Candida albicans	20	0	+
Aspergillus niger	20	0	+

Buckeye®**QUAT 128™**ONE-STEP DISINFECTANT, GERMICIDAL DETERGENT
AND DEODORANT***Virucidal****Human Immunodeficiency Virus (HIV-1)**

Evaluation of **Sanicare Quat 128** for virucidal efficacy against dried virus (5% organic soil load) after a four (4) minute exposure to a 1:128 dilution in synthetic hard water (200 ppm).

CPE Assay with MT2 Cells (Day 7)

Cytopathic-Cytotoxic Effects (No. Positive/No. Inoculated)

Dilution Innoculated	Virus Control	Sample + Virus		Non-Virucidal Level of Disinfectant		Cytotoxicity Controls	
		Lot A	Lot B	Lot A	Lot B	Lot A	Lot B
10 ¹	4/4	Toxic	Toxic	Toxic	Toxic	4/4	4/4
10 ²	4/4	Toxic	Toxic	Toxic	Toxic	4/4	4/4
10 ³	4/4	0/4	0/4	4/4	4/4	0/4	0/4
10 ⁴	4/4	0/4	0/4	4/4	4/4	0/4	0/4
10 ⁵	4/4	a	a	4/4	4/4	a	a
10 ⁶	2/4	a	a	0/4	0/4	a	a
Virus Titer (-Log ₁₀ TCID ₅₀)	6.0	≤2.5	≤2.5	5.5	5.5		
Cytotoxicity Titer (-Log ₁₀ TCID ₅₀)						2.5	2.5
Reduction of Virus Titer by test sample (-Log ₁₀ TCID ₅₀)		≥3.5	≥3.5				

Note: a = Virus not tested

Conclusion: **Sanicare Quat 128** demonstrated virucidal activity against HIV-1 (AIDS Virus) in the CPE assay with MT2 cells.

E.P.A./Health Canada

EPA REG. NO. 47371-130-559
 EPA EST. NO. 559-MO-1
 DIN 01962086

DIRECTIONS FOR USE:

Disinfects, cleans, and deodorizes the following hard, non-porous, inanimate surfaces:

Floors, walls, (non-medical) metal surfaces, (non-medical) stainless steel surfaces, glazed porcelain, plastic surfaces (such as polypropylene, polystyrene, etc.). Remove heavy soil deposits from surface, then thoroughly wet surface with a use-solution of 1 oz. of the concentrate per gallon of water (use 4 oz. per gallon of water to kill Adenovirus Type 7). The use-solution can be applied with a cloth, mop, sponge or coarse spray, or soaking. For sprayer applications, use a coarse spray device. Spray 6–8 inches from the surface, rub with a brush, cloth or sponge. Do not breathe spray. Let solution remain on surface for a minimum of 10 minutes. Rinse or allow to air dry. Rinsing of floors is not necessary unless they are to be waxed or polished. Food contact surfaces must be thoroughly rinsed with potable water. This product must not be used to clean the following food contact surfaces: utensils, glassware and dishes. Prepare a fresh solution daily or more often if the solution becomes visibly dirty or diluted.

TECHNICAL SPECIFICATIONS**SANICARE QUAT 128**

pH in concentrate	7.6 ± 0.2
pH 1 oz./gal.	7.0 ± 0.2
Weight/Gallon	8.34 lbs/gal.
Specific Gravity	1.00
Biodegradable	Yes
Dilution	1:128
Concentration of Quat @ 1 oz./gal.	660 ppm

Active Disinfectant:

Didecyl dimethyl ammonium chloride.....5.07%
 n-Alkyl (C₁₄ 50%, C₁₂ 40%, C₁₆ 10%)
 dimethyl benzyl ammonium chloride..... 3.38%
 Inert Ingredients.....91.55%

For more information about
Quat 128, scan this code.

**BUCKEYE INTERNATIONAL, INC.**

2700 WAGNER PLACE • MARYLAND HEIGHTS • MO 63043 • USA • 800.321.2583

www.buckeyeinternational.com