INTERvention

Farm Animal Care

Disinfectant Cleaner & Deodorizer

Concentrate

FOR BARN AND FARM USE



Reference Sheet

Virox® Technologies Inc.

Manufactured by:

2770 Coventry Road, Oakville, ON Canada L6H 6R1 1-800-387-7578 | virox.com | viroxanimalhealth.com

This product is designed for use as a cleaner, disinfectant or sanitizer on hard non-porous surfaces of vehicles, trucks, trailers, carts, animal crates, grooming equipment, handling equipment, buckets, brushes, tables, transportation crates, foot baths, automatic feeders, troughs, feed racks, wash stalls, non-porous fencing, gates, gathering, guiding / controlling equipment, and non-porous harnesses & leashes; commonly found in animal housing facilities, poultry, stall, barn, pen, agricultural & livestock buildings, and

To Prepare Use Solution

breeding facilities.

Ratio	Per Gallon of Water
1:16	8 oz.
1:32	4 oz.
1:64	2 oz.
1:128	1 oz.
1:256	0.5 oz.

Claims

When used as directed, this product is highly effective against a wide variety of pathogenic microorganisms including bacteria, antibiotic resistant bacteria, *viruses, fungi, mold and mildew. At 1:16 – 1:64 dilution (2 – 8 oz. of product per gallon of water), in the presence of 200ppm hard water, 5% serum load and 5 minute contact time, unless otherwise noted, this product kills the following on hard non-porous inanimate surfaces:

VETERINARY *VIRUSES - 1:64, 5 minutes

Avian Adenovirus type 2

Avian Infectious Bronchitis virus

Avian Influenza A (H3N2)

Avian Reovirus (Strain 2177)

Bovine Viral Diarrhea virus (BVDV)

Duck Hepatitis B virus (DHBV)

Equine Herpes virus type 1

Equine Influenza A (H3N8) virus

Foot and Mouth Disease virus (FMDv)

- 1:64 dilution, 10 minutes

Infectious Laryngotracheitis virus

Marek's Disease virus

Newcastle Disease virus

Porcine Epidemic Diarrhea virus

Porcine Respiratory & Reproductive

Syndrome (PRRS) virus

Porcine Rotavirus

Pseudorabies virus

Seneca Valley virus

Swine Influenza A (H1N1) virus

Transmissible Gastroenteritis virus (TGE)

*VIRUSES

At 1:16-1:64 dilution (2-8 oz. of product per gallon of water), in the presence of 200 ppm hard water, 5% serum load and 5 minute contact time, unless otherwise noted, this product kills the following on hard, non-porous inanimate surfaces:

Adenovirus type 8

Herpes simplex Type 2 – 1:128 dilution, 5 minutes

Human Coronavirus

Influenza Type A₂ – 1:128 dilution, 5 minutes

Norovirus (Feline Calicivirus as the surrogate)

Parainfluenza Type 3

Poliovirus Type 1

Respiratory Syncytial Virus

Rhinovirus Type 37, Strain 151-1

Rotavirus

Vaccinia Virus (smallpox vaccine virus)

Kills *Hepatitis B Virus (HBV) & *Hepatitis C Virus (HCV) when used as directed on hard, non-porous inanimate surfaces with a 5 minute contact time.

Kills *Influenza A Virus (H1N1) when used as directed on hard, non-porous inanimate surfaces with a 1 minute contact time.

*Kills Pandemic 2009 H1N1 Influenza A virus (formerly called swine flu).

BACTERIA - 1:16, 5 minutes, unless otherwise noted

Acinetobacter baumannii

Campylobacter jejuni – 1:64 dilution, 10 minutes***

Chlamydia psittaci (Strain 6 BC) – 1:64 dilution, 5 minutes

Escherichia coli O157:H7

Klebsiella pneumoniae

Listeria monocytogenes

Mycoplasma orale - 1:64 dilution, 10 minutes***

Pseudomonas aeruginosa – 1:64 dilution, 10 minutes**** – 1:16 dilution, 5 minutes

Salmonella enterica (formerly known as Salmonella choleraesuis) – 1:64 dilution, 10 minutes***- 1:16 dilution, 5 minutes

Salmonella (enterica subspecies enterica serovar) pullorum – 1:64 dilution, 10 minutes****

Shigella dysenteriae

Staphylococcus aureus – 1:64 dilution, 10 minutes**** – 1:16 dilution, 5 minutes

Streptococcus pyogenes

ANTIBIOTIC-RESISTANT BACTERIA - 1:16, 5 MINUTES

Enterococcus faecium, Vancomycin Resistant (VRE)

Escherichia coli, Extended Spectrum Betalactamase resistance (ESBL)

Klebsiella pneumoniae, Carbapenemresistant (KPC)

Staphylococcus aureus (CA-MRSA) (Genotype USA300)

Staphylococcus aureus (CA-MRSA) (Genotype USA400)

Staphylococcus aureus (MRSA)

Staphylococcus epidermidis (MRSE)

Streptococcus pneumoniae, Penicillin Resistant (PRSP)

FUNGI

This product is fungicidal when used as directed on hard, non-porous inanimate surfaces at a 1:16 dilution (8 oz. per gallon of water), and in the presence of a 5% serum load and 5 minute contact time at 20°C (68°F).

