PERISEPT
Sporicidal Disinfectant Cleaner

Meets CDC protocol for disinfecting Ebola and EV-68 viruses.

EPA Registration
# 10324-214-12120

TECHNICAL GUIDE
# Table of Contents

## Perisept Product Data

- What is Perisept? ........................................................... 1
- How Does Perisept Work? ............................................. 2
- Perisept Dispensing Options ........................................ 3
- Perisept Wall Chart ...................................................... 4
- TB vs. C.Diff Effectiveness ........................................... 5-6
- Efficacy Data ............................................................. 7
- Efficacy Claims Against Non Enveloped Viruses ......... 8
- Surface and Material Compatibility ....................... 9-10
- Concentrated SDS ...................................................... 11-21
- EPA Registered Product Label (Conc.) .................. 22
- Ready To Use SDS ..................................................... 23-27
- EPA Registered Product Label (RTU) .................... 28
- General Efficacy & Marketing Claims ................ 29

## Reference Materials

- ESM-PropProper Cleaning & Disinfecting for C. diff spores and other MDRO’s ........................................... 30-34
- CDC Vital Signs .......................................................... 35-38
- Areas of Use .............................................................. 39
  - General Use Sites
  - Medical Use Sites
  - Material Compatibility
- Competitive Analysis Sporicidal Disinfectants ....... 40
- Notes Page ............................................................... 41
New Power Against C. diff and other Common Pathogens

SSS Perisept Sporicidal Disinfectant Cleaner eliminates and prevents the spread of *C. difficile*, as well as, MRSA and many other common pathogens in healthcare, including ESKAPE pathogens – Enterococcus faecalis (VRE), Staphylococcus aureus, Klebsiella pneumoniae, Acinetobacter baumannii, Pseudomonas aeruginosa, and Enterobacterspecies.*

Contains no alcohol or bleach, requires no rinsing and leaves no film on hard surfaces. As a hospital-grade disinfectant cleaner and sporicide it is ideal for surgical rooms, patient rooms, operating suites, physical therapy departments, nursing services, autopsy facilities, long-term care facilities and nursing homes.

According to the Centers for Disease Control and Prevention, EPA-registered disinfectants with a sporicidal claim have been used successfully with environmental surface disinfection in patient care areas.

*When used in accordance with product labeling.*
How does PERISEPT Work?

The primary mode of action is oxidation; the stronger the oxidizer, the faster the killing.

1. PAA disrupts/opens protective membrane
2. HP destroys internal structures

Oxidation Potential of Various Disinfectants

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>eV (ELECTRON VOLTS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydroxy Radical</td>
<td>2.80</td>
</tr>
<tr>
<td>Ozone</td>
<td>2.07</td>
</tr>
<tr>
<td>Peroxyacetic Acid</td>
<td>1.81</td>
</tr>
<tr>
<td>Hydrogen Peroxide</td>
<td>1.80</td>
</tr>
<tr>
<td>Chlorine Dioxide</td>
<td>1.57</td>
</tr>
<tr>
<td>Sodium Hypochlorite (bleach)</td>
<td>1.36</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>0.80</td>
</tr>
</tbody>
</table>

The higher the eV the better the chemical

Power that lasts

Peroxyacetic acid disrupts the outer membrane/endospore or coat of the target spore, bacteria, or virus.
- Hydrogen peroxide oxidizes and destroys the internal components.

Together, the active ingredients kill the microbe.

Combat C. difficile and HAIs with the Industry’s Fastest Sporicidal Disinfectant Cleaner

Fast Kill Time
With its shorter kill times, SSS Perisept Sporicidal Disinfectant Cleaner stays wet and works faster. The outcome – assured efficacy against hard-to-kill C. difficile spores and other dangerous pathogens every time you clean and disinfect.

Cost-Effective Non-Bleach Formula; Superior Material and Surface Compatibility
The non-bleach, hydrogen peroxide/peroxyacetic acid based formulation leaves no harmful or corrosive residues, no undesirable film on surfaces. SSS Perisept Sporicidal Disinfectant is compatible with many different surfaces and medical equipment used in healthcare including stainless steel, aluminum, chrome, glazed ceramic tile, plastic and painted surfaces, and finished floors. Unlike bleach-based products, it will not corrode metal or damage mattress covers, and requires no rinsing. See the Technical Guide for a broad list of compatible surfaces.

Benefits of a Concentrate
SSS Perisept Sporicidal Disinfectant is designed for use with the closed loop Navigator Dilution Control System. The Navigator DCS offers closed loop dispensing and minimizes contact with the concentrate. The easy to follow numbering and color-coded labeling simplifies training for EVS departments. The high 1:32 dilution rate offers customers a lower end-use cost making it affordable for use as a daily cleaner, in addition to operating rooms, isolation rooms and post discharge. Standardizing to one disinfectant cleaner reduces training challenges, potential confusion, as well as, the number of chemicals stored in the supply closet.
PERISEPT Dispensing Options

Navigator 4 - Station Dispenser

Four-Station Wall Mount Dilution Control System accurately dispenses four different concentrated cleaning products in one easy step.

Features:
- Easy refill bottle installation
- Single dial product selector
- One-handed spray bottle filling
- Remote bucket/auto scrubber fill gun with trigger on handle
- Rinse water selector
- 2.5 GPM dispensing with action-gap back-flow protection
- No metering tip installation—refill bottles come pre-tipped
- Locking doors prevents access to concentrates

Navigator Portable

Saves time—no back-and-forth trips to refill buckets or equipment

- Ideal for remote locations – works with any standard water source
- Compact, rugged design with simple one-hand control
- Safe-Guard System eliminates spills and chemical contact

Safe-Guard™ System All Navigator Models

Leak-proof bottle insert integrates with dispenser connector—eliminates spills; prevents contact with concentrated product.
1. Put on Gloves/Eyewear

2. Install Bottle

   Screw white cap from dispenser onto bottle and slide into bracket.

3. Dispense

   Push and hold lever up. Dispense into secondary bottle or chemical dilution bucket.

4. Fill Chart

<table>
<thead>
<tr>
<th>Number of Cloths</th>
<th>Gallons of Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>1/4</td>
</tr>
<tr>
<td>25</td>
<td>1/2</td>
</tr>
<tr>
<td>40</td>
<td>3/4</td>
</tr>
<tr>
<td>50</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Mops</th>
<th>Gallons of Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>3/4</td>
</tr>
<tr>
<td>15</td>
<td>1 1/3</td>
</tr>
<tr>
<td>20</td>
<td>1 1/2</td>
</tr>
<tr>
<td>25</td>
<td>1 3/4</td>
</tr>
</tbody>
</table>

Recommended use-solution for preparing microfiber for cleaning/disinfecting.

5. Pour

   Pour contents into microfiber charging bucket.

   Allow 15 minutes for solution to saturate microfiber.

6. Set

   15 min

   • Bedrails
   • Walls
   • Bedside Tables
   • High Touch Surfaces
   • Counters
   • Toilets
   • Floors
   • Headboards
   • Call Devices
   • Showers
   • Restrooms
   • X-Ray Equipment
   • Operating Room Tables
   • and Other Hard Surface

   IN CASE OF SPILL:

   Immediately shut off any sources of ignition. Evacuate any personnel not trained in handling spilled material. Ventilate area well. Do not allow contact with organic materials such as paper, fabric, cotton, leather or wood. Do not walk in product or allow contact with footwear or clothing.

   Wear protective clothing - chemical splash goggles, rubber or other chemical resistant gloves, and rubber boots. Use positive pressure self-contained breathing apparatus for confined or poorly ventilated areas.

   DO NOT allow undiluted material to enter floor drains or sanitary sewer systems.

   Methods for cleaning up: Combustible materials exposed to hydrogen peroxide, an ingredient in this product, should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

   DO NOT discard rags, mops or other clean-up materials into trash without first being thoroughly rinsed with water.

   Neutralization of Spill: Add sodium carbonate (soda ash) at a rate of 1-3 pounds for each gallon of concentrated solution. Excessive carbon dioxide bubbles will be present which will dissipate quickly. Continue adding sodium carbonate (soda ash) until final pH is 6-7. Dispose of product in accordance with state and local regulations.

POTENTIAL HEALTH EFFECTS:

Eyes: Causes burns and may result in permanent injury to eyes including blindness. Skin: Causes corrosive burns. Brief exposures may cause irritation. Inhalation: Mists and vapors can irritate nose, throat and lungs but will usually subside when exposure ceases. Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

IN CASE OF SPILL:

TAKE CARE NOT TO DROP, PUNCTURE, OR SPILL CONCENTRATED LIQUID. CONSULT EMERGENCY PROCEDURES BELOW IF NECESSARY.

CONSULT PERISEPT LABEL AND SAFETY DATA SHEET FOR ADDITIONAL SAFETY AND HANDLING INFORMATION.
Descending Order of Resistance to Germicidal Chemicals

**High Level Disinfection**

- **Bacterial Spores**
  - Bacillus subtilis, Clostridium sporogenes, (**Clostridium Difficile)**

**Mid Level Disinfection**

- **Mycobacteria**
  - Mycobacterium tuberculosis var. bovis, Nontuberculous mycobacteria

**Low Level Disinfection**

- **Nonlipid or Small Viruses**
  - Poliovirus, Coxsackievirus, Rhinovirus
  - **Fungi**
    - Trichophyton spp., Cryptococcus spp., Candida spp.
  - **Vegetative Bacteria**
    - Pseudomonas aeruginosa, Staphylococcus aureus, Salmonella choleraesuis, Enterococci, MRSA, E.Coli
  - **Lipid or Medium-size Viruses**
    - Herpes simplex virus, CMV, Respiratory syncytial virus, HBV, HCV, HIV, Hantavirus, Ebola virus
According to OSHA Bloodborne Pathogens Standard (created December 6, 1991) regulation 1910.1030(d)(4)(ii)(A) contaminated work surfaces shall be decontaminated with an appropriate disinfectant after completion of procedures; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface may have become contaminated since the last cleaning.

What does OSHA currently accept as "appropriate" disinfectants to prevent the spread of HIV and HBV and other unknown disease causing organisms?
OSHA’s position is that EPA-registered tuberculocidal disinfectants, diluted bleach solutions and EPA-registered disinfectants that are labeled as effective against both HIV and HBV, as well as, Sterilants/High-Level Disinfectants cleared by the FDA, meet the requirement in the standard and are "appropriate" disinfectants to clean contaminated surfaces, provided that such surfaces have not become contaminated with agent(s) or volumes of or concentrations of agent(s) for which higher level disinfection is recommended.

High Level Disinfection – Disinfectants categorized as Sterilants/Disinfectants by EPA, FDA, CDC are required against bacterial spores e.g. C. difficile. #62 PERISEPT Sporicidal Disinfectant Cleaner is considered a High Level Disinfectant.

Intermediate Level Disinfection – Under EPA – these are classified as tuberculocidal, which are a lower level disinfectant than the above types. This category was recommended by CDC and OSHA when no other label claims existed for HIV and HBV.

Hydrogen Peroxide/Per oxyacetic Acid (PERISEPT ACTIVES) is the equivalent to a high level disinfectant according to the CDC and FDA.

