

## Sani-Prime™

EPA Reg. No. 9480-10 (spray)  
EPA Reg. No. 9480-12 (wipe)



### PRODUCT DESCRIPTION

**Sani-Cloth®** Prime Germicidal Disposable Wipe and **Sani-Prime™** Germicidal Spray are next-generation disinfectants powered by **ACCELOQUAT™** technology, a proprietary blend of quaternary ammonium, isopropyl alcohol, and ethanol, that delivers *SPEED* and *POWER* to protect your patients, staff, and facility in just one (1) minute.

- Proven efficacy against 54 microorganisms, including 17 Multi-Drug Resistant Organisms like MRSA, CRE, and VRE, within a one (1) minute contact time.
- Fast acting disinfectants recommended for use in healthcare environment where the control of hazards of cross-contamination between treated surfaces is required.
- Designed to be compatible with hard nonporous surfaces and equipment made of stainless steel, plastic, Formica® laminate, glass and more.
- Available as a premoistened nonwoven durable wipe and ready-to-use spray.

### CHEMICAL COMPOSITION

#### Active Ingredients:

|  |         |
|--|---------|
| Didecyl Dimethyl Ammonium Chloride . . . . . | 0.61%   |
| Ethyl Alcohol . . . . .                      | 27.30%  |
| Isopropyl Alcohol . . . . .                  | 28.70%  |
| Other Ingredients . . . . .                  | 43.39%  |
| TOTAL . . . . .                              | 100.00% |

Each cloth is saturated with 6,100 parts per million of active quaternary ammonium chlorides.

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**EFFICACY**

**BACTERIAL ORGANISM EFFICACY**

**MULTI-DRUG RESISTANT BACTERIA:**

*Acinetobacter baumannii* – Multidrug Resistant (MDR) [ATCC 19606]  
 Carbapenem Resistant – *Klebsiella pneumoniae* (CRKP) [ATCC BAA-1705]\*  
 Carbapenem Resistant – *Escherichia coli* [CDC 81371]  
 ESBL Positive *Klebsiella pneumoniae* [ATCC 700603]  
 ESBL Positive *Escherichia coli* [ATCC BAA-196]  
 Methicillin Resistant *Staphylococcus aureus* (MRSA) [ATCC 33592]  
 Multidrug Resistant (MDR) *Klebsiella pneumoniae*-KPC-2 positive [ST258] [CDC 2008030]  
 Metallo-beta lactamase (MBL) positive *Pseudomonas aeruginosa* [CDC 2012059]  
 Community Acquired Methicillin Resistant *Staphylococcus aureus* [CA-MRSA Genotype USA 300] [NRS 384]  
 Community Acquired Methicillin Resistant *Staphylococcus aureus* [CA-MRSA Genotype USA 400] [NRS 123]  
 NDM-1 Positive *Enterobacter cloacae* [CDC 1000654]  
 NDM1 Positive *Escherichia coli* [CDC 1001728]  
 NDM1 Positive *Klebsiella pneumoniae* [CDC 1000527]  
*Streptococcus pneumoniae* – Penicillin Resistant [ATCC 700677]  
 Vancomycin Intermediate Resistant *Staphylococcus aureus* (VISA) [HIP 5836]  
 Vancomycin Resistant *Enterococcus faecalis* (VRE) [ATCC 51575]  
 Vancomycin Resistant *Staphylococcus aureus* (VRSA) [VRS1]  
 AOAC Germicidal Spray Method for Hard Surface Disinfection  
 \*Pre-Saturated Towelette Modified AOAC Germicidal Spray Method for Hard Surface Disinfection

Test Method Used:

Organic Soil Load:

Exposure Time:

Incubation:

Results:

5% fetal bovine serum  
 1 minute  
 46-50 hours at 25-37°C  
 No growth observed

**BACTERIA:**

*Bordetella pertussis* [ATCC 12743]  
*Legionella pneumophila* [ATCC 33153]  
*Campylobacter jejuni* [ATCC 29428]  
 AOAC Germicidal Spray Method for Hard Surface Disinfection