Microsporum canis

Trichophyton interdigitale (formerly known as Trichophyton mentagrophytes)

*Canine Parvovirus: Kills *Canine Parvovirus when used as directed on hard, non-porous inanimate surfaces at a 1:16 dilution (8 oz. per gallon of water), and in the presence of a 5% serum load and 5 minute contact time.

*Canine Parvovirus: Kills *Canine Parvovirus when used as directed on hard, non-porous inanimate surfaces at a 1:32 dilution (4 oz. per gallon of water), and in the presence of a 5% serum load and 10 minute contact time.

Mildewcidal Activity – kills the growth of mold and mildew when diluted at 1:16 in 200 ppm hard water at a 10 minute contact time: *A. niger* and the odors caused by them when applied to hard, non-porous environmental surfaces.

Mildewstatic Activity – controls and prevents the growth of mold and mildew when diluted at 1:16 in 200 ppm hard water at a 10 minute contact time: *A. niger* and the odors caused by them when applied to hard, non-porous environmental surfaces.

Bactericidal Stability of Use-Solution – This product, when diluted at 1:16 dilution (8 oz. of product per gallon of water) in 200 ppm hard water, in the presence of 5% serum, remains effective against *Staphylococcus aureus, Salmonella enterica* (formerly known as *Salmonella choleraesuis*) and *Pseudomonas aeruginosa* for up to 90 days in storage as long as the bottle remains sealed. If the use-solution becomes visibly dirty or contaminated, it must be discarded and a fresh product prepared. Always use clean, dry containers when diluting this product. Treated surfaces must remain wet for 5 minutes.

Sanitizing: When used as a non-food contact sanitizer at a 1:16 dilution (8 oz. of product per gallon of water), in the presence of 200 ppm hard water, 5% serum load, this product reduces the following bacteria by 99.9% with a 30 second contact time on hard non-porous inanimate surfaces:

Enterobacter aerogenes

Enterococcus faecalis, Vancomycin Resistant (VRE)

Escherichia coli, Extended Spectrum Beta-lactamase resistance (ESBL)

Listeria monocytogenes

Pseudomonas aeruginosa

Salmonella enterica (formerly known as Salmonella choleraesuis)

Staphylococcus aureus

Sanitizing: When used as a non-food contact sanitizer at a 1:128 dilution (1 oz. of product per gallon of water), in the presence of 200 ppm hard water, 5% serum load, this product reduces the following bacteria by 99.9% with a 3 minute contact time on hard non-porous inanimate surfaces:

Enterococcus faecalis

Escherichia coli

Klebsiella pneumoniae

Listeria monocytogenes

Pseudomonas aeruginosa

Salmonella enterica (formerly known as Salmonella choleraesuis)

Staphylococcus aureus

Malodor Activity – eliminates odors and odor-causing bacteria on hard, non-porous surfaces in restroom areas, behind and under sinks and counters, and storage areas and other places where bacterial growth can cause malodors, when used as directed at a 1:16 dilution (8 oz. of product per gallon of water), in the presence of 200 ppm hard water in 30 seconds or when used as directed at a 1:128 dilution (1 oz. per gallon of water), in the presence of 200 ppm hard water in 3 minutes.

Directions For Use

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

For use as a *Virucide: Dilute at 2 – 8 oz. of product per gallon of water (1:16 – 1:64). 1) Pre-clean heavily soiled areas. 2) Apply Use Solution until thoroughly wet. 3) Let stand for 5 minutes. 1 4) Wipe surfaces and let air dry.

***For Use as a One-Step Bactericide Cleaner/Disinfectant: Dilute at 2.0 oz of product per gallon of water (Dilute at 1:64). 1) Pre-clean heavily soiled areas. 2) Spray Use Solution until thoroughly wet. 3) Let stand for 10 minutes. 4) Wipe surfaces (and let air dry).

To Kill *Canine Parvovirus: Dilute at 4.0 oz. of product per gallon of water (1:32). 1) Pre-clean heavily soiled areas. 2) Apply Use Solution until thoroughly wet. 3) Let stand for 10 minutes. 4) Wipe surfaces and let air dry.

To Kill Mold and Mildew: Dilute at 8.0 oz. of product per gallon of water (1:16). Pre-clean surfaces. Apply Use Solution to hard, non-porous environmental surfaces. Allow surfaces to remain wet for 10 minutes. Wipe surfaces and let air dry.