By having claims against C. difficile, which according to CDC/NIH is harder to kill than TB (SEE CHART BELOW), the product would provide better efficacy and be considered better than the normally required tuberculocidal disinfectant. Most healthcare facilities follow the guidelines offered by the CDC.

Table 1. Descending Order of Resistance to Germicidal Chemicals

<table>
<thead>
<tr>
<th>HIGH LEVEL DISINFECTION</th>
<th>MID LEVEL DISINFECTION</th>
<th>LOW LEVEL DISINFECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacterial Spores</td>
<td>Mycobacteria</td>
<td>Nonlipid or Small Viruses</td>
</tr>
<tr>
<td>Bacillus subtilis, Clostridium sporogenes, (&quot;Clostridium Difficile&quot;)</td>
<td>Mycobacterium tuberculosis var. bovis, Nontuberculous mycobacteria</td>
<td>Poliovirus, Coxsackievirus, Rhinovirus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fungi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trichophyton spp., Cryptococcus spp., Candida spp.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vegetative Bacteria</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pseudomonas aeruginosa, Staphylococcus aureus, Salmonella choleraesuis, Enterococci, MRSA, E. Coli</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lipid or Medium-size Viruses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Herpes simplex virus, CMV, Respiratory syncytial virus, HBV, HCV, HIV, Hantavirus, Ebola virus</td>
</tr>
</tbody>
</table>

CONCLUSION: Since C. difficile is harder to kill (according to the CDC and NIH), it requires a higher level liquid disinfectant, such as PERISEPT, which in the CDC’s view, would also be effective against TB, and be a more suited product to be used when contamination of unknown bacteria, viruses or fungi are encountered. A tuberculocidal disinfectant may now be unsuited for critical cleaning/disinfection in healthcare environments. A disinfectant effective against C. difficile will assure Infection Control Managers that they are using the best product to reduce hospital-associated Infections (HAI).

** This organism was an addition to the comparable organisms listed in this category.
### Sporicidal

<table>
<thead>
<tr>
<th>Bacteria</th>
<th>Oz./Gallon</th>
<th>Contact Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clostridium difficile</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bacteria</th>
<th>Oz./Gallon</th>
<th>Contact Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acinetobacter baumannii (ATCC 19606)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Bordetella pertussis (ATCC 12743)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Community Acquired Methicillin Resistant Staphylococcus aureus CA-MRSA 300 NRS-384</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Community Acquired Methicillin Resistant Staphylococcus aureus CA-MRSA 400 NRS 123</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Escherichia coli (ATCC 11229)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Escherichia coli with beta-lactamase resistance (ESBL) BAA-196</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Klebsiella pneumonia (ATCC 4352)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Klebsiella pneumonia Carbapenem Resistant BAA-1705</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Methicillin Resistant Staphylococcus aureus MRSA (ATCC 33592)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Proteus mirabilis (ATCC 9240)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Pseudomonas aeruginosa (ATCC 15442)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Salmonella enterica (ATCC 10708)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Staphylococcus aureus (ATCC 6538)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Streptococcus pneumonia (ATCC 6305)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Streptococcus pyogenes (ATCC 19615)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Vancomycin Intermediate Resistant Staphylococcus aureus VISA HIP 5836</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Vancomycin Resistant Enterococcus faecalis VRE (ATCC 51575)</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

### Virucidal

<table>
<thead>
<tr>
<th>Virus</th>
<th>Oz./Gallon</th>
<th>Contact Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adenovirus type 5 (ATCC VR-5) Strain Adenoid 75</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Herpes simplex virus type 1 (ATCC VR-733)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Herpes simplex virus type 2 (ATCC VR-734)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Human Immunodeficiency virus type 1 HTLV-IIIIB</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Influenza A virus (ATCC VR-544)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Murine Norovirus (MNV-1)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Norovirus (ATCC VR-782)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Respiratory syncytial (RSV) virus (ATCC VR-26)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Rhinovirus type 37 (ATCC VR-1147)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Rotavirus</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Vaccinia virus (ATCC VR-119)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Canine Parvovirus (CPV)</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Hepatitis B Virus</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Hepatitis C Virus (ATCC VR-1422)</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

### Fungicidal

<table>
<thead>
<tr>
<th>Fungus</th>
<th>Oz./Gallon</th>
<th>Contact Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candida albicans (ATCC 10231)</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Trichophyton mentagrophytes (ATCC 9533) (Athlete’s foot fungus) (a cause of Ringworm)</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
SSS Disinfectants with Efficacy Claims Against Non Enveloped Viruses
For Controlling Ebola & EV68 Virus

CDC Guidelines for Environmental Infection Control in Hospitals for Ebola & EV68 Virus

Use a U.S. Environmental Protection Agency (EPA)-registered hospital disinfectant with a label claim for a non-enveloped virus (e.g., norovirus, rotavirus, adenovirus, poliovirus) to disinfect environmental surfaces in rooms of patients with suspected or confirmed Ebola or EV-D68 virus infection. Although there are no products with specific label claims against the Ebola or EV-D68 virus, enveloped viruses such as Ebola and EV-D68 are susceptible to a broad range of hospital disinfectants used to disinfect hard, non-porous surfaces. In contrast, non-enveloped viruses are more resistant to disinfectants.

As a precaution, selection of a disinfectant product with a higher potency than what is normally required for an enveloped virus is being recommended at this time. EPA-registered hospital disinfectants with label claims against non-enveloped viruses (e.g., norovirus, rotavirus, adenovirus, poliovirus) are broadly antiviral and capable of inactivating both enveloped and non-enveloped viruses.

SSS Disinfectant Cleaner Meeting CDC Criteria

<table>
<thead>
<tr>
<th>SSS Disinfectant Cleaners</th>
<th>Non Enveloped Virus</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSS Navigator #62 Perisept Sporicidal Disinfectant Cleaner*</td>
<td>Norovirus</td>
</tr>
<tr>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*Suggested for facilities requiring highest levels of efficacy.

Additional dispenser options available from your local Triple S distributor.

Sources:
http://www.cdc.gov/non-polio-enterovirus/about/ev-d68.html#protection
http://www.apic.org/Resource_/TinyMceFileManager/epublications/EbolaPS1403-FALL-FINAL.pdf

### Surface & Material Compatibility

<table>
<thead>
<tr>
<th>Surface &amp; Material Compatibility</th>
<th>Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished Floors</td>
<td>Laminated Surfaces</td>
</tr>
<tr>
<td>Aluminum</td>
<td>Plastic and Painted Surfaces</td>
</tr>
<tr>
<td>Baked Enamel Surfaces</td>
<td>Plastic Surfaces</td>
</tr>
<tr>
<td>Brass</td>
<td>Polished Nickel Finish</td>
</tr>
<tr>
<td>Chrome</td>
<td>Shower Stall</td>
</tr>
<tr>
<td>Glass</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Glazed Ceramic Tile</td>
<td>Vinyl</td>
</tr>
<tr>
<td>Glazed Porcelain</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** This product is compatible with the listed materials. If product is intended to be used on any other surface, it is recommended that you apply product to a smaller test area to determine compatibility before proceeding with its use.

### General Use Sites - this product is designed specifically as a general (non-abrasive) cleaner and disinfectant for use in:

<table>
<thead>
<tr>
<th>General Use Sites</th>
<th>Site Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Life Science Laboratories</td>
<td>ICU Areas</td>
</tr>
<tr>
<td>Athlete/Recreational Facilities</td>
<td>Locker Rooms</td>
</tr>
<tr>
<td>Cruise Ships</td>
<td>Lodging Establishments</td>
</tr>
<tr>
<td>Dental and Offices</td>
<td>Manufacturing Facilities</td>
</tr>
<tr>
<td>Examination Rooms</td>
<td>Nursing Homes</td>
</tr>
<tr>
<td>Food Service Establishments (Restaurants)</td>
<td>Office Building</td>
</tr>
<tr>
<td>(Commercial Kitchens)</td>
<td>Operating Rooms</td>
</tr>
<tr>
<td>Hospitals</td>
<td>Patient Rooms</td>
</tr>
</tbody>
</table>

### Medical Use Sites

<table>
<thead>
<tr>
<th>Medical Use Sites</th>
<th>Site Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assisted Living or Full Care Nursing Homes</td>
<td>Doctor's Offices</td>
</tr>
<tr>
<td>(Bedside) Commodes</td>
<td>Donation Ctr. (Blood/Plasma/Semen/Milk)</td>
</tr>
<tr>
<td>(Crash) (Emergency) Carts</td>
<td>Emergency Rooms (ERs)</td>
</tr>
<tr>
<td>(Exam or Examination) Tables</td>
<td>Environmental Surfaces</td>
</tr>
<tr>
<td>External Surfaces of Ultrasound Equipment</td>
<td>Examination Rooms or Areas</td>
</tr>
<tr>
<td>(Hard Nonporous) Edge of Privacy Curtains</td>
<td>Exterior of Pipes</td>
</tr>
<tr>
<td>Hospital or Patient Beds</td>
<td>Exterior Surfaces of Air Vents or Air Vent</td>
</tr>
<tr>
<td>Bed Springs/Railings/Frames/Linings</td>
<td>External Surfaces of Medical Equipment</td>
</tr>
<tr>
<td>(Inner) (Inside of) Drawers</td>
<td>Eye Surgical Centers</td>
</tr>
<tr>
<td>(Mayo) (Instrument) Stands</td>
<td>Footboards</td>
</tr>
<tr>
<td>(Medical) (Physician's) (Doctor's) Offices</td>
<td>Glucometers</td>
</tr>
<tr>
<td>(Medical) Clinics</td>
<td>Gurneys</td>
</tr>
<tr>
<td>Ambulances/ER Transport Vehicles</td>
<td>Handheld (Electronic) Devices</td>
</tr>
<tr>
<td>Ambulatory Care Centers</td>
<td>Hard, Nonporous Hospital Medical Surfaces</td>
</tr>
<tr>
<td>Ambulatory Surgical Centers (ASC)</td>
<td>Headboards</td>
</tr>
<tr>
<td>Anesthesia Machines</td>
<td>Healthcare Settings or Facilities</td>
</tr>
<tr>
<td>Anesthesia Rooms or Areas</td>
<td>High Touch Surfaces</td>
</tr>
<tr>
<td>Apheresis Machines</td>
<td>Hospices</td>
</tr>
<tr>
<td>Autoclaves</td>
<td>Hospitals</td>
</tr>
</tbody>
</table>