Test Method Used:

Organic Soil Load:

Exposure Time:

Incubation:

Results:

*Burkholderia cepacia* [ATCC 25416]  
*Enterobacter aerogenes* [ATCC 13048]  
*Escherichia coli* (*E. coli*) [ATCC 11229]  
*Pseudomonas aeruginosa* [ATCC 15442]\*  
*Salmonella enterica* [ATCC10708]\*  
*Staphylococcus aureus* [ATCC 6538]\*  
*Shigella dysenteriae* [ATCC 11835]  
*Streptococcus pyogenes* [ATCC 12344]  
*Streptococcus pneumoniae* [ATCC 6305]  
*Klebsiella pneumoniae* [ATCC 4352]  
*Escherichia coli* (*E. coli*) O157:H7 [ATCC 35150]  
*Listeria monocytogenes* [ATCC 19117]  
*Proteus vulgaris* [ATCC 9920]

Test Method Used:

Organic Soil Load:

Exposure Time:

Incubation:

Results:

AOAC Germicidal Spray Method for Hard Surface Disinfection  
 \*Pre-Saturated Towelette Modified AOAC Germicidal Spray Method for Hard Surface Disinfection  
 5% fetal bovine serum  
 1 minute  
 46-50 hours at 35-37°C  
 No growth observed

**MYCOBACTERIUM BOVIS - BCG (TB):**

Test Method Used: *Mycobacterium bovis* BCG (Tuberculosis) (TB) [Organon Teknika] [ATCC 35743]  
 AOAC Method 965.12 Tuberculocidal Activity of Disinfectants (2012)  
 (Spray and Modified for Pre-saturated Towelettes)  
 Organic Soil Load: 5% concentration Horse Serum  
 Exposure Time: 1 minute at 21°C  
 Incubation: 90 days at 35-37°C  
 Results: No growth observed

**VIRAL EFFICACY**

**NON-ENVELOPED VIRUSES:**

Adenovirus type 5 [ATCC VR-5]\*  
 Enterovirus EV-D68 [ATCC VR-561]  
 Rhinovirus type 1a [ATCC VR-1559] [Strain 2060]\*  
 Rotavirus (Strain WA)  
 Test Method Used: Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surface  
 \*Pre-Saturated Towelette Virucidal Efficacy Test  
 Organic soil load: 5% fetal bovine serum  
 Incubation: 7-10 days at 34-38°C  
 Exposure Time: 1 minute at room temperature (20.0 +/- 1°C)  
 Results: Virucidal according to the criteria established by the U.S. Environmental Protection Agency guidelines in effect at the time of test for determining the virucidal efficacy of disinfectants intended for use on dry inanimate surfaces.

**ENVELOPED VIRUSES:**

Avian Influenza A (H5N1) virus [CDC 2006719965] [Strain VNH5N1-PR8/CDC-RG]  
 Avian Influenza A (H7N9) virus [CDC-2013759189]  
 Cytomegalovirus [ATCC VR-538] [Strain AD-169]\*  
 Herpes Simplex virus type 1 [ATCC VR-733] [Strain (F-1)]  
 Herpes Simplex virus type 2 [ATCC VR-734] [Strain G]  
 Human Coronavirus [Strain 229E] [ATCC VR-740]  
 Influenza A virus (H3N2) / Strain Hong Kong [ATCC VR-544]  
 Influenza B virus [ATCC VR-823], Strain B / Hong Kong / 5/72  
 Respiratory Syncytial virus (RSV) [ATCC VR-26], Strain Long  
 Vaccinia virus (Strain WR) [ATCC VR-119]  
 Test Method Used: Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces  
 Organic Soil Load: 5% fetal bovine serum  
 Exposure Time: 1 minute  
 Incubation: 7-10 days  
 \*28 days  
 Results: Virucidal according to the criteria established by the U.S. Environmental Protection Agency guidelines in effect at the time of test for determining the virucidal efficacy of disinfectants intended for use on dry inanimate surfaces.

