

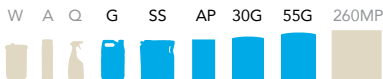


QUAT 256™

**ONE-STEP DISINFECTANT, GERMICIDAL DETERGENT
AND DEODORANT**



Available Packaging



The Sani-care Quat 256 Difference

Buckeye **Sani-care Quat 256** is a multi-purpose, germicidal detergent for use in hospital, health care and industrial settings at ½ oz. per gallon of water. Buckeye **Sani-care Quat 256** requires no rinsing, and is pH neutral for use on floor finishes.

Buckeye **Sani-care Quat 256** has:

- a 1 minute contact time for Human Coronavirus
- a 2 minute contact time for Influenza Virus Type A
- a 4 minute contact time for HIV-1 (AIDS virus)

Effectively kills: HIV-1 (AIDS virus) • Hepatitis B Virus (HBV) • Hepatitis C Virus (HCV) • Herpes Simplex Virus Type 1 & Type 2 • German Measles • Athlete's Foot • Influenza • Vaccinia • Adenovirus • Vancomycin resistant Enterococcus faecalis (VRE) • Methicillin resistant Staphylococcus aureus (MRSA) • Community Associated Methicillin- Resistant Staphylococcus aureus (CA-MRSA) • Gram-negative & Gram-positive pathogens

FEATURES

- Disinfectant
- Pseudomonocidal
- Bactericidal
- Staphylocidal
- *Virucidal
- Fungicidal
- Mildewstatic
- Salmonellacidal
- One-step cleaning, disinfecting and deodorizing
- Effective in 400ppm 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 washable, 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 CaCO₃). Dilution 1:256

| Organism | Sample | # Carriers | # of Positives | Neutralization Control |
|------------------------------------|--------|------------|----------------|------------------------|
| Pseudomonas aeruginosa | A | 60 | 0 | + |
| | B | 60 | 0 | + |
| | C | 60 | 0 | + |
| Salmonella (choleraesuis) enterica | A | 60 | 0 | + |
| | B | 60 | 0 | + |
| | C | 60 | 0 | + |
| Legionella pneumophila | A | 10 | 0 | + |
| | B | 10 | 0 | + |
| Acinetobacter calcoaceticus | A | 10 | 0 | + |
| | B | 10 | 0 | + |
| Chlamydia psittaci | A | 10 | 0 | + |
| | B | 10 | 0 | + |
| Enterobacter aerogenes | A | 10 | 0 | + |
| | B | 10 | 0 | + |
| Enterobacter cloacae | A | 10 | 0 | + |
| | B | 10 | 0 | + |
| Fusobacterium necrophorum | A | 10 | 0 | + |
| | B | 10 | 0 | + |
| Salmonella typhimurium | A | 10 | 0 | + |
| | B | 10 | 0 | + |
| Salmonella typhi | A | 10 | 0 | + |
| | B | 10 | 0 | + |
| Salmonella enteritidis | 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 | + |
| Listeria monocytogenes | A | 10 | 0 | + |
| | B | 10 | 0 | + |
| Pasteurella multocida | A | 10 | 0 | + |
| | B | 10 | 0 | + |

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 1:256

| 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 Quat 256 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 1:256

Enterococcus faecalis-Vancomycin resistant (VRE)

Escherichia coli

Klebsiella pneumoniae

Pseudomonas aeruginosa

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

Staphylococcus aureus-Methicillin Resistant (MRSA),

Vancomycin Intermediate Resistant [VISA] and other antibiotic resistant strains

Staphylococcus epidermidis

Streptococcus faecalis

*Virucidal

Sanicare Quat 256 acts as a virucidal against:

Adenovirus Type 4
 Adenovirus Type 7 at 2 oz per gallon
 Hepatitis B Virus (HBV)
 Hepatitis C Virus (HCV)
 Herpes Simplex Virus Type 2
 Herpes SimplexVirus Type 1
 HIV-1 (AIDS Virus)
 Human coronavirus
 Influenza Type A/Hong Kong
 Respiratory Syncytial Virus (RSV)
 Rotavirus
 Rubella (German Measles)
 SARS associated coronavirus
 Vaccinia (Pox Virus)

according to the **Virucidal Qualification Test**, modified in the presence of 5% organic serum and 200 ppm water hardness (calculated as CaCO₃). Dilution 1:256

Herpes Simplex Type 2; MS 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 | 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 256** effectively inactivated the test virus, Herpes Simplex Virus Type 2.

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

*Virucidal

Herpes Simplex Type 1; VR-733 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 256** effectively inactivated the test virus, Herpes Simplex 1.

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 256** effectively inactivated the test virus, Influenza Virus, Type A.

Adenovirus Type 4; Strain RI-67

| 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 256** 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 Quat 256** 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 Quat 256** 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 1:256

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

SANICARE QUAT 256™

ONE-STEP DISINFECTANT, GERMICIDAL DETERGENT AND DEODORANT

*Virucidal

Human Immunodeficiency Virus (HIV-1)

Evaluation of **Sanicare Quat 256** for virucidal efficacy against dried virus (5% organic soil load) after a four (4) minute exposure to a 1:256 dilution in synthetic hard water (200 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 | | | | |

Note: a = Virus not tested

Conclusion: **Sanicare Quat 256** demonstrated virucidal activity against HIV-1 (AIDS Virus) in the CPE assay with MT2 cells.

E.P.A./Health Canada

EPA REG. NO. 47371-129-559
 EPA EST. NO. 559-MO-1
 DIN 01962116

DIRECTIONS FOR USE:

Remove heavy soil deposits from surface. Then thoroughly wet surface with a use-solution of ½ ounce of the concentrate per gallon of water or equivalent. (Use 2 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 256

| | |
|---|-----------------|
| pH in concentrate | 7.6 ± 0.2 |
| pH ½ oz./gal. | 7.0 ± 0.2 |
| Weight/Gallon | 8.34 lbs |
| Specific Gravity | 1.00 |
| Biodegradable | Yes |
| Dilution | 1:256 |
| Refractive Index at 30° C | 1.3735 – 1.3740 |
| Active Concentration | 660 ppm |
| Active Disinfectant: | |
| Didecyl dimethyl ammonium chloride..... 10.14% | |
| n-Alkyl (C ₁₄ 50%, C ₁₂ 40%, C ₁₆ 10%) | |
| dimethyl benzyl ammonium chloride.....6.76% | |
| Inert Ingredients.....83.10% | |



For more information about Quat 256, scan this code.

BUCKEYE INTERNATIONAL, INC.

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

www.buckeyeinternational.com