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The document provides detailed surface compatibility and general use sites for PERISEPT, a sporicidal disinfectant cleaner. It emphasizes the importance of testing on smaller areas before use on surfaces other than those listed for compatibility. The document also outlines general use sites across various medical and healthcare settings, highlighting its use in diverse environments to ensure thorough disinfection and cleanliness.
<table>
<thead>
<tr>
<th>Medical Use Sites (continued)</th>
<th>PVC Tubing</th>
<th>Medical Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bathroom Doorknob</td>
<td>Intensive Care Units (ICUs)</td>
<td>PVC Tubing</td>
</tr>
<tr>
<td>Bed Rails</td>
<td>Isolation Areas</td>
<td>Radiology or X-Ray Rooms</td>
</tr>
<tr>
<td>Bedpans</td>
<td>Isolettes</td>
<td>Reception (Counter) (Desks) (Areas)</td>
</tr>
<tr>
<td>Bedside Tables</td>
<td>IV (Stands) (Pumps) (Poles)</td>
<td>Recovery Rooms</td>
</tr>
<tr>
<td>Blood Pressure Cuffs</td>
<td>Keyboards</td>
<td>Rehabilitation Centers</td>
</tr>
<tr>
<td>Cabinet Handles</td>
<td>Laboratories</td>
<td>Remote Controls</td>
</tr>
<tr>
<td>Call Boxes</td>
<td>Laptops</td>
<td>Respirators</td>
</tr>
<tr>
<td>Carts</td>
<td>Laundry Rooms</td>
<td>Respiratory Centers</td>
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<tr>
<td>CAT Lab/oratories</td>
<td>Long Term Care Facilities</td>
<td>Respiratory Therapy Equipment</td>
</tr>
<tr>
<td>Computerized Axial Tomography Equip.</td>
<td>Loupes</td>
<td>Respiratory Therapy Rooms or Areas</td>
</tr>
<tr>
<td>Cellular Phones</td>
<td>Mammography Equipment</td>
<td>Restrooms</td>
</tr>
<tr>
<td>Central Service Areas</td>
<td>Medical Facilities</td>
<td>Scales</td>
</tr>
<tr>
<td>Central Supply Rooms (Areas)</td>
<td>Medication Carts</td>
<td>Sequential Compression Devices</td>
</tr>
<tr>
<td>Chairs</td>
<td>Mobile Devices</td>
<td>Shower Fixtures</td>
</tr>
<tr>
<td>Charging Stations</td>
<td>Mobile Electronic Equipment</td>
<td>Side Rails</td>
</tr>
<tr>
<td>Closet Handles</td>
<td>Mobile Workstations</td>
<td>Slit Lamps</td>
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<tr>
<td>Coated Mattresses</td>
<td>Mouse Pads</td>
<td>Spine Backboards</td>
</tr>
<tr>
<td>Coated Pillows</td>
<td>Magnetic Resonance Imaging (MRI) Equip.</td>
<td>Stethoscopes</td>
</tr>
<tr>
<td>Computer Mouse</td>
<td>Nurse-Call (Devices) (Buttons) (and Cords)</td>
<td>Stools</td>
</tr>
<tr>
<td>Computer Peripherals</td>
<td>Nursing Homes</td>
<td>Stretcher</td>
</tr>
<tr>
<td>Computer Screens</td>
<td>Nursing or Nurses’ Stations</td>
<td>Support Bars</td>
</tr>
<tr>
<td>Computer Tables</td>
<td>Operating Room Tables and Lights</td>
<td>Surgery Rooms</td>
</tr>
<tr>
<td>Cords</td>
<td>Operating Rooms (ORs)</td>
<td>Tablet PCS</td>
</tr>
<tr>
<td>Counters</td>
<td>Operatory Light Switches</td>
<td>Toilet Handholds</td>
</tr>
<tr>
<td>Critical Care Units (CCUs)</td>
<td>Ophthalmic Offices or Areas</td>
<td>Traction Devices</td>
</tr>
<tr>
<td>Desktops</td>
<td>Waiting Rooms or Waiting Areas</td>
<td>Walls (Around Toilet) In Patient Rooms</td>
</tr>
<tr>
<td>Dialysis Clinics (Facilities)</td>
<td>Wash Basins</td>
<td>Wash Basins</td>
</tr>
<tr>
<td>Dialysis Machines</td>
<td>Wheelchairs</td>
<td>Wheelchairs</td>
</tr>
<tr>
<td>Docking Stations</td>
<td></td>
<td>X-Ray Equipment</td>
</tr>
</tbody>
</table>
# SSS Navigator #62 Perisept Sporicidal Disinfectant Cleaner

## 1. Product and Company Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>NAVIGATOR #62 PERISEPT SPORICIAL DISINFECTANT CLEANER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td></td>
</tr>
<tr>
<td>Product Code</td>
<td>48027</td>
</tr>
<tr>
<td>Product registration number</td>
<td>10324-214-12120</td>
</tr>
<tr>
<td>Recommended use</td>
<td>FIFRA Regulated End Use Product (EUP)</td>
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<tr>
<td>Recommended restrictions</td>
<td>None known.</td>
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<tr>
<td>Distributor information</td>
<td></td>
</tr>
<tr>
<td>Company name</td>
<td>Triple S</td>
</tr>
<tr>
<td>Address</td>
<td>2 Executive Park Drive</td>
</tr>
<tr>
<td>Billerica, MA 01862</td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td>(978) 667-7900</td>
</tr>
<tr>
<td>(800)-323-2251</td>
<td></td>
</tr>
<tr>
<td>Emergency phone number</td>
<td>(888)-779-1339</td>
</tr>
</tbody>
</table>

## 2. Hazard(s) identification

### Physical hazards
- Flammable liquids: Category 4
- Organic peroxides: Type F

### Health hazards
- Acute toxicity, oral: Category 4
- Skin corrosion/irritation: Category 1B
- Serious eye damage/eye irritation: Category 1
- Specific target organ toxicity, single exposure: Category 3 respiratory tract irritation
- Not classified.

### OSHA defined hazards
- CORROSIVE
- EXCLAMATION
- FLAME

### GHS Label elements

#### Signal word
DANGER

#### Hazard statement
Combustible liquid. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.

#### Precautionary statement

**Prevention**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

**Response**
If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish.

**Storage**
Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

**Disposal**
Dispose of contents/container in accordance with local/regional/national/international regulations.
Environmental hazards

- Hazardous to the aquatic environment, acute hazard
- Hazardous to the aquatic environment, long-term hazard

Hazard(s) not otherwise classified (HNOC)

- Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Supplemental information

- 7% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

### 3. Composition/information on ingredients

#### Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Peroxide</td>
<td></td>
<td>7722-84-1</td>
<td>20 - &lt; 30</td>
</tr>
<tr>
<td>Acetic Acid</td>
<td></td>
<td>64-19-7</td>
<td>5 - &lt; 10</td>
</tr>
<tr>
<td>Peracetic Acid</td>
<td></td>
<td>79-21-0</td>
<td>5 - &lt; 10</td>
</tr>
<tr>
<td>Etidronic Acid</td>
<td></td>
<td>2809-21-4</td>
<td>1 - &lt; 3</td>
</tr>
<tr>
<td>Sulfuric Acid</td>
<td></td>
<td>7664-93-9</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

Other components below reportable levels

- 50 - < 60

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

#### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

#### Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

#### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

#### Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

- Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed

- Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

#### Suitable extinguishing media


#### Unsuitable extinguishing media

- Do not use water jet as an extinguisher, as this will spread the fire.

#### Specific hazards arising from the chemical

- The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.

#### Special protective equipment and precautions for firefighters

- Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Fire fighting equipment/instructions

- In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

#### Specific methods

- Use standard firefighting procedures and consider the hazards of other involved materials.

#### General fire hazards

- Combustible liquid.
6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

TO NEUTRALIZE SPILL:
Add sodium carbonate (soda ash) at a rate of 1-3 pounds for each gallon of concentrated solution.

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

IF CONTAMINATION OCCURS:
The drum or container may be hot to the touch. Cool the drum with water if possible. Excessive bubbles may be present in the liquid. Move the drum to an outside location or ventilated area to prevent exposure damage. If possible, dilute the concentrated product within the drum or container. Be aware that heat may be generated during this process.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. Keep liquid away from clothing and other combustible materials. Keep away from heat, sparks and open flame. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment when handling. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store drums locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Keep only in the original container. Store in a well-ventilated place. Store material away from alkaline corrosive materials. Keep in an area equipped with sprinklers. DO NOT allow the concentrated solution to contact any metals other than stainless steel. Preferred materials are plastics such as polypropylene, PVC, polyethylene, Kynar and PTFE. DO NOT allow galvanized metal, copper, iron, steel or brass to come in contact with the concentrated solution. DO NOT place anything into the concentrated container that is not new in order to avoid contamination and unwanted reaction. DO NOT return unused solution back into the container. DO NOT store the product in direct sunlight.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic Acid (CAS 64-19-7)</td>
<td>PE L 25 mg/m3</td>
</tr>
<tr>
<td>Hydrogen Peroxide (CAS 7722-84-1)</td>
<td>PE L 1.4 mg/m3</td>
</tr>
<tr>
<td>Sulfuric Acid (CAS 7664-93-9)</td>
<td>PE L 1 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic Acid (CAS 64-19-7)</td>
<td>STEL</td>
<td>15 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>10 ppm</td>
<td></td>
</tr>
<tr>
<td>Hydrogen Peroxide (CAS 7722-84-1)</td>
<td>TWA</td>
<td>1 ppm</td>
<td></td>
</tr>
<tr>
<td>Peracetic Acid (CAS 79-21-0)</td>
<td>STEL</td>
<td>0.4 ppm</td>
<td>Inhale fraction and vapor.</td>
</tr>
<tr>
<td>Sulfuric Acid (CAS 7664-93-9)</td>
<td>TWA</td>
<td>0.2 mg/m3</td>
<td>Thoracic fraction.</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic Acid (CAS 64-19-7)</td>
<td>STEL</td>
<td>37 mg/m3</td>
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</tr>
<tr>
<td></td>
<td>TWA</td>
<td>15 ppm</td>
<td></td>
</tr>
<tr>
<td>Hydrogen Peroxide (CAS 7722-84-1)</td>
<td>TWA</td>
<td>1.4 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Sulfuric Acid (CAS 7664-93-9)</td>
<td>TWA</td>
<td>1 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Chemical respirator with organic vapor cartridge.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Liquid.
Color Colorless
Odor Pungent Vinegar
Odor threshold Not available.
pH > 1
Melting point/freezing point Not available.
Initial boiling point and boiling range 212 °F (100 °C)
Flash point 181.4 °F (83.0 °C)
Evaporation rate Not available.
Flammability (solid, gas) Not applicable.
Upper/lower flammability or explosive limits

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability limit - lower (%)</td>
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</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Vapor pressure 22 mm Hg @ 25 deg C
Vapor density Not available.
Relative density Not available.

Solubility(ies)
- Solubility (water) Miscible
- Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.
Decomposition temperature Not available.
Viscosity Not available.

Other information
- Specific gravity 1.1 @ 25 deg C
- VOC (Weight %) 7 % estimated

10. Stability and reactivity

Reactivity Reacts violently with strong alkaline substances. This product may react with reducing agents.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.
Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Do not mix with other chemicals. Contact with incompatible materials.
Hazardous decomposition products Toxic gas.

11. Toxicological information

Information on likely routes of exposure
- Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
- Skin contact Causes severe skin burns.
- Eye contact Causes serious eye damage.
- Ingestion Causes digestive tract burns. Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Harmful if swallowed. May cause respiratory irritation.

