

Buckeye®



LEMON MINT PINE QUAT



ONE-STEP DISINFECTANT, GERMICIDAL DETERGENT
AND DEODORANT

for use against SARS-CoV-2



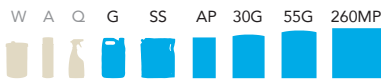
The US Environmental Protection Agency (EPA) has approved Buckeye Sanicare Lemon, Mint and Pine Quat for use against SARS-Related Coronavirus 2 (SARS-CoV-2) [cause of COVID-19] with a one-minute contact time at a 2 oz./gal. dilution rate.

The Sanicare LMP Quat Difference

Sanicare Lemon, Mint and Pine Quats are multi-purpose, germicidal cleaners that offer one-step cleaning, disinfecting and deodorizing for washable, hard, nonporous surfaces.

Sanicare Lemon, Mint and Pine Quats are used at 2 oz. per gallon dilution.

Available Packaging



**Only Sanicare Lemon Quat is available in Smart Sacs

Effectively Kills: *HIV-1 (AIDS virus) • *HBV (Hepatitis B Virus) • *HCV (Hepatitis C Virus) • *Herpes Simplex 1 & 2 • Athlete's Foot Fungus • *Influenza • Vancomycin Resistant Enterococcus faecalis (VRE) • Methicillin Resistant Staphylococcus aureus (MRSA) • Staphylococcus aureus - Community Associated Methicillin-Resistant (CA-MRSA) (NRS384) (USA300) • *Human Coronavirus • *Rotavirus • *Vaccinia Virus • *Adenovirus •

FEATURES

- Germicidal
- Bactericidal
- Fungicidal
- Virucidal*
- Mildewstatic
- Pseudomonacidal
- Salmonellacidal
- Staphylocidal
- Effective in hard water up to 200 ppm in the presence of 5% organic serum
- Economical
- pH neutral
- E.P.A. Registered
- Easy-to-use
- For use on washable, hard, nonporous surfaces
- Leaves a clean, fresh scent

Sanicare Lemon, Mint & Pine Quat is designed for use in:

- Hospitals
- Health Care facilities/Nursing homes
- Commercial & industrial institutions
- Medical offices
- Dental offices
- Day care centers
- Schools/Colleges/Universities
- Federally inspected meat and poultry plants (non-food contact surfaces)
- Athletic facilities
- Correctional facilities
- Kennels
- Hotels/Motels
- Office buildings
- Public restrooms
- Airports

For more information about Lemon, Mint & Pine Quat, scan this code.



DISINFECTANTS

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 CaCO₃). Dilution 1:64

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	+

Bactericidal Gram-Positive

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 CaCO₃). Dilution 1:64

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	+
Streptococcus faecalis	A	10	0	+
	B	10	0	+

Bactericidal Antibiotic Resistant

Buckeye **Sanicare Lemon, Mint & Pint Quat** 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 CaCO₃) in the presence of 5% organic serum. Dilution 1:64

Enterococcus faecalis-Vancomycin resistant (VRE)

Escherichia coli

Klebsiella pneumoniae

Pseudomonas aeruginosa

Staphylococcus aureus - Community Associated Methicillin-Resistant (CA-MRSA) (NRS384) (USA300)

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

Staphylococcus aureus-Vancomycin Intermediate Resistant (VISA)

Staphylococcus epidermidis

Streptococcus faecalis

*Virucidal

Buckeye **Sanicare Lemon, Mint & Pint Quat** 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
- *Adenovirus Type 7 at 8 oz per gallon
- *Respiratory Syncytial Virus (RSV)
- *Rotavirus
- *Rubella Virus
- *SARS Associated Coronavirus (SARS) (may cause Severe Acute Respiratory Syndrome)
- *SARS-Related Coronavirus 2 (SARS-CoV-2) (may cause COVID-19)
- *Vaccinia Virus (Animal Viruses:)
- *Avian polyomavirus
- *Canine distemper Virus
- *Feline leukemia virus
- *Feline picornavirus
- *Pseudorabies Virus (PRV)
- *Rabies Virus

according to the Virucidal Qualification Test, modified in the presence of 5% organic serum and 200 ppm water hardness (calculated as CaCO₃). Dilution 1:64

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

Herpes Simplex Virus 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: Buckeye **Sanicare Lemon, Mint & Pint Quat** effectively inactivated the test virus, Herpes Simplex Virus Type 2.

*Virucidal

Herpes Simplex Virus Type 1; HSV-1, 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: Buckeye **Sanicare Lemon, Mint & Pint Quat** effectively inactivated the test virus, Herpes Simplex Virus Type 1.

Influenza Virus Type A; 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: Buckeye **Sanicare Lemon, Mint & Pint Quat** 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: Buckeye **Sanicare Lemon, Mint & Pint Quat** effectively inactivated the test virus, Vaccinia.

Rubella 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: Buckeye **Sanicare Lemon, Mint & Pint Quat** effectively inactivated the test virus, Rubella.

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

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 1:64

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



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AND DEODORANT

*Virucidal

Human Immunodeficiency Virus (HIV-1)

Evaluation of Buckeye **Sanicare Lemon, Mint & Pine Quat** for virucidal efficacy against dried virus (5% organic soil load) after a 4-minute exposure to a 1:64 dilution in synthetic hard water (400 ppm).

CPE Assay with MT2 Cells (Day 7)

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

Dilution Inoculated	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				

a = Virus not tested

Conclusion: Buckeye **Sanicare Lemon, Mint & Pine Quat** demonstrated virucidal activity against HIV-1 (AIDS Virus) in the CPE assay with MT2 cells.

E.P.A./Health Canada

EPA REG. NO.	47371-131-559
EPA EST. NO.	559-MO-1
PINE QUAT	DIN 01962108
MINT QUAT	DIN 01962078
LEMON QUAT	DIN 01962051

DIRECTIONS FOR USE:

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product is not for use on medical device surfaces.

DISINFECTION / CLEANING / DEODORIZING DIRECTIONS:

Remove visible soil deposits from surface, then visibly wet surface with a use-solution of 2 ounces of the concentrate per gallon of water. Use 8 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 by 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 visibly wet 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.

For SARS-CoV-2, treated surfaces⁸ must remain visibly wet for 1 minute.

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.

TECHNICAL SPECIFICATIONS BUCKEYE SANICARE LEMON, MINT & PINE QUAT

pH in concentrate	7.6 ± 0.2
pH 2 oz./gal.	7.0 ± 0.2
Weight/Gallon	8.34 lb/gal
Specific Gravity	1.00
Biodegradable	Yes
Concentration of Quat @ 2 oz./gal.	660 ppm
Active Ingredients:	
Didecyl dimethyl ammonium chloride.....	2.54%
n-Alkyl (C ₁₄ 50%, C ₁₂ 40%, C ₁₆ 10%)	
dimethyl benzyl ammonium chloride.....	1.69%
Inert Ingredients.....	95.77%
Total.....	100.00%

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