



Neutral Disinfectant



Buckeye Eco Neutral Disinfectant is a multi-purpose, neutral pH, broad-spectrum germicidal detergent designed for use in hospital, healthcare and industrial settings at 1:256 and 1:64 dilution. Buckeye Eco Neutral Disinfectant is ideal for routine germicidal cleaning and floor care maintenance. With a use-dilution pH of 7.0 ± 0.2, Buckeye Eco Neutral Disinfectant will not attack floor finish.

- Special detergents effectively remove dirt and soil without harming the finish. Buckeye Eco Neutral Disinfectant requires no rinsing. This means more time may pass between labour intensive stripping and recoating procedures.
- Use Buckeye Eco Neutral Disinfectant on most hard, nonporous surfaces in:
 - Nursing Homes
 - Hospitals
 - Healthcare Facilities
 - Schools and Colleges
 - Office Buildings
 - Public Facilities
 - Hotels
 - Exercise Facilities



FEATURES

- 1 minute contact time for Human Coronavirus
- 2 minute contact time for Influenza Virus Type A
- 4 minute contact time for HIV-1 (AIDS virus)
- Disinfectant
- Bactericidal
- Virucidal*
- Fungicidal
- Mildewstatic
- EPA registered
- Disinfects, cleans, and deodourises in one labour-saving step
- pH neutral
- Effective in hard water up to 200 ppm [calculated as CaCO₃] in the presence of a moderate amount of soil [5% organic serum] according to the AOAC Use-Dilution Test
- Use on hard, nonporous surfaces

Effectively kills: •HIV-1 (AIDS Virus) • *Hepatitis B Virus (HBV) • *Hepatitis C Virus (HCV) • *Herpes Simplex Virus Type 1 & 2 • *Rubella Virus • *Influenza A Virus/Hong Kong • *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 • Trichophyton Mentagrophytes (Athlete's Foot Fungus)

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

1.25 L Bag Yield Rate



1:256 makes 318 end-use litres

Each 4x1 case makes 1272 end-use litres



1:64 makes 81 end-use litres, which is equivalent to:

86
quarts (946 mL/32 oz)

**Each 4x1 case makes 343 end-use quarts/
324 end-use litres**

0.95 L Squeeze & Pour Yield Rate

1:256 makes 242 end-use litres



**Each 6x1 case makes
1452 end-use litres**

1:64 makes 62 end-use litres, which is equivalent to:



65
quarts (946 mL/32 oz)

**Each 6x1 case makes 390
end-use quarts/372 end-use litres**

RESEARCH FACTS

Antimicrobial Test Results

| Claim: | Contact Time: | Organic Soil: | Water Conditions: |
|---------------------|---------------------|---------------|------------------------------|
| Disinfectant | 10 minutes | 5% | 200 ppm as CaCO ₃ |
| Test Method: | EPA Approved Method | | |

| Organism | ATCC# | Use-Dilution Concentration |
|--|------------------|----------------------------|
| Acinetobacter baumannii | BAA-1709 | 660 ppm (½ oz./gal.) |
| Acinetobacter calcoaceticus | 23055 | 660 ppm |
| Bordetella bronchiseptica | 31427 | 660 ppm |
| Chlamydia psittaci | VR-854 | 660 ppm |
| Enterobacter aerogenes | 13048 | 660 ppm |
| Enterobacter cloacae | 13047 | 660 ppm |
| Enterobacter cloacae NDM-1 | CDC1000654 | 660 ppm |
| Enterococcus faecalis - Vancomycin Resistant (VRE) | 51299 | 660 ppm |
| Escherichia coli | 11229 | 660 ppm |
| Escherichia coli NDM-1 | CDC1001728 | 660 ppm |
| Fusobacterium necrophorum | 27852 25286 | 660 ppm |
| Klebsiella pneumoniae | 4352 | 660 ppm |
| Klebsiella pneumoniae ¹ NDM-1 | BAA-2473 | 660 ppm |
| Legionella pneumophila | 33153 | 660 ppm |
| Listeria monocytogenes | 15313 | 660 ppm |
| Pasteurella multocida | 12947 | 660 ppm |
| Proteus mirabilis | 9240 | 660 ppm |
| Proteus vulgaris | 9920 | 660 ppm |
| Salmonella enterica | 10708 | 660 ppm |
| Salmonella enteritidis | 13076 | 660 ppm |
| Salmonella typhi | 6539 | 660 ppm |
| Serratia marcescens | 14756 | 660 ppm |
| Shigella flexneri | 9380 | 660 ppm |
| Shigella sonnei | 25931 | 660 ppm |
| Staphylococcus aureus | 6538 | 660 ppm |
| Staphylococcus aureus ¹ (MRSA) | 33592 | 660 ppm |
| Staphylococcus aureus ¹ (MRSA) Community Associated | (NRS 384) USA300 | 660 ppm |
| Staphylococcus aureus ¹ (MRSA) Community Associated | (NRS 123) USA400 | 660 ppm |
| Staphylococcus aureus ² (VISA) | CDC No. HIP-5836 | 660 ppm |
| Staphylococcus epidermidis ¹ (MDR) Multi-Drug Resistant | 12228 | 660 ppm |
| Streptococcus pyogenes | 19615 | 660 ppm |
| Pseudomonas aeruginosa | 15442 | 660 ppm |
| Pseudomonas aeruginosa ¹ (MBL) | CDC 2012059 | 660 ppm |