<table>
<thead>
<tr>
<th>Component</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic Acid (CAS 64-19-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>3310 mg/kg</td>
</tr>
<tr>
<td>Etidronic Acid (CAS 2809-21-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 10000 mg/kg</td>
</tr>
<tr>
<td>Components</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
<td>--------------</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td><strong>LD50</strong></td>
<td>Rat</td>
</tr>
<tr>
<td><strong>Hydrogen Peroxide (CAS 7722-84-1)</strong></td>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Dermal</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td><strong>Inhalation</strong></td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td><strong>Oral</strong></td>
<td>Rat</td>
</tr>
<tr>
<td><strong>Peracetic Acid (CAS 79-21-0)</strong></td>
<td><strong>Acute</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td><strong>Dermal</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Inhalation</strong></td>
<td>Mouse</td>
</tr>
<tr>
<td></td>
<td><strong>Oral</strong></td>
<td>Rat</td>
</tr>
<tr>
<td><strong>Sulfuric Acid (CAS 7664-93-9)</strong></td>
<td><strong>Acute</strong></td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td><strong>Inhalation</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Oral</strong></td>
<td>Rat</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

- **Skin corrosion/irritation**: Causes severe skin burns and eye damage.
- **Serious eye damage/eye irritation**: Causes serious eye damage.
- **Respiratory or skin sensitization**: Not a respiratory sensitizer.
- **Respiratory sensitization**: This product is not expected to cause skin sensitization.
- **Skin sensitization**: This product is not expected to cause skin sensitization.
- **Germ cell mutagenicity**: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
- **Carcinogenicity**: Risk of cancer cannot be excluded with prolonged exposure. IARC has concluded that "occupational exposure to strong inorganic mists containing sulfuric acid is carcinogenic for humans (Group 1)".

IARC Monographs. Overall Evaluation of Carcinogenicity
- Hydrogen Peroxide (CAS 7722-84-1): 3 Not classifiable as to carcinogenicity to humans.
- Sulfuric Acid (CAS 7664-93-9): 1 Carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
- Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens
- Sulfuric Acid (CAS 7664-93-9): Known To Be Human Carcinogen.

Reproductive toxicity: This product is not expected to cause reproductive or developmental effects.

- Specific target organ toxicity - single exposure: May cause respiratory irritation.
- Specific target organ toxicity - repeated exposure: Not classified.
- Aspiration hazard: Not an aspiration hazard.
- Chronic effects: Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.
12. Ecological information

**Ecotoxicity**

Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic Acid (CAS 64-19-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute</td>
<td>Algae</td>
<td>EC50</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Oncorhynchus mykiss</td>
</tr>
<tr>
<td>Etidronic Acid (CAS 2809-21-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute</td>
<td>Algae</td>
<td>EC50</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
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<tr>
<td>Chronic</td>
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<td>NOEC</td>
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<tr>
<td>Crustacea</td>
<td>NOEC</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Hydrogen Peroxide (CAS 7722-84-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute</td>
<td>Algae</td>
<td>EC50</td>
</tr>
<tr>
<td>Crustacea</td>
<td>LC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas)</td>
</tr>
<tr>
<td>Chronic</td>
<td>Crustacea</td>
<td>NOEC</td>
</tr>
<tr>
<td>Peracetic Acid (CAS 79-21-0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute</td>
<td>Algae</td>
<td>EC50</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Bluegill (Lepomis macrochirus)</td>
</tr>
<tr>
<td>Chronic</td>
<td>Crustacea</td>
<td>NOEC</td>
</tr>
<tr>
<td>Fish</td>
<td>NOEC</td>
<td>Fish</td>
</tr>
<tr>
<td>Sulfuric Acid (CAS 7664-93-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute</td>
<td>Algae</td>
<td>EC50</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Bluegill (Lepomis macrochirus)</td>
</tr>
<tr>
<td>Chronic</td>
<td>Crustacea</td>
<td>NOEC</td>
</tr>
<tr>
<td>Fish</td>
<td>NOEC</td>
<td>Fish</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Persistence and degradability**

No data is available on the degradability of this product.

**Bioaccumulative potential**

See next page.
### Partition coefficient n-octanol / water (log Kow)

| Acetic Acid | -0.17 |

### Mobility in soil

No data available.

### Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

#### Disposal instructions

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

#### Local disposal regulations

Dispose in accordance with all applicable regulations.

#### Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

#### Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

#### Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### DOT

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN3109</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Organic peroxide type F, liquid (Peroxyacetic acid, type F, stabilized)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>5.2</td>
</tr>
<tr>
<td>Class</td>
<td>5.2</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>8</td>
</tr>
<tr>
<td>Label(s)</td>
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</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
<tr>
<td>Special provisions</td>
<td>IP5</td>
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<td>Packaging exceptions</td>
<td>152</td>
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<td>Packaging non bulk</td>
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<td>Packaging bulk</td>
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<tr>
<td>ERG number</td>
<td>145</td>
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#### IATA

<table>
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<tr>
<td>UN proper shipping name</td>
<td>Organic peroxide type F, liquid (Peroxyacetic acid, type F, stabilized)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
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<tr>
<td>Class</td>
<td>5.2</td>
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<tr>
<td>Subsidiary risk</td>
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</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
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</tr>
<tr>
<td>ERG Code</td>
<td>5L</td>
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<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
<tr>
<td>Other information</td>
<td>Allowed.</td>
</tr>
<tr>
<td>Passenger and cargo aircraft</td>
<td>Allowed.</td>
</tr>
</tbody>
</table>

#### IMDG

<table>
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<th>UN number</th>
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<td>Transport hazard class(es)</td>
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<tr>
<td>Class</td>
<td>5.2</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>8</td>
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<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Marine pollutant: No.</td>
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<tr>
<td>EmS</td>
<td>F-J, S-R</td>
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<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
</tbody>
</table>
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

DOT

IATA

IMDG

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Acetic Acid (CAS 64-19-7) Listed.
Peracetic Acid (CAS 79-21-0) Listed.
Sulfuric Acid (CAS 7664-93-9) Listed.

SARA 304 Emergency release notification

Hydrogen Peroxide (CAS 7722-84-1) 1000 LBS
Peracetic Acid (CAS 79-21-0) 500 LBS
Sulfuric Acid (CAS 7664-93-9) 1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No
### SARA 302 Extremely Hazardous Substance

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>Reportable quantity</th>
<th>Threshold planning quantity</th>
<th>Threshold planning quantity, lower value</th>
<th>Threshold planning quantity, upper value</th>
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<tbody>
<tr>
<td>Hydrogen Peroxide</td>
<td>7722-84-1</td>
<td>1000</td>
<td>1000 lbs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peracetic Acid</td>
<td>79-21-0</td>
<td>500</td>
<td>500 lbs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfuric Acid</td>
<td>7664-93-9</td>
<td>1000</td>
<td>1000 lbs</td>
<td></td>
<td></td>
</tr>
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</table>

### SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>SARA 311/312 Hazardous Chemical</th>
<th>SARA 313 (TRI reporting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peracetic Acid</td>
<td>79-21-0</td>
<td>No</td>
<td>CAS number</td>
</tr>
<tr>
<td>Sulfuric Acid</td>
<td>7664-93-9</td>
<td>No</td>
<td>CAS number</td>
</tr>
</tbody>
</table>

### SARA 313 (TRI Reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peracetic Acid</td>
<td>79-21-0</td>
<td>5 - &lt; 10</td>
</tr>
<tr>
<td>Sulfuric Acid</td>
<td>7664-93-9</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

### Other Federal Regulations

- **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**
  - Not regulated.

- **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**
  - Peracetic Acid (CAS 79-21-0)
  - Sulfuric Acid (CAS 7664-93-9)

- **Safe Drinking Water Act**
  - Not regulated.

### Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

- Sulfuric Acid (CAS 7664-93-9) 6552

### Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

- Sulfuric Acid (CAS 7664-93-9) 20 %WV

### DEA Exempt Chemical Mixtures Code Number

- Sulfuric Acid (CAS 7664-93-9) 6552

### FIFRA Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Listed below is the hazard information as required on the pesticide label.

- **Signal word**
  - DANGER

- **Hazard statement**
  - CORROSIVE. Causes irreversible eye damage and skin burns. Harmful if swallowed. May be fatal if inhaled. Do not get into eyes, on skin or on clothing. Do not breathe vapors or spray mist.

### US State Regulations

- **US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**
  - Not listed.

- **US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**
  - Sulfuric Acid (CAS 7664-93-9)

- **US. Massachusetts RTK - Substance List**
  - Acetic Acid (CAS 64-19-7)
  - Hydrogen Peroxide (CAS 7722-84-1)
  - Peracetic Acid (CAS 79-21-0)
  - Sulfuric Acid (CAS 7664-93-9)

- **US. New Jersey Worker and Community Right-to-Know Act**
  - Acetic Acid (CAS 64-19-7)
  - Hydrogen Peroxide (CAS 7722-84-1)
  - Peracetic Acid (CAS 79-21-0)
  - Sulfuric Acid (CAS 7664-93-9)

- **US. Pennsylvania Worker and Community Right-to-Know Law**
  - Acetic Acid (CAS 64-19-7)
  - Hydrogen Peroxide (CAS 7722-84-1)
  - Peracetic Acid (CAS 79-21-0)
  - Sulfuric Acid (CAS 7664-93-9)
US. Rhode Island RTK
Acetic Acid (CAS 64-19-7)
Hydrogen Peroxide (CAS 7722-84-1)
Peracetic Acid (CAS 79-21-0)
Sulfuric Acid (CAS 7664-93-9)

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date: 06-04-2015
Revision date: 08-23-2016
Version #: 02

NFPA ratings
Health: 3
Flammability: 2
Instability: 0

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Information
Accidental release measures: Methods and materials for containment and cleaning up
Handling and storage: Conditions for safe storage, including any incompatibilities
STORAGE AND DISPOSAL

Do not contaminate water, food, or household items.

PESTICIDE STORAGE: Keep this product in its original container after use. Do not store in metal containers.

IF SWALLOWED: Call a Poison Control Center or doctor immediately.

IF IN EYES: Remove contact lenses, if present, after the first 5 minutes, then continue rinsing for up to 15 minutes.

PRECAUTIONARY STATEMENTS

Hazard to Humans and Domestic Animals

Do not store in metal containers. Pesticides are toxic to domestic animals. Store in a location out of reach of children and domestic animals.

FIRST AID

How to handle and clear up spills:

PROCEDURE FOR LEAK OR SPILL: Use protective clothing and equipment to contain and immobilize the spill. Avoid the release of embalming fluids into drains or sewer systems except in an emergency. If a spill occurs, avoid releasing fluids into body of water. Do not pour fluids into drains or sewers.

INERT INGREDIENTS

Hydrogen Peroxide............................27.3%

INERT INGREDIENTS

Hydrogen Peroxide............................27.3%

BEFORE USING THIS PRODUCT, PLEASE READ THIS ENTIRE LABEL CAREFULLY

IF SWALLOWED: Call a Poison Control Center or doctor immediately for further treatment advice.

IF IN EYES: Remove contact lenses, if present, after the first 5 minutes, then continue rinsing for up to 15 minutes.

INERT INGREDIENTS

Hydrogen Peroxide............................27.3%

Before using this product, please read this entire label carefully.

