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 a 1:16 dilution (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:

**BACTERICIDAL: 5 MINUTES @ 1:16**

- Acinetobacter baumannii (ATCC 19606)
- Escherichia coli O157:H7 (ATCC 35150)
- Klebsiella pneumoniae (ATCC 4352)
- Listeria monocytogenes (ATCC 19111)
- Pseudomonas aeruginosa (ATCC 15442)
- Salmonella enterica (ATCC 10708)
  (formerly known as *Salmonella choleraesuis*)
- Shigella dysenteriae (ATCC 13313)
- Staphylococcus aureus (ATCC 6538)
- Streptococcus pyogenes (ATCC 12204)

**ANTIBIOTIC-RESISTANT BACTERICIDAL ACTIVITY:**

- Enterococcus faecium, (Resistant to Vancomycin [VRE]) (ATCC 51559)
- Escherichia coli, (Extended Spectrum Beta-lactamase resistance [ESBL]) (ATCC BAA-196)
- Klebsiella pneumoniae, (Carbenem-resistant [KPC]), (ATCC BAA-1705)
- Staphylococcus aureus, (CA-MRSA) (clinical isolate 08001)
  (Genotype USA300)
- Staphylococcus aureus, (CA-MRSA) (clinical isolate 08005)
  (Genotype USA400)
- Staphylococcus aureus (MRSA) (ATCC 33591)
- Staphylococcus epidermidis (MRSE) (ATCC 51625)
- Streptococcus pneumoniae, Penicillin Resistant (PRSP)
  (ATCC 700671)

**VIRUCIDAL: 5 MINUTES @ 1:64**

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 (ATCC VR-1368, Strain Trim)*
*Herpes simplex Type 2 (VR-734)*
*Human Coronavirus (VR-740)*
*Influenza Type A (Hong Kong) (VR-544)*
*Norovirus (Feline Calicivirus as the surrogate) (VR-782)*
*Parainfluenza Type 3 (VR-93)*
*Poliovirus Type 1 (ATCC VR-1000)*
*Respiratory Syncytial Virus (VR-26)*
*Rhinovirus Type 37, Strain 151-1 (ATCC VR-1147)*
*Rotavirus (Strain WA)*
*Vaccinia Virus (smallpox vaccine virus) (ATCC VR-119)*
*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.

**FUNGICIDAL: 5 MINUTES @ 1:16**

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). *Trichophyton mentagrophytes* (ATCC 9533) and *Microsporum canis* (ATCC 10214) are killed by this product.

**MALODORS**

Malodors – reduces 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 and a 30 seconds contact time.

**MOLD/MILDEW**

**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: *Aspergillus niger* (ATCC 16404) and the odors caused by them when applied to hard, non-porous environmental surfaces.

**Mildewstatic Activity:** Reduces the growth of mold and mildew when diluted at 1:16 in 200 ppm hard water at a 10 minute contact time: *Aspergillus niger* (ATCC 6275) and the odors caused by them when applied to hard, non-porous environmental surfaces.
**BROAD-SPECTRUM NON-FOOD CONTACT SANITIZER: 30 SECONDS @ 1:16**

**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** (ATCC 13048)
- **Enterococcus faecalis**, Vancomycin-Resistant (VRE), (ATCC 51575)
- **Escherichia coli**, Extended Spectrum Beta-lactamase resistance (ESBL) (ATCC BAA-196)
- **Listeria monocytogenes** (ATCC 19111)
- **Pseudomonas aeruginosa** (ATCC 15442)
- **Salmonella enterica** (ATCC 10708) (formerly known as **Salmonella choleraesuis**)
- **Staphylococcus aureus** (ATCC 6538)

**BROAD-SPECTRUM NON-FOOD CONTACT SANITIZER: 3 MINUTES @ 1:128**

**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:

- **Escherichia coli** (ATCC 11229)
- **Enterococcus faecalis** (ATCC 29212)
- **Klebsiella pneumoniae** (ATCC 4352)
- **Listeria monocytogenes** (ATCC 19111)
- **Pseudomonas aeruginosa** (ATCC 15442)
- **Salmonella enterica** (ATCC 10708) (formerly known as **Salmonella choleraesuis**)
- **Staphylococcus aureus** (ATCC 6538)

**BACTERICIDAL STABILITY OF USE-SOLUTION**

Tests show this product as a disinfectant, 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.

**DIRECTIONS FOR USE**

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

*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 HBV, 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 solution to remain wet for 1 minute to kill HIV-1, and for 5 minutes to kill HBV and HCV.

**Disposal of Infectious Material:** Blood and other body fluids must be autoclaved and disposed of according to Federal, State, and local regulations for infectious waste disposal.

**For use as a *Virucide:* Dilute at 2 – 8 oz. of product per gallon of water (1:16 – 1:54).
1. Pre-clean heavily soiled areas.
2. Apply Use Solution until thoroughly wet.
3. Let stand for 5 minutes.
4. Wipe surfaces and let air dry.

**For Treatment of Animal Housing Facilities:** Dilute at 8.0 oz. of product per gallon of water (1:16).
1. Remove all animals and feeds from areas being treated.
2. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes, and other facilities occupied or traversed by animals.
3. Empty or cover all troughs, racks and other feeding and watering appliances.
4. Thoroughly clean all surfaces with soap or detergent and rinse with water.
5. Apply fresh Use Solution to floors, walls, cages and other washable hard, non-porous environmental surfaces. For smaller surfaces, use a trigger spray bottle to spray all surfaces with solution until wet. To disinfect, all surfaces must remain wet for 5 minutes.
6. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure.
7. Ventilate buildings and other closed spaces. Do not house animals or re-employ equipment until product has dried.
8. For disinfection of feed racks, troughs, automatic feeders, fountains and watering appliances scrub with use-solution, let stand 5 minutes. Then thoroughly scrub all treated surfaces with soap or detergent and rinse with potable water before reuse.