Conclusion: Buckeye Eco Neutral Disinfectant demonstrated efficacy against the listed bacteria as specified in the test performance standards. The formulation meets EPA requirements for hard surface disinfectant claims when diluted as directed.

| Claim: | Contact Time: | Organic Soil: | Water Conditions: |
|---------------------|---------------------|---------------|------------------------------|
| Mildewstat | 10 minutes | 5% | 200 ppm as CaCO ₃ |
| Test Method: | EPA Approved Method | | |

| Organism | ATCC# | Use-Dilution Concentration |
|-------------------|-------|----------------------------|
| Aspergillus niger | 6275 | 660 ppm (½ oz./gal.) |

Conclusion: Buckeye Eco Neutral Disinfectant demonstrated efficacy as a mildewstat against the above organism as specified in the test performance standards.

| Claim: | Contact Time: | Organic Soil: | Water Conditions: |
|---|--------------------------------|---------------|-------------------|
| Citrus Canker Disease Control | 10 minutes | 5% | Deionized |
| Test Method: | EPA Approved Method | | |
| Organism | Use-Dilution Concentration | | |
| Xanthomonas axonopodis (Pathovar citri) (USDA Permit No. 46190) | 2000 ppm (5oz. per 3¼ gallons) | | |

| Claim: | Contact Time: | Organic Soil: | Water Conditions: |
|---------------------|---------------------|---------------|------------------------------|
| Fungicide | 10 minutes | 5% | 200 ppm as CaCO ₃ |
| Test Method: | EPA Approved Method | | |

| Organism | ATCC# | Use-Dilution Concentration |
|-----------------------------|-------|----------------------------|
| Trichophyton mentagrophytes | 9533 | 660 ppm (½ oz./gal.) |
| Candida albicans | 11651 | 660 ppm |

Conclusion: Buckeye Eco Neutral Disinfectant demonstrated fungicidal efficacy against the above organisms as specified in the test performance standards.

¹ Antibiotic-resistant strain

² Reduced Susceptibility to Vancomycin

| | | | |
|---------------------|----------------------|----------------------|------------------------------|
| Claim: | Contact Time: | Organic Soil: | Water Conditions: |
| Virucide | Varies | 5% | 200 ppm as CaCO ₃ |
| Test Method: | EPA Approved Method | | |

| Organism | Source of Virus or ATCC# | Use-Dilution Concentration | Contact Time |
|------------------------------------|--|------------------------------|---------------|
| Adenovirus Type 4 | VR-4 strain RI-67 | 660 ppm (½ oz./gal.) | 10 Min. |
| Adenovirus Type 7 | VR-7 | 2640 ppm (2 oz./gal.) | 10 Min. |
| Hepatitis B (HBV) | Duck Hepatitis B Virus (Hepadna Virus Testing, Inc.) | 660 ppm | 10 Min. |
| Hepatitis C (HCV) | Bovine Viral Diarrhea Virus (BVDV-CPE) | 660 ppm | 10 Min. |
| Herpes Simplex Type 1 | VR-733 | 660 ppm | 10 Min. |
| Herpes Simplex Type 2 | MS Strain | 660 ppm | 10 Min. |
| HIV-1 (AIDS Virus) | HTLV-III _{RF} strain | 660 ppm | 4 Min. |
| Human coronavirus | VR-740 Strain 229E | 660 ppm | 1 Min. |
| Influenza A Virus | VR-544 Strain Hong Kong | 660 ppm | 2 Min. |
| Respiratory Syncytial virus (RSV) | VR-26 | 660 ppm | 10 Min. |
| Rotavirus (WA) | Strain WA | 660 ppm | 10 Min. |
| Rubella virus | Strain M-33 | 660 ppm | 10 Min. |
| SARS Associated Coronavirus (SARS) | CDC Strain #200300592 | 660 ppm | 10 Min. |
| Vaccinia (Pox virus) | Strain IHD | 660 ppm | 10 Min. |