IF INHALED: Get fresh air. If symptoms of an inhalation exposure persist, seek medical attention immediately.

For use with water hardness up to 400 ppm.

DO NOT USE ON EPOXY OR ACM VAPOR PROOF SUBSTRATES.

DIRECTIONS FOR USE

This product kills and/or inactivates spores of Clostridium difficile on hard, non-porous surfaces. This product is effective against CDI due to vancomycin-resistant Enterococci, including VRE, and Enterococcus faecium with VanA (E. faecium VanA) and VRE (VRE-A). This product is effective against VRE-A, VanA, VanB, VanC, VanD, and VanE strains.

SAFETY DATA SHEET

SSS Navigator #62 Perisept Sporicidal Disinfectant Cleaner RTU

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SSS Navigator #62 Perisept Sporicidal Disinfectant Cleaner RTU
GENERAL USE: Disinfectant, Virucide, Fungicide
PRODUCT DESCRIPTION: READY-TO-USE
PRODUCT CODE: 48027-RTU
CHEMICAL FAMILY: See Concentrate Information

DISTRIBUTOR
Triple S
2 Executive Park Drive
Billerica, MA 01862
http://www.triple-s.com
Customer Service: 978-667-7900

24 HR. EMERGENCY TELEPHONE NUMBERS
888-779-1339

EPA REG. NO.: 10324-214-12120

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS
Health:
Eye Irritation, Category 2A
Skin Irritation, Category 3

GHS LABEL
Exclamation mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS
Causes serious eye irritation.
Causes mild skin irritation.
May be harmful if swallowed.

PRECAUTIONARY STATEMENT(S)

Prevention:
Do not get in eyes, on skin, or on clothing.
Keep container tightly closed.
Keep out of reach of children.
Wear protective gloves/protective clothing/eye protection/face protection.

Response:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Gently wash with plenty of soap and water.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage:
Store in a closed container.

Disposal:
Dispose of contents/container according to all local, state and Federal regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Light color version of concentrate.

IMMEDIATE CONCERNS: Eye & Skin irritant

POTENTIAL HEALTH EFFECTS

EYES: Contact causes eye irritation.
SKIN: Skin irritant with prolonged or repeated contact.
SKIN ABSORPTION: None Expected.

INGESTION: Although of moderate to low toxicity, ingestion of large amounts can cause gastrointestinal irritation, nausea, vomiting, diarrhea.

INHALATION: Mist is irritating to nose, throat and lungs.

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: No known significant effects or critical hazards.
TERATOGENIC EFFECTS: No known significant effects or critical hazards.

CARCINOGENICITY: No listed substance

MUTAGENICITY: No known significant effects or critical hazards.

MEDICAL CONDITIONS AGGRAVATED: Previous skin conditions such as dermatitis may be aggrevated.

ROUTES OF ENTRY: Eye, skin, ingestion.

CANCER STATEMENT: None

WARNING CAUTION LABELS: Irritant

PHYSICAL HAZARDS: None Expected.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to concentrate Product Safety Data Sheet for ingredient information</td>
<td>&lt; 10</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

EYES: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.

SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove victim to fresh air and monitor. Seek medical advise if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Burning sensation with tearing, redness.
SKIN: Prolonged contact will cause irritation marked by redness, burning sensation.
SKIN ABSORPTION: Not Established

INGESTION: Irritation of mouth, throat, along with stomach upset, vomiting.

INHALATION: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing.

ACUTE TOXICITY: Not Established

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: NA = Not Applicable
GENERAL HAZARD: NA = Not Applicable
EXTINGUISHING MEDIA: Not required. Water based material.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Avoid walking in product. Wipe up or otherwise flush small spills to sanitary sewer.
LARGE SPILL: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.
ENVIRONMENTAL PRECAUTIONS
  WATER SPILL: Avoid discharges into open waterways.
  LAND SPILL: Avoid discharge to soil.
GENERAL PROCEDURES: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-combustible material and transfer to containers.
SPECIAL PROTECTIVE EQUIPMENT: Eye protection, rubber gloves, rubber boots to protect feet.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Close container after use.
HANDLING: Wear chemical resistant rubber or neoprene gloves and eye safety goggles/full face shield when handling.
STORAGE: Store in area inaccessible to children.
STORAGE TEMPERATURE: Store at ambient temperatures.
STORAGE PRESSURE: Store at ambient atmospheric pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: No special requirements.
PERSONAL PROTECTIVE EQUIPMENT
  EYES AND FACE: Safety glasses with side shields.
  SKIN: Rubber or other chemical resistant gloves.
  RESPIRATORY: A respirator is not needed under normal and intended conditions of product use.
  PROTECTIVE CLOTHING: No special requirements.
WORK HYGIENIC PRACTICES: Wash with soap and water after handling. Do not eat, drink or smoke while using product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid
ODOR: Characteristic.
ODOR THRESHOLD: Not Established
COLOR: Lighter color of concentrate.
pH: 2.5
PERCENT VOLATILE: >90
FLASH POINT AND METHOD: None
FLAMMABLE LIMITS: N/A
AUTOIGNITION TEMPERATURE: NA = Not Applicable
VAPOR PRESSURE: ≤ 20 mm Hg at (68°F)
VAPOR DENSITY: ≥ 1 Air = 1
BOILING POINT: 212° F; 100° C
FREEZING POINT: 32° F; 0° C
MELTING POINT: NA = Not Applicable
THERMAL DECOMPOSITION: Not Available
SOLUBILITY IN WATER: Complete
EVAPORATION RATE: (Water =1) 1.0
DENSITY: 8.34 at (68°F)
Notes: Estimated
SPECIFIC GRAVITY: 1.01 grams/ml.
Notes: Estimated
VISCOSITY: Water thin.
(VOC): Not Established

10. STABILITY AND REACTIVITY

REACTIVITY: Stable
HAZARDOUS POLYMERIZATION: No
CONDITIONS TO AVOID: Not Established
POSSIBILITY OF HAZARDOUS REACTIONS: None Expected.
HAZARDOUS DECOMPOSITION PRODUCTS: None known.
INCOMPATIBLE MATERIALS: Not Established

11. TOXICOLOGICAL INFORMATION

ACUTE

EYES: Not Established
DERMAL LD₅₀: Not Established
SKIN ABSORPTION: None Expected.
ORAL LD₅₀: Not Established
INHALATION LC₅₀: Not Established
EYE EFFECTS: Moderate to severe eye irritant.
SKIN EFFECTS: May irritate skin with prolonged or repeated contact.
CARCINOGENICITY

IARC: None known.
IRRITATION: Irritant
SENSITIZATION: No known significant effects or critical hazards.
NEUROTOXICITY: No known significant effects or critical hazards.
GENETIC EFFECTS: No known significant effects or critical hazards.
REPRODUCTIVE EFFECTS: No known significant effects or critical hazards.
TARGET ORGANS: No known significant effects or critical hazards.
MUTAGENICITY: No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Established
ECOTOXICOLOGICAL INFORMATION: Not Established
AQUATIC TOXICITY (ACUTE): Not Established
CHEMICAL FATE INFORMATION: Not Established

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Small amounts (less than 5 gallons) may be disposed of in sanitary sewer. Consult local authorities for additional disposal information.
FOR LARGE SPILLS: Consult with local and state authorities for large volume disposal.
PRODUCT DISPOSAL: See above.
EMPTY CONTAINER: Rinse container with clear water. Offer container for recycling, or dispose of in trash.
RCRA/EPA WASTE INFORMATION: NA = Not Applicable

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)
PROPER SHIPPING NAME: Not intended to be shipped away from end-user site.

AIR (ICAO/IATA)
SHIPPING NAME: Not intended to be shipped away from end-user site.

VESSEL (IMO/IMDG)
SHIPPING NAME: Not intended to be shipped away from end-user site.

15. REGULATORY INFORMATION

UNITED STATES
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)
311/312 HAZARD CATEGORIES: Health - Acute
FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: No
313 REPORTABLE INGREDIENTS: NA = Not Applicable
302/304 EMERGENCY PLANNING
EMERGENCY PLAN: NA = Not Applicable

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)
CERCLA REGULATORY: NA = Not Applicable

TSCA (TOXIC SUBSTANCE CONTROL ACT)
TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

CALIFORNIA PROPOSITION 65: No listed substance
CARCINOGEN: No listed substance

16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department Date Prepared: 06/19/2015

HMIS RATING

| HEALTH | 2 |
| FLAMMABILITY | 0 |
| PHYSICAL HAZARD | 0 |
| PERSONAL PROTECTION | B |

MANUFACTURER DISCLAIMER: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.
Cleaning Procedure:

Fecal matter/waste must be thoroughly cleaned from surfaces/objects before disinfection by application with a clean microfiber cloth, to avoid redeposition of soil. Do not use this product to clean or disinfect utensils, glassware, dishes or interior surfaces of appliances. A fresh solution must be prepared at least 30 minutes before use. Surfaces in patient rooms are to be cleaned in an appropriate manner, saturated with the disinfectant product. This cleaning may be accomplished with a brush, cloth, mop, or sponge saturated with the detergent product. This cleaning may be accomplished with any cleaning solution, including this product. Cleaning is to include vigorous application and scrubbing, until all visible soil is removed. Special attention is needed for high-touch surfaces. Surfaces in patient rooms are to be cleaned in an appropriate manner, such as right to left, and top to bottom, on vertical surfaces, to minimize spreading of the spores. Restroom areas are to be cleaned last.

FIRST AID

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

NOTE TO PHYSICIAN:

Probable mucosal damage may contraindicate the use of gastric lavage.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by spillage or improper disposal.

PESTICIDE STORAGE:

Never return this product to the original container after it has been removed. Avoid all contact with的眼睛, nasal passages and mouth. Contamination and impurities will reduce shelf life and can return reactivity. In case of contamination, rinse container, dispose container with solid waste and disperse this product with large volumes of water. Avoid damage to containers. Keep container closed at all times when not in use. Keep product out of direct sunlight. To maintain product quality, store at temperatures below 86°F.

PESTICIDE DISPOSAL:

Perisep Pesticides: Originally hazardous. Improper disposal of excess pesticides, spray mixture and/or waste is forbidden by federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state or local Pesticide Control Agency, or the Hazardous Waste Representative at the Environmental Protection Agency Regional Office for guidance. If material has been spilled, an acceptable method of disposal is to dilute with at least 20 volumes of water followed by discharge into suitable treatment system in accordance with all local, state, and federal environmental laws, rules, regulations, standards, and other requirements. Because acceptable methods of disposal may vary by location, regulatory agencies should be contacted prior to disposal.

This product which is to be disposed of should be disposed of as hazardous waste after contacting the appropriate local, state or federal agency to determine proper procedures.
Effective in 2 minutes against C. difficile spores.
Will not bleach uniforms or fabrics.
Cuts cleaning time.
Is a heavy duty disinfectant cleaner that cleans, disinfects and deodorizes in one labor saving step.
Leaves no visible residue.
No rinsing.
Good for use with microfiber cloths.
May be used to clean and disinfect finished floors. Cleans and disinfects without dulling gloss.
Do not use on marble or un-sealed/un-coated terrazzo floors.
This product does not damage furnishing, equipment or clothing.
Economical concentrate.
Intended for use with the Triple S Navigator Dilution Control System.
Closed loop automated dispensing reduces employee exposure to concentrate product. Triple S Navigator Dilution Control System makes accurate dispensing quick and easy.
Designed for daily use on common materials found in hospitals.

