

Buckeye®

ONE-STEP DISINFECTANT, GERMICIDAL DETERGENT AND DEODORANT

SANI-CARE

**LEMON
MINT
PINE**

QUAT™



- Germicidal • Bactericidal • Fungicidal • Virucidal*
- Mildewstatic • Pseudomonacidal • Salmonellacidal • Staphylocidal
- Effective in 400 ppm hard water with 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 all hard surfaces
- Easy to use • Solvent free

- 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
 - Vancomycin Resistant Enterococcus faecalis (VRE) • Methicillin Resistant Staphylococcus aureus (MRSA)
 - Community Associated Methicillin - Resistant Staphylococcus aureus (CA-MRSA)
 - Human Coronavirus • Rotavirus • Vaccinia • Adenovirus • Gram-negative & Gram-positive pathogens

SANICARE LEMON, PINE, & MINT QUAT

SANICARE LEMON, MINT & PINE QUAT are multi-purpose, germicidal detergents and deodorants designed for use in healthcare, industrial and institutional settings at 2 oz. per gallon of water.

SANICARE LEMON, MINT & PINE QUAT are effective in up to 400 ppm hard water plus 5% organic serum. They offer labor saving, one-step cleaning, disinfecting and deodorizing.

SANICARE LEMON, MINT & PINE QUAT kill HIV-1 (AIDS virus), HBV (Hepatitis B Virus), HCV (Hepatitis C Virus), Herpes Simplex 1 and 2, and a broad spectrum of bacteria, fungi and viruses. (Test results found inside.)



Effective pH neutral, no-rinse cleaners

Ideal for routine germicidal cleaning and floor care maintenance.

SANICARE LEMON, MINT & PINE QUAT are true pH neutral, germicidal cleaners. With a use-dilution pH of 7.0 ± 0.2 , LEMON, MINT & PINE QUAT will not attack floor finish.

Special detergents effectively remove dirt and soil without harming the finish. SANICARE LEMON, MINT & PINE QUAT require no rinsing. This means more time may pass between labor intensive stripping and recoating procedures.

In using SANICARE LEMON, MINT & PINE QUAT, floors and other hard surfaces come cleaner and shine longer.



HIV-1 (AIDS virus), HBV (Hepatitis B Virus) and HCV (Hepatitis C Virus)

SANICARE LEMON, MINT & PINE QUAT KILL HIV-1 (AIDS VIRUS), HBV (HEPATITIS B VIRUS) AND HCV (HEPATITIS C VIRUS) ON PRECLEANED ENVIRONMENTAL SURFACES/ OBJECTS PREVIOUSLY SOILED WITH BLOOD OR BODY FLUIDS in healthcare settings or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood/ body fluids, and in which the surfaces/objects likely to be soiled with blood/body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus Type 1 (HIV-1) (associated with AIDS) or Hepatitis B Virus (HBV) or Hepatitis C Virus (HCV).



SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV-1 (AIDS VIRUS) OR HBV OR HCV OF SURFACES/OBJECTS SOILED WITH BLOOD/BODY FLUIDS:

Personal Protection: Disposable protective gloves, gowns, face masks, and eye coverings, as appropriate, must be worn during all cleaning of blood/body fluids, and during decontamination procedures.

Cleaning Procedures: Blood/body fluids must be thoroughly cleaned from surfaces/objects before application of **SANICARE LEMON, MINT** or **PINE QUAT**.

Contact Time: HIV-1 (AIDS virus) is inactivated after a contact time of 4 minutes at 25°C (77°F) (room temperature). HBV and HCV are inactivated after a 10 minute contact time. Use a 10-minute contact time for other viruses, fungi, and bacteria listed.

Disposal of Infectious Materials: Blood/body fluids should be autoclaved and disposed of according to federal, state and local regulations for infectious waste disposal.