To Control Mold and Mildew: Dilute at 8.0 oz. of product per gallon of water (1:16). Apply Use Solution to pre-cleaned hard, non-porous environmental surfaces. Wipe surfaces and let air dry. Repeat application weekly or when growth reappears.

To Sanitize Non-Food Contact Surfaces: Dilute at 8.0 oz. of product per gallon of water (1:16). 1) Pre-clean heavily soiled hard non-porous surfaces. 2) Apply Use Solution until thoroughly wet. 3) Let stand for 30 seconds. 4) Wipe surfaces and let air dry. 5) Not for use on food contact surfaces or on food preparation areas.

To Sanitize Non-Food Contact Surfaces: Dilute at 1.0 oz. of product per gallon of water (1:128). **1)** Pre-clean heavily soiled hard non-porous surfaces. **2)** Apply Use Solution until thoroughly wet. **3)** Let stand for 3 minutes. **4)** Wipe surfaces and let air dry. **5)** Not for use on food contact surfaces or on food preparation areas.

For Use as a Deodorizer: Dilute at 1 oz. of product per gallon of water (1:128). Apply to hard, non-porous surfaces. Let stand for 3 minutes.

For Cleaning and Disinfection of Vehicles: Dilute at 2.0 – 8.0 oz. of product per gallon of water (1:16 – 1:64). To disinfect the non-porous, hard surfaces of vehicles: Remove all litter and manure, fecal matter from surfaces and thoroughly clean surfaces with this product and rinse with water. Apply use solution of this product using a high pressure or coarse spray system. Allow product to remain in contact with surfaces for 5 minutes when using a 1:16 (8.0 oz per gallon of water) dilution for bactericidal, fungicidal and *virucidal efficacy. If using a 1:64 (2.0 oz per gallon of water) dilution, allow 5 minutes for *viruses and 10 minutes for bacteria. Allow to air dry. All treated surfaces that will contact feed or drinking water must be thoroughly scrubbed with soap or detergent and then rinsed with potable water before reuse.

Poultry Houses and Poultry Hatcheries: Dilute at 2.0 – 8.0 oz. of product per gallon of water (1:16 - 1:64). For cleaning and disinfecting the following hard non-porous surfaces: feeding and watering equipment, utensils, instruments, cages, crates, stables, catteries etc. 1) Remove all poultry and feeds from premises, trucks, coops and crates. 2) Remove all litter and droppings from floors, walls and surfaces of facilities occupied or traversed by poultry. 3) Empty all troughs, racks and other feeding and watering appliances. 4) Thoroughly clean all surfaces with soap or detergent and rinse with water. 5) Saturate all surfaces floors, walls, cages and other washable hard, non-porous environmental surfaces by spraying with use solution until thoroughly wet. To disinfect, all surfaces must remain wet for 5 minutes when using a 1:16 (8.0 oz per gallon of water) dilution for bactericidal, fungicidal and *virucidal efficacy. If using a 1:64 (2.0 oz per gallon of water) dilution, allow 5 minutes for *viruses and 10 minutes for bacteria. 6) Ventilate buildings, coops and other closed spaces. Do not house poultry or employ equipment until treatment has been absorbed, set, or dried. 7) Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains and waterers with soap or detergent and rinse with potable water before re-use.

*This product kills HBV, HCV and HIV-1 on pre-cleaned environmental surfaces/
objects previously soiled with blood/body fluids in health care settings and other
settings in which there is an expected likelihood of soiling of inanimate surfaces/
objects with blood or body fluids, and in which the surfaces/objects likely to be soiled
with blood or body fluids can be associated with the potential for transmission of
Hepatitis B Virus (HBV), Hepatitis C Virus (HCV) and Human Immunodeficiency Virus
Type 1 (HIV-1) (associated with AIDS).

SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HBY, HCV AND HIV-1 OF SURFACES/OBJECTS SOILED WITH BLOOD/BODY FLUIDS.

Personal Protection: Disposable latex or vinyl gloves, gowns, face masks, and eye coverings must be worn during all cleaning of body fluids, blood, and decontamination procedures.

Cleaning Procedures: Blood and body fluids must be thoroughly cleaned from surfaces and objects before application of this product.

Contact Time: Allow surface to remain wet for 1 minute to kill HIV-1, and for 5 minutes to kill HBV, HCV, fungi and all other organisms cited on the label.

Disposal of Infectious Material: Cleaning materials used that may contain blood and other body fluids must be autoclaved and disposed of according to Federal, State, and local regulations for infectious waste disposal.

Si no puede leer en ingles, pregunte a su supervisor sobre las instrucciones de uso apropiadas antes de trabajar con este producto.

EPA Reg. No. 74559-4 EPA Est. No.74559-CAN-1

¹ Use a 10 minute contact time for Foot and Mouth Disease virus (FMDv)