**NON FOOD CONTACT HARD SURFACE DISINFECTION:**
This product disinfects, as it cleans, in one operation. This product is to be used to disinfect floors, walls, and other hard nonporous surfaces such as tables, chairs, countertops, bathroom fixtures, sinks, bed frames, shelves, racks, carts, refrigerators, coolers, glazed tile, linoleum, vinyl, glazed porcelain, plastic, stainless steel, or glass. Areas of use in hospitals include surgical and obstetrical suite; housekeeping services; physical therapy departments; nursing services; autopsy facilities. Also use this product in hospitals and nursing homes, other health-care facilities schools, colleges, veterinary clinics, animal life science laboratories, industrial facilities, dietary areas, office buildings, recreational facilities, retail and wholesale establishments.

**COMBINATION DISINFECTION AND CLEANING:**
This product is effective against the labeled organisms at 4 fluid ounces per 1 gallon of water in hard water (400 ppm as CaCO3) and 5% blood serum on hard nonporous surfaces. For heavily soiled areas a pre-cleaning step is required. Apply solution with mop, cloth, sponge, brush, scrubber, or coarse spray device or by soaking so as to wet all surfaces thoroughly. Allow to remain wet for required contact of 5 minutes and then either allow to air dry or if desired remove solution and entrapped soil with a clean wet mop, cloth, or wet vacuum pickup. Prepare a fresh solution daily or when it becomes soiled or diluted.

**TO DEODORIZE:**
Apply this product use solution to completely wet all surfaces. Let stand for 2 minutes to kill odor causing bacteria then wipe or allow to air dry. For heavily soiled areas, a precleaning step is required.
Cleaning and Disinfecting for MDROs

Standard, consistent cleaning and disinfecting practices are important in preventative approaches to managing patients with *C. difficile* spores (Multi-Drug Resistant Organisms (MDROs)). Providing cleaning and disinfecting assists in preventing cross-transmission of resistant microorganisms to patient, staff or visitors and to other surfaces that may come in contact with patients, staff or visitors. Training and education of Environmental Services staff on the management of *C. difficile* spores (MDRO) cross-transmission is critical to reducing the possibility of further *C. difficile* spore transmissions. Remember the basic rules of breaking the chain of infection and its application to *C. difficile* spores (MDRO) management.

*C. difficile* spores have been recovered from bed rails, telephones, call lights, light switches, flush handles, faucet handles, doorknobs, chairs, wheelchairs, over-the-bed tables and computer keyboards. Any place that a patient, staff or visitor touches can be contaminated with *C. difficile* spores and transported to all of the above and more. Hand washing is one of the major processes in controlling *C. difficile* spores (MDROs). The next major step is cleaning and disinfecting high-touch areas throughout the facility. Cleaning and disinfecting these areas only once per 24 hours is no longer acceptable in managing the transmission of *C. difficile* spores within a healthcare facility.

Frequent application of disinfectant to high-contact surface areas is extremely important. It does no good to have the chemical in the bottle and not on the surfaces of the facility. The biggest contribution that Environmental Services staff can provide in the management of *C. difficile* spores (MDROs) is the frequency of cleaning and disinfecting of high-contact surface areas.

Disinfectants

Hospital-grade disinfectants approved by the Environmental Protection Agency (EPA) are recommended. Few commercial products meet these requirements for killing *C. difficile* spores. The following is an example of the proper documentation and chemical efficacy required for MDRO management for the Environmental Services Department.

**EPA-registered, hospital-grade disinfectant cleaner:**

- Kills the *C. difficile* spores with a 99.9999% log reduction.
- Kills HIV-1, MRSA, VRE, Herpes Simplex I and II, and other pathogens.
- Rinse-free
- Can be dispensed into buckets
- Can be used with course sprayer or pour-top bottles

What is the difference between vegetative state and *C. difficile* spores?

Before disinfecting the surface, it is important to have some insight into what is being cleaned and disinfected. One of the most common questions asked is, “What is the difference between *C. difficile* spores and vegetative state?”

This question was answered during a presentation at the annual scientific meeting of the Society of Healthcare Epidemiology of America (SHEA) in April 2006. The vegetative state is the active growth phase of the organism. A spore is a thick-walled resting cell produced by the organism to protect itself from unfavorable environmental conditions. When *C. difficile* in the vegetative state is challenged, but not killed, the bacterium forms a spore. *C. difficile* vegetative cells can survive up to 24 hours and spores up to 5 months.

As stated in the SHEA position paper, *C. difficile* is present in feces and the major reservoirs of *C. difficile*-infected patients (both symptomatic and asymptomatic), and items or surfaces contaminated with feces. *C. difficile* spores are transferred to patients primarily via the hands of healthcare personnel who have direct contact with infected patients or who have touched a contaminated surface or item. Documented cases of *Clostridium Difficile* Associated Disease (CDAD) have been linked to a contaminated commode chair, a nursery baby bath, and contaminated electronic rectal thermometer handles.
What environmental disinfectants are effective against *C. difficile*?

Few studies have examined the use of chemical disinfectants for inactivation and/or removal of *C. difficile* spores. There are few well-controlled studies investigating cleaning and disinfection methods. Quaternary ammonium compounds and phenols are not effective in killing spores and are only effective against *C. difficile* in the vegetative state. Since some strains of *C. difficile* may display increased levels of spore production when exposed to non-based Hydrogen Peroxide and Peroxyacetic cleaning agents, and spores are more resistant than vegetative cells to surface disinfectants, some have recommended the use of hypochlorite (bleach) for disinfection of rooms of patients with CDAD, and for routine disinfecting in units with high *C. difficile* rates. While this has been a standard practice prior to the introduction of Hydrogen Peroxide and Peroxyacetic cleaning agents, the use of bleach on surfaces have become costly over time to do the damage caused to facility surfaces.

Because person-to-person contact (via hands) is the main way this organism is spread between patients, hand washing, barrier precautions, and meticulous environmental cleaning of fecally contaminated surfaces (e.g. commodes, bathrooms) for all patients is required to prevent the spread of *C. difficile*. Low-level disinfectants such as Quats do not kill spores. However, the cleaning process using low-level disinfectants removes not only soil but also reduces the number of microorganisms on the surface.

Recommendations to prevent transmission of *C. difficile*?

Regardless of the disinfectant used, successful environmental control of *C. difficile* requires a collaborative approach between Environmental Services, Infection Control and Nursing services. Surfaces likely to become contaminated with feces and high-hand contact surfaces need to be identified, the cleaning process defined (when and how), accountability for cleaning established (who), and compliance monitored.

The CDC recommends that surfaces should be kept clean and body substance spills should be promptly cleaned up as outlined in the Guideline for Environmental Infection Control (www.cdc.gov). Hospital cleaning products can be used for routine cleaning. Hydrogen Peroxide with Peroxyacetic Acid disinfectants such as Perisept have been used with success for surface disinfection in those patient-care areas where surveillance indicates ongoing transmission of *C. difficile*.

**Note:** At present, there are few EPA-registered products with specific claims for inactivating *C. difficile* spores. Perisept is one of two products on the market to kill *C. difficile* spores without using bleach. Don’t be confused by the number of registered products that have claims against *C. difficile* in the vegetative state. The vegetative cells are killed by low-level disinfectants. The spores must be killed with a high-level disinfectant such as Perisept.

**Disinfecting Environmental Surfaces**

**Recommendation:**

Create separate environmental service cart(s) for cleaning and disinfecting MDRO patient rooms. There should only be enough equipment and supplies to clean and disinfect one area at a time. The cart should be cleaned and disinfected before moving to the next area that is contaminated by a MDRO. This cart should be labeled, if possible, on the door of the cart with “MDRO Use Only.”

**Recommendation:**

Provide environmental service specialized training for the management of MDROs. The staff that receives this training should work closely with an Infection Control Practitioner and Nursing staff. These staff members, while on duty, should be provided with some type of communication so that the Infection Control Practitioner or Nurse Management can reach them.
Environmental Services Management - Cleaning & Disinfecting

For *C. difficile* Spores and Other Multi-Drug Resistant Organisms

**Cleaning and Disinfecting Process**

**Recommendation:**

**Caution:** When cleaning and disinfecting a patient’s room or bathroom that is contaminated with *C. difficile* spores use Perisept and follow these practices:

1. Wear all PPE (Personal Protective Equipment)
2. Ensure proper ventilation
3. Ensure patient safety
4. Ensure staff and visitor safety
5. Use disposable items when possible
6. Disinfect all equipment after use
7. Allow proper dwell time
8. Wash hands using approved healthcare facility procedures
9. Because Perisept doesn’t leave behind residue there is no need to rinse the surface. Follow the manufacture’s instructions on the bottle label.

**Cleaning Process for Occupied and Discharge Patient Rooms Contaminated with *C. difficile* Spores (MDRO)**

**Note:** Place environmental service cart outside of patient room. Make sure that the cart doesn’t block the corridor.

- Use proper PPE.
- Place a "Wet Floor" sign at the entrance of the patient’s room.
- Use proper dwell times as stated on the manufacture’s label.
- High dusting vents and ledges using a high duster. This procedure will be performed using the “Wet Method and at Discharge.”
- Clean sink using Perisept disinfectant cleaner and a green microfiber cloth.
- Refill dispensers.
- Carefully remove soiled linen and place in the proper linen bag.
- Clean entire patient bed using Perisept sporidical disinfectant cleaner and a red microfiber cloth.
- Clean over the bed table and night stand using Perisept sporidical disinfectant cleaner and a green microfiber cloth.
- Clean and disinfect counter top using Perisept sporidical disinfectant cleaner and a green microfiber cloth.
- Clean and disinfect phones, cords, call buttons, and TV remote controls using Perisept sporidical disinfectant cleaner and a green microfiber cloth.
- Remove litter.
- Remove medical waste.
- Empty trash receptacles.
- Clean and disinfect trash receptacles using a wet green microfiber cloth with Perisept sporidical disinfectant cleaner.
- Remove and replace sharps containers when ¾ full, or when needed.
- Spot walls using Perisept sporidical disinfectant cleaner and a green microfiber cloth.
- Clean high-touch areas such as switches and handles using Perisept sporidical disinfectant cleaner and a green microfiber cloth.
- Dust mop floors using a dry green microfiber dry pad, or vacuum.
Patient Room

Note: Do not use any cloths that cleaned and disinfected the patient room in the bathroom, or microfiber cloths used in the bathroom in the patients room.