Human Immunodeficiency Virus (HIV-1)

Evaluation of **SANICARE LEMON, MINT & PINE QUAT** for virucidal efficacy against dried virus (5% organic soil load) after a four (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: **SANICARE LEMON, MINT & PINE QUAT** demonstrated virucidal activity against HIV-1 (AIDS virus) in the CPE assay with MT2 cells.



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 400 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 400 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

SANICARE LEMON, MINT & PINE QUAT are also bactericidal against the following antibiotic resistant bacteria according to the *AOAC Use Dilution Test* in hard water up to 400 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

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

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

Staphylococcus aureus-Vancomycin Intermediate Resistant (VISA)

Staphylococcus epidermidis

Streptococcus faecalis

*Virucidal

SANICARE LEMON, MINT & PINE QUAT act as a virucidal against:

HIV-1 (AIDS virus)

Hepatitis B Virus (HBV)

Hepatitis C Virus (HCV)

Herpes Simplex Type 1

Herpes Simplex Type 2

Human coronavirus

Influenza Type A/Hong Kong

Adenovirus Type 4

Adenovirus Type 7 at 8 oz per gallon

Respiratory Syncytial Virus (RSV)

Rotavirus

Rubella (German Measles)

SARS Associated Coronavirus [SARS][cause of Severe Acute Respiratory Syndrome]

Vaccinia

(Animal Viruses:)

Avian polyomavirus

Canine distemper

Feline leukemia

Feline picornavirus

Pseudorabies (PRV)

Rabies

according to the *Virucidal Qualification Test*, modified in the presence of 5% organic serum and 400 ppm water hardness (calculated as CaCO₃). Dilution 1:64

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

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 LEMON, MINT & PINE QUAT effectively inactivated the test virus Herpes Simplex, Type 2.

*Virucidal

Herpes Simplex Virus; HSV-I, VR-3, Hominus

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 LEMON, MINT & PINE QUAT** effectively inactivated the test virus Herpes Simplex, Type 1.

Influenza Virus, Type A; 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 LEMON, MINT & PINE QUAT** effectively inactivated the test virus Influenza Virus, Type A.

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 LEMON, MINT & PINE QUAT** effectively inactivated the test virus Adenovirus, Type 4.

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 LEMON, MINT & PINE QUAT** effectively inactivated the test virus Vaccinia.

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 LEMON, MINT & PINE 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 400 ppm water hardness (calculated as CaCO₃). Dilution 1:64

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

ONE-STEP DISINFECTANT, GERMICIDAL DETERGENT AND DEODORANT

SANICARE LEMON, MINT & PINE QUAT are designed for use in:

- Hospitals
- Health care facilities / Nursing homes
- Commercial & Industrial Institutions
- Medical clinics
- Physicians' offices
- Day care centers
- Schools / Colleges / Universities
- Federally inspected meat and poultry plants (non-food contact surfaces)
- Community centers / Churches
- Hotels / Motels
- Office buildings
- Public rest areas
- Airport terminals

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

SANICARE LEMON, MINT & PINE are packaged in:

- 5-gallon **Action Pacs**[®]
- 30-gallon drums
- 4 x 1 gallon cases
- 55-gallon drums
- 260-gallon **Mega Pac**[™]
- **Smart Sacs**[™] (3 x 1 only available in **LEMON QUAT**[™])

Authorized Buckeye Distributor

Directions for use:

Disinfects, cleans, and deodorizes the following hard, nonporous, inanimate surfaces: floors, walls, (non-medical) metal surfaces, (non-medical) stainless steel surfaces, glazed porcelain, plastic surfaces (such as polypropylene, polystyrene, acrylic, etc.). Remove heavy soil deposits from surface, then thoroughly 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 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 use-solution daily or more often if the solution becomes visibly dirty or diluted.

Technical Specifications

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%

SANICARE LEMON, MINT & PINE QUAT are available through your local source for Buckeye products.



Buckeye International, Inc.

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