**PATHOGENIC FUNGI**

*Candida albicans* [ATCC 10231]  
 Test Method Used: Fungicidal Germicidal Spray Method  
 Organic Soil Load: 5% fetal bovine serum  
 Exposure Time: 1 minute at 18-25°C  
 Incubation: 46-50 hours at 25-30°C  
 Results: No growth observed

*Trichophyton mentagrophytes* [ATCC 9533]  
 Test Method Used: Pre-Saturated Towelette Modified AOAC Fungicidal Germicidal Spray Test  
 Organic Soil Load: 5% fetal bovine serum  
 Exposure Time: 1 minute at 18-25°C  
 Incubation: 10 days at 36-38°C  
 Results: No growth observed

**BLOODBORNE PATHOGENS:**

Human Immunodeficiency virus type 1 (HIV) (AIDs Virus), Strain HTLV-III<sub>B</sub>  
 Test Method Used: Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces  
 Organic Soil Load: 5% fetal bovine serum  
 Exposure Time: 1 minute  
 Incubation: 10-14 days at 36-38 °C  
 Results: The results indicate complete inactivation of Human Immunodeficiency Virus type 1 virus under these test conditions as required by the U.S. EPA and Health Canada.

Duck Hepatitis B Virus as a surrogate for Human Hepatitis B Virus  
 Test Method Used: Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces  
 Organic Soil Load: Whole duck serum (100% duck serum) with an additional 5% fetal bovine serum  
 Exposure Time: 1 minute  
 Incubation: 10 days at 36-38 °C  
 Results: The results indicate complete inactivation of Duck Hepatitis B virus under these test conditions as required by the U.S. EPA and Health Canada.

Bovine Viral Diarrhea virus as a surrogate for human Hepatitis C virus  
 Test Method Used: Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces  
 Organic Soil Load: 5% horse serum  
 Exposure Time: 1 minute  
 Incubation: 7 days at 36-38 °C  
 Results: The results indicate complete inactivation of Bovine Viral Diarrhea virus under these test conditions as required by the U.S. EPA and Health Canada.

## **TOXICITY STUDIES OF SANI-CLOTH PRIME GERMICIDAL DISPOSABLE WIPE AND SANI-PRIME GERMICIDAL SPRAY**

### **ACUTE ORAL**

**Conclusion:** A single-dose of **Sani-Cloth** Prime Germicidal Disposable Wipe solution was administered and observed for 14 days. Based on the results of this study, **Sani-Cloth** Prime Germicidal Disposable Wipe has an acute oral toxicity LD50 greater than 2 g/kg of body weight, classified as Toxicity Category III.

### **PRIMARY EYE IRRITATION**

**Conclusion:** All eye irritation cleared within the timed observation period resulting in no permanent eye damage. In accordance with the OPPTS/OECD Guidelines, **Sani-Cloth** Prime Germicidal Disposable Wipe would be classified as Toxicity Category II in unwashed eyes.

### **ACUTE DERMAL**

**Conclusion:** Following the single dermal administration, the subjects were observed for 14 days. Under the conditions of this test, the acute dermal LD50 was found to be greater than 5 g/kg of body weight, classified as Toxicity Category IV.

### **PRIMARY DERMAL**

**Conclusion:** Following a single dermal administration, the subjects were observed for 14 days. All irritation cleared within the observation period, and the product met the requirements for Toxicity Category IV classification.

### **ACUTE INHALATION**

**Conclusion:** Following four hours of exposure to the aerosolized product, the subjects were observed for 14 days. The inhalation LC50 was observed to be greater than 0.55 mg/L over the four hour period, classified as Toxicity Category III.

### **SKIN SENSITIZATION**

**Conclusion:** Incidence of grade 1 response or greater to primary challenge dose within the test group was not significantly greater than the naïve group, indicating that sensitization had not been induced.