Daily
- Clean and disinfect sink using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Refill dispensers.
- Clean and disinfect handrails and footboards on patient bed using Perisept sporicidal disinfectant cleaner and a red microfiber cloth.
- Clean and disinfect and over the bed table and night stand using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Clean and disinfect counter tops using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Remove litter.
- Remove medical waste.
- Empty trash receptacles. Clean and disinfect using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Remove soiled linen.
- Remove and replace sharps containers when ¼ full, or when needed.
- Clean and disinfect walls using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Clean and disinfect high-touch areas such as switches and handles using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Dust mop floors using a dry green microfiber pad.
- Clean and disinfect windowsills and frames using Perisept sporicidal disinfectant cleaner and a wet green microfiber cloth.
- Clean and disinfect baseboards using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Clean and disinfect furniture surfaces using a green microfiber cloth.
- Clean and disinfect vents and ledges using Perisept sporicidal disinfectant cleaner and a microfiber high duster. This procedure will be performed as needed and at discharge.
- Wash walls using the microfiber wall washing 18-inch frame and extension pole. This procedure will be performed as needed and at discharge.

Restrooms

Daily
- Clean and disinfect mirrors using Perisept sporicidal disinfectant cleaner and a blue microfiber glass and mirror cloth.
- Clean and disinfect and sink using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Refill dispensers.
- Clean and disinfect counter tops using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Clean and disinfect toilet using Perisept sporicidal disinfectant cleaner and a yellow microfiber cloth.
- Clean and disinfect partitions using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Empty trash receptacles, clean and disinfect using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Replace trash receptacle liners.
- Dust mop floors using a dry green microfiber pad.
- Mop floors using Perisept sporicidal disinfectant cleaner and a blue microfiber wet pad.
- Clean and disinfect vents and ledges using Perisept sporicidal disinfectant cleaner and a microfiber high duster.
- Clean and disinfect furniture surfaces (chairs and counter tops) using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Clean and disinfect walls using Perisept sporicidal disinfectant cleaner and the microfiber wall washing 18-inch frame and extension pole.
- Clean and disinfect windowsills and frames using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
- Clean and disinfect baseboards using Perisept sporicidal disinfectant cleaner and a green microfiber cloth.
**Best Practices**

**Environmental Services Management**

For *C. difficile* Spores and Other Multi-Drug Resistant Organisms

- Clean and disinfect walls using Perisept sporicidal disinfectant cleaner and a **green** microfiber cloth.
- Clean and disinfect high-touch areas such as switches and handles using Perisept sporicidal disinfectant cleaner and a **green** microfiber cloth.
- Dust mop floors using a dry **green** microfiber pad.
- Clean and disinfect windowsills and frames using Perisept sporicidal disinfectant cleaner and a **green** microfiber cloth.
- Clean and disinfect baseboards using Perisept sporicidal disinfectant cleaner and a **green** microfiber cloth.
- Clean and disinfect furniture surfaces using a **green** microfiber cloth.
- Clean and disinfect vents and ledges using Perisept sporicidal disinfectant cleaner and a microfiber high duster. This procedure will be performed as needed and at discharge.
- Wash walls using the microfiber wall washing 18-inch frame and extension pole. This procedure will be performed as needed and at discharge.

**Note:** All used microfiber pads should be placed in waterproof bags and sent to laundry for proper washing.

Regular, routine cleaning and disinfecting of environmental surfaces and items is important in reducing cross-transmission of MDROs. The frequency of these activities should be based on input from Environmental Services, Infection Control and Nursing Management.

"Wet" dusting with disinfecting solution is the best method for dusting all patient-care areas. This process helps reduce the transmission of MDROs. This practice should be taught to all Environmental Service staff. It also reduces the bio-load of the resistant organisms on equipment and surfaces. The recommended manufacturer's duration of the disinfecting solution on a surface and the use of microfiber cloths provide the best outcome for cleaning and disinfecting surfaces that are contaminated with MDROs.

It is never recommended to reuse a microfiber cloth after it dries out, or reintroduce the microfiber cloth into the clean disinfecting solution. By not reintroducing the microfiber cloth back into clean disinfecting solution, the proper chemical disinfectant strength can be maintained throughout the cleaning process. Increased frequency of cleaning and disinfecting applications must be considered during an outbreak or cluster of MDRO cases. The Environmental Service Specialist must clean and disinfect the areas using the same steps each time the application is performed. Using the same steps reduces the possibility of high-touch areas being overlooked and further assures the application was done correctly.

Restrooms and patient rooms used by *C. difficile* spores (MDROs)-infected or colonized patients should be cleaned and disinfected at least twice daily with Perisept sporicidal disinfectant cleaner. As with all areas that are contaminated with *C. difficile* spores (MDROs), the more cleaning and disinfecting that occurs, the less bio-load is on the surfaces.

**Recommendation:**
Consider the second cleaning and disinfecting application to be done by second-shift Discharge Specialist.

**Trash**

No special precautions are necessary for MDRO trash. Proper PPE should be used at all times when trash is sorted or handled.

**Linen**

Soiled linen should be contained/bagged at the location of use (patient area). No special precautions are necessary for MDRO patients' dirty linen, such as double bagging. Use waterproof bags to contain fluids to prevent/reduce contamination of the environment and staff. Do not sort or rinse soiled linens with body substances in patient-care areas. Follow your healthcare facility's laundry policies and procedure. Healthcare facilities should follow local or State health department regulations for laundering. Linen handlers should wear PPE to prevent contamination from soiled linens. Wash or sanitize hands after glove use.

**Patient Equipment**

Any equipment used by patients with MDRO infections should be cleaned and disinfected before leaving the area. Examples include wheelchairs, I.V. poles, equipment carts, and weight scales. Equipment from MDRO-infected area should not be moved or used until it has been thoroughly cleaned and disinfected.

**Note:** In some cases, patient equipment must be returned to Central Sterile Supply (CS). If this is the case, the equipment must be cleaned/disinfected and tagged before being sent to CS.

**Definition of C. difficile Spore (MDRO) Outbreak**

When a facility has an initial case of *C. difficile*, MRSA, or VRE, it is an outbreak by definition. However, the common definition of an outbreak is: several (e.g. three or more healthcare-associated infection (HAI) cases of MDRO which are epidemiologically associated by person, time or place, or a substantial increase in the number of cases in a facility. Each healthcare facility must decide the criteria to define an outbreak.
Making Health Care Safer

Stopping C. difficile infections

People getting medical care can catch serious infections called health care-associated infections (HAIs). While most types of HAIs are declining, one – caused by the germ C. difficile* – remains at historically high levels. C. difficile causes diarrhea linked to 14,000 American deaths each year. Those most at risk are people, especially older adults, who take antibiotics and also get medical care. When a person takes antibiotics, good germs that protect against infection are destroyed for several months. During this time, patients can get sick from C. difficile picked up from contaminated surfaces or spread from a health care provider’s hands. About 25% of C. difficile infections first show symptoms in hospital patients; 75% first show in nursing home patients or in people recently cared for in doctors’ offices and clinics. C. difficile infections cost at least $1 billion in extra health care costs annually.

*Clostridium difficile (kla-strid-ee-um DIFF-ee-ble)
**Problem**

*C. difficile* infections are at an all-time high.

*C. difficile* causes many Americans to become sick or die.
- *C. difficile* infections are linked to 14,000 deaths in the US each year.
- Deaths related to *C. difficile* increased 400% between 2000 and 2007, due in part to a stronger germ strain.
- Most *C. difficile* infections are connected with receiving medical care.
- Almost half of infections occur in people younger than 65, but more than 90% of deaths occur in people 65 and older.
- Infection risk generally increases with age; children are at lower risk.
- About 25% of *C. difficile* infections first show symptoms in hospital patients; 75% first show in nursing home patients or in people recently cared for in doctors’ offices and clinics.

*C. difficile* germs move with patients from one health care facility to another, infecting other patients.
- Half of all hospital patients with *C. difficile* infections have the infection when admitted and may spread it within the facility.
- The most dangerous source of spread to others is patients with diarrhea.
- Unnecessary antibiotic use in patients at one facility may increase the spread of *C. difficile* in another facility when patients transfer.
- When a patient transfers, health care providers are not always told that the patient has or recently had a *C. difficile* infection, so they may not take the right actions to prevent spread.

*C. difficile* infections can be prevented.
- Early results from hospital prevention projects show 20% fewer *C. difficile* infections in less than 2 years with infection prevention and control measures.
- England decreased *C. difficile* infection rates in hospitals by more than half in 3 years by using infection control recommendations and more careful antibiotic use.

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**For Clinicians:**

6 Steps to Prevention

1. Prescribe and use antibiotics carefully. About 50% of all antibiotics given are not needed, unnecessarily raising the risk of *C. difficile* infections.
2. Test for *C. difficile* when patients have diarrhea while on antibiotics or within several months of taking them.
3. Isolate patients with *C. difficile* immediately.
4. Wear gloves and gowns when treating patients with *C. difficile*, even during short visits. Hand sanitizer does not kill *C. difficile*, and hand washing may not be sufficient.
5. Clean room surfaces with bleach or another EPA-approved, spore-killing disinfectant after a patient with *C. difficile* has been treated there.
6. When a patient transfers, notify the new facility if the patient has a *C. difficile* infection.

SOURCE: CDC, 2012
How *C. difficile* Spreads.

George, a 68-year-old man, goes to the doctor’s office and is diagnosed with pneumonia. He is prescribed antibiotics, drugs that put him at risk for *C. difficile* infection for several months.

Three Days Later

George goes back to the hospital for treatment of diarrhea and tests positive for *C. difficile*. He is started on specific antibiotics to treat it. Health care workers wear gloves and do not spread *C. difficile*. George recovers.

Two Days Later

George transfers to a rehabilitation facility for his leg and gets diarrhea. He is not tested for *C. difficile*. The health care worker doesn’t wear gloves and infects other patients.

One Month Later

George breaks his leg and goes to a hospital. A health care worker spreads *C. difficile* to him after forgetting to wear gloves when treating a *C. difficile* infected patient in the next room.

Deaths caused by *C. difficile* infections*

*Age-adjusted rate of *C. difficile* as the primary (underlying) cause of death.

SOURCE: CDC National Center for Health Statistics, 2012

Deaths per 1,000,000

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SOURCE: CDC, 2012
What Can Be Done

Federal government is

◊ Tracking and reporting national progress toward preventing *C. difficile* infections in many types of health care facilities. These programs help track the size of the problem, antibiotics used, and people at risk.

◊ Promoting *C. difficile* prevention programs and providing gold-standard patient safety recommendations (see http://www.cdc.gov/HAI/organisms/cdiff/Cdiff_infect.html).

◊ Providing prevention expertise, as well as outbreak and laboratory support to health departments and facilities.

Health care facility administrators can

◊ Support better testing, tracking, and reporting of infections and prevention efforts.

◊ Make sure cleaning staff follows CDC recommendations, using an EPA-approved, spore-killing disinfectant in rooms where *C. difficile* patients are treated.

◊ Notify other health care facilities about infectious diseases when patients transfer, especially between hospitals and nursing homes.

◊ Participate in a regional *C. difficile* prevention effort.

States and communities can

◊ Encourage health care facilities to track and share data using CDC’s National Healthcare Safety Network.

◊ Develop regional *C. difficile* prevention projects with many types of facilities.

◊ Help health care facilities in their prevention efforts.

◊ Provide a standardized form for facilities to use during patient transfers, especially between hospitals and nursing homes.