Conclusion: Buckeye Eco Neutral Disinfectant effectively inactivated the above viruses specified in the test performance standards. The formulation meets EPA requirements for hard surface disinfectant claims when diluted as directed.

| | | | |
|---------------------|----------------------|----------------------|------------------------------|
| Claim: | Contact Time: | Organic Soil: | Water Conditions: |
| Animal Viruses | 10 minutes | 5% | 200 ppm as CaCO ₃ |
| Test Method: | EPA Approved Method | | |

| Organism | Source of Virus or ATCC # | Use-Dilution Concentration | Contact Time |
|---|---|----------------------------|--------------|
| Avian influenza (H5N1) | Strain VNH5N1-PR8/CDC-RG CDC #2006719965 | 660 ppm (½ oz./gal.) | 10 Min. |
| Avian polyomavirus | Dr. Bruce Calnek, Cornell University | 660 ppm | 10 Min. |
| Canine distemper virus | VR-128 | 660 ppm | 10 Min. |
| Feline leukemia virus | VR-717 | 660 ppm | 10 Min. |
| Feline picornavirus (calicivirus) | VR-649 | 660 ppm | 10 Min. |
| Infectious bovine rhinotracheitis | VR-793 | 660 ppm | 10 Min. |
| Infectious bronchitis [Avian IBV] | VR-22 | 660 ppm | 10 Min. |
| Newcastle Disease | VR-108, strain B1, Hitchner or Blacksburg | 660 ppm | 10 Min. |
| Pseudorabies virus [PRV] | VR-135 | 660 ppm | 10 Min. |
| Rabies virus | VR-138 | 660 ppm | 10 Min. |
| Transmissible Gastroenteritis virus [TGE] | VR-763 | 660 ppm | 10 Min. |

Conclusion: Buckeye Eco Neutral Disinfectant effectively inactivated the above viruses specified in the test performance standards. The formulation meets EPA requirements for hard surface disinfectant claims when diluted as directed.

Directions for Use

DIRECTIONS: Disinfects, cleans, and deodorises the following hard, nonporous, inanimate surfaces: floors, walls, (non-medical) metal surfaces, (non-medical) stainless steel surfaces, glazed porcelain, and plastic surfaces such as polypropylene, polystyrene, etc. 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 (1:256). Use 2 oz. per gallon of water (1:64) 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 152–203 mm 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.

Connecting 1.25 L Bags to Eco Unit

1. Remove 1.25 L bag from carton.
2. To open the Eco unit product compartment, depress the top of the unit with your fingers and pull the compartment down towards you with your other hand.
3. Align Eco unit connector cap lugs with 1.25 L bag metering plug channels. Rotate clockwise to lock in place.
4. Fit 1.25 L bag neatly into product compartment with hose barb pointed downward.
**Ensure chemical line is not pinched.*
5. Close Eco unit product compartment.

Dispensing Diluted Product into 946 mL Trigger Spray Bottle

1. Use appropriate 946 mL trigger spray bottle, and slide up over 127 mm discharge hose.
2. Push back lever to dispense diluted product.
3. Once trigger spray bottle is filled (approximately 51 mm from top), release lever to avoid overfilling.

Dispensing Diluted Product into Mop and Bucket/Other Equipment

1. Position Eco unit discharge hose into mop bucket or other equipment.
2. Press green button below appropriate product to dispense diluted product.
3. For hands-free operation, push the appropriate green button once to dispense diluted product. Once filled, push the button again to stop product flow.

0.95 L Squeeze & Pour Bottles (S23) – User Instructions:

For mop and bucket applications:

Add 1 oz. per prefilled 2 gallons of water

For Eco 32 oz. trigger spray bottle:

Add ½ oz. per prefilled Eco trigger spray bottle of water

Available in:



1.25 L bags



0.95 L squeeze & pour bottles

| Eco Neutral Disinfectant Technical Specifications | |
|---|--------------|
| pH in concentrate | 7.6 ± 0.2 |
| pH 2 oz./gal. (1:64) | 6.8 ± 0.2 |
| pH ½ oz./gal. (1:256) | 7.0 ± 0.2 |
| Weight/Gallon | 8.31 lbs |
| Specific Gravity | 0.998 |
| Colour | Forest Green |
| Fragrance | Lemon Zest |
| 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 E23/S23, scan this code.



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