Doctors and nurses can

◊ Prescribe antibiotics carefully (see http://www.cdc.gov/getsmart/specific-groups/hcp/index.html). Once culture results are available, check whether the prescribed antibiotics are correct and necessary.

◊ Order a *C. difficile* test (preferably a nucleic acid test) if the patient has had 3 or more unformed stools within 24 hours.

◊ Be aware of infection rates in your facility or practice, and follow infection control recommendations with every patient. This includes isolating patients who test positive for *C. difficile* infection and wearing gloves and gowns to treat them.

Patients can

◊ Take antibiotics only as prescribed by your doctor. Antibiotics can be lifesaving medicines.

◊ Tell your doctor if you have been on antibiotics and get diarrhea within a few months.

◊ Wash your hands after using the bathroom.

◊ Try to use a separate bathroom if you have diarrhea, or be sure the bathroom is cleaned well if someone with diarrhea has used it.

For more information, please contact

**Telephone:** 1-800-CDC-INFO (232-4636)
**TTY:** 1-888-232-6348
**E-mail:** cdcinfo@cdc.gov
**Web:** www.cdc.gov

Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30333
Publication date: 3/6/2012
PERISEPT
Sporicidal Disinfectant Cleaner

Areas of Use

**GENERAL USE SITES:**
This product is designed specifically as a general (non-abrasive) cleaner and disinfectant for use in:
- Animal Life Science Laboratories
- Athlete/Recreational Facilities
- Cruise Ships
- Dental Offices
- Examination Rooms
- Food Service Establishments (Restaurants, Commercial Kitchens)
- Hospitals
- ICU Areas
- Locker Rooms
- Lodging Establishments
- Manufacturing Facilities
- Nursing Homes
- Office Building
- Operating Rooms
- Patient Rooms
- Pet Shops
- Public Restrooms
- Retail Businesses
- Schools
- Shower Rooms
- Transportation Terminals
- Veterinary Clinics

**MEDICAL USE SITES:**
(Assisted living or Full Care) Nursing Homes
(Bedside) Commodies
(Exam or Examination) Tables (external) (surfaces of) ultrasound transducers (and/or probes)
(Hard, nonporous) edges of privacy curtains
(Hospital or patient) bed(s) (springs) (railing(s)) (frames) (linings)
(Inner) (inside of) drawers
(Mayo) (instrument) stands
(Medical) (Physician’s) (Doctor’s) offices
(Medical) Clinics
Ambulances or (Emergency Medical) Transport Vehicles
Ambulatory Care Centers
Ambulatory Surgical Centers (ASC)
Anesthesia Machines
Anesthesia Rooms or Areas
Apheresis Machines
Autoclaves
Bathroom Door Knob
Bed Rails
Bedpans
Bedside Tables
Blood Pressure Cuffs
Cabinet Handles
Call Boxes
Carts
CAT Laboratories
CAT or Computerized Axial Tomography Equipment
Cellular Phones
Central Service Areas
Central Supply Rooms (Areas)
Chairs
Charging Stations
Closet Handles
Coated Mattresses
Coated Pillows
Computer Mouse

**MEDICAL USE SITES (cont.)**
Computer Screens
Computer Tables
Counters
Critical Care Units (CCUs)
Desktops
Diagnostic Equipment
Dialysis Clinics (Facilities)
Dialysis Machines
Docking Stations
Doctor’s Offices
Donation Centers (blood) (plasma) (semen) (milk) (apheresis)
Emergency Rooms (ERs)
Environmental Surfaces
Examination Rooms or Areas
Exterior of pipes
Exterior surfaces of air vents or air vent exteriors
External Surfaces of (Medical) Equipment (or) (Medical) Equipment Surfaces
Eye Surgical Centers
Footboards
Glucometers
Glucometers
Gurneys
Handheld (Electronic) Devices
Hard, nonporous (environmental) hospital or medical surfaces
Headboards
Healthcare Settings or Facilities
High Touch Surfaces
Hospices
Hospitals
Intensive Care Units or ICU(s) (Areas)
Isolation Areas
Isolettes
IV (Stand(s)) (Pumps) (Poles)
Keyboards
Laboratories
Laptops
Laundry Rooms
Long Term Care Facilities
Loupes
Mammography Equipment
Medical Facilities
Medication Carts
Mobile Devices
Mobile Electronic Equipment
Mobile Workstations
Mouse Pads
MRI or Magnetic Resonance Imaging Equipment
Nurse-call (Devices) (Buttons) (and cords)
Nursing Homes
Nursing or Nurses’ Stations
Operating Room Tables and Lights
Operating Rooms (ORs)
Operatory Light Switches
Ophthalmic Offices
Or Areas
Orthopedics
Out-Patient (Surgical Centers [OPSC]) (Clinics) (Facilities)
Overbed Tables
Paddles
Pages
Patient Chairs
Patient Monitoring Equipment

**MEDICAL USE SITES (cont.):**
Patient Support and Delivery Equipment
Pharmacies
Phlebotomy Trays
Phone Cradle
Physical Therapy (PT) Equipment Surfaces
Physical Therapy Rooms or Areas
Patient Areas
Physicians’ Offices
Plastic Mattress Covers
Power Cords
Psychiatric Facilities
Public (Care) Areas
Pulse Oximeters
PVC Tubing
Radiology or X-Ray Rooms
Reception (Counter) (Desks) (Areas)
Recovery Rooms
Rehabilitation Centers
Remote Controls
Respirators
Respiratory Centers
Respiratory Therapy Equipment
Respiratory Therapy Rooms or Areas
Restrooms
Scales
Sequencial Compression Devices
Shower Fixtures
Side Rails
Slit Lamps
Spine Backboards
Stethoscopes
Stools
Stretchers
Support Bars
Surgery Rooms
Tablet PCs
Toilet Handholds
Traction Devices
Waiting Rooms or Waiting Areas
Walls (Around Toilet) (in Patient Rooms)
Wash Basins
Wheelchairs
X-Ray Equipment

**MATERIAL COMPATIBILITY:**
Finished Floors
Aluminum
Baked Enamel Surfaces
Brass
Chrome
Glass
Glazed Ceramic Tile
Glazed Porcelain
Laminated Surfaces
Plastic and Painted Surfaces
Plastic Surfaces
Polished Nickel Finish
Shower Stall
Stainless Steel
Vinyl
# Sporicidal Disinfectants and Cleaners

## Competitive Analysis

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>PERISEPT™</th>
<th>Ultra Clorox Germicidal Bleach</th>
<th>OxyCide™</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Available Sizes:</strong></td>
<td>2 Liters (2/cs)</td>
<td>96 oz. (6/cs) 180 oz. (3/cs)</td>
<td>96 oz. (4/cs) 1/2.5/5-Gallon</td>
</tr>
<tr>
<td><strong>Kill Times for Clostridium difficile:</strong></td>
<td>2 minutes</td>
<td>10 minutes</td>
<td>3 minutes</td>
</tr>
<tr>
<td><strong>ESKAPE Pathogens</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enterococcus faecalis (VRE)</td>
<td>2 minutes</td>
<td>5 minutes</td>
<td>n/a</td>
</tr>
<tr>
<td>Staphylococcus aureus (MRSA)</td>
<td>2 minutes</td>
<td>5 minutes</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Klebsiella pneumoniae</td>
<td>2 minutes</td>
<td>n/a</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Acinetobacter baumanii</td>
<td>2 minutes</td>
<td>5 minutes</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Pseudomonas aeruginosa</td>
<td>5 minutes</td>
<td>5 minutes</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>2 minutes</td>
<td>5 minutes</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Influenza A (H1N1)</td>
<td></td>
<td></td>
<td>3 minutes</td>
</tr>
<tr>
<td><strong>Total Kill Claims</strong></td>
<td>45</td>
<td>42</td>
<td>33</td>
</tr>
<tr>
<td><strong>Product Formulation (%)</strong></td>
<td>Hydrogen Peroxide 27.3 Peroxyacetic Acid 5.9</td>
<td>Sodium Hypochlorite 6.15</td>
<td>Hydrogen Peroxide 27.5 Peroxyacetic Acid 5.8 Acetic Acid 8 Other 66.7</td>
</tr>
<tr>
<td><strong>HMIS-Use Dilution</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Health Hazards</td>
<td>1</td>
<td>n/a</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
<td>n/a</td>
<td>0</td>
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<tr>
<td>Physical Hazards</td>
<td>0</td>
<td>n/a</td>
<td>0</td>
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<tr>
<td>PPE</td>
<td>-</td>
<td>n/a</td>
<td>B</td>
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<tr>
<td><strong>Shelf Life</strong></td>
<td>1 year</td>
<td>6 months</td>
<td>n/a</td>
</tr>
</tbody>
</table>

## Competitive Analysis

- **Fastest RTU C. diff kill claim**
- **First Dilution System Process on the market**
- **More cost effective than RTU products on the market**
- **Wall-mounted and portable dispenser**
- **Longer (10-minute) kill claim against C. diff**
- **Bleach-based products damage hard-surfaces; carpet; uniforms; and LCD monitors**
- **Requires pre-cleaning & rinse – requires additional labor**
- **Leaves behind salt residue/film**
- **Concentrated product considered HAZMAT. Potential shipping issues.**
- **No sanitizer claims**
- **EPA registered as one-step cleaner disinfectant (must pre-clean surface for sporicidal applications) must remove gross contamination.**
- **Large cumbersome dilution system**
- **No rinse required. Wipe dry or air dry. Product is toxic to birds, fish, and aquatic invertebrates.**

* Based on SDS information and HMIS Rating Guide
PERISEPT
Concentrate

<table>
<thead>
<tr>
<th>ITEM#</th>
<th>DESCRIPTION</th>
<th>SIZE</th>
<th>PACK</th>
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</thead>
<tbody>
<tr>
<td>48027</td>
<td>Perisept Sporicidal Disinfectant Cleaner</td>
<td>2 Liters</td>
<td>2/cs</td>
</tr>
</tbody>
</table>

Dispensing Solutions

<table>
<thead>
<tr>
<th>ITEM#</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>23200</td>
<td>Wall Mount–Four Station Dispenser, includes water supply hose</td>
</tr>
<tr>
<td>23201</td>
<td>Wall Mount–Single Station Dispenser, Bottle fill*</td>
</tr>
<tr>
<td>23202</td>
<td>Wall Mount–Single Station Dispenser, Bucket fill*</td>
</tr>
<tr>
<td>23203</td>
<td>Portable Dispenser*</td>
</tr>
<tr>
<td>23204</td>
<td>Portable Spray/Foaming Dispenser – Basic Model*</td>
</tr>
<tr>
<td>23205</td>
<td>Portable Spray/Foaming Dispenser – Premium Model,* includes 4 ft. extension hose &amp; foamer</td>
</tr>
<tr>
<td>23206</td>
<td>Navigator Portable Dispenser</td>
</tr>
<tr>
<td>23209</td>
<td>Premium Grade Water Supply Hose, 6 ft., Black</td>
</tr>
</tbody>
</table>

*Requires Water Supply Hose

Manufactured for:

Triple S
Billerica, MA 01862
800-323-2251  www.triple-s.com

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