

## Sani-24<sup>®</sup>

GERMICIDAL SPRAY

EPA Reg. No. 42182-9



### PRODUCT DESCRIPTION

**Sani-24<sup>®</sup>** Germicidal Spray gives you the power with around the clock protection. It is the first, and only, EPA-registered disinfectant with the ability to control HAI-causing microorganisms with Continuously Active Disinfection for up to 24 hours<sup>1</sup>.

### CHEMICAL COMPOSITION

#### Active Ingredients:

Alkyl dimethyl benzyl ammonium chloride (50% C <sub>14</sub> , 40% C <sub>12</sub> , 10% C <sub>16</sub> )	0.276%
Didecyl dimethyl ammonium chloride	0.104%
Octyl decyl dimethyl ammonium chloride	0.207%
Diocetyl dimethyl ammonium chloride	0.104%
Ethanol	68.610%
Other ingredients	30.699%
TOTAL	100.000%

## EFFICACY

### ENVELOPED VIRUSES–10 SECONDS:

Test Method Used:	Hepatitis B Virus (HBV) (Duck Hepatitis B virus as Surrogate)
Organic Soil Load:	Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces
Exposure Time:	Whole duck serum (100% duck serum) with an additional 5% fetal bovine serum
Results:	10 seconds
	The results demonstrated complete inactivation of Duck Hepatitis B virus following a 10 second exposure time at 20±1°C (21.0°C), as required by the U.S. EPA
Test Method Used:	Hepatitis C Virus (HCV) (Bovine Viral Diarrhea Virus as Surrogate)
Organic Soil Load:	Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces
Exposure time:	5% horse serum
Results:	10 seconds
	The results demonstrated complete inactivation of Bovine Viral Diarrhea Virus following a 10 second exposure time at 20±1°C (21.0°C), as required by the U.S. EPA
Test Method Used:	Herpes simplex virus type 1 [ATCC VR-733]
Organic Soil Load:	Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces
Exposure time:	5% fetal bovine serum
Results:	10 seconds
	The results indicate complete inactivation of Herpes simplex virus type 1 under these test conditions as required by the U.S. EPA
Test Method Used:	Herpes simplex virus type 2 [ATCC VR-734] [Strain G]
Organic Soil Load:	Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces
Exposure time:	5% fetal bovine serum
Results:	10 seconds
	The results indicate complete inactivation of Herpes simplex virus type 2 under these test conditions as required by the U.S. EPA
Test Method Used:	Human Coronavirus [ATCC VR-740] [Strain 229E]
Organic Soil Load:	Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces
Exposure time:	5% fetal bovine serum
Results:	10 seconds
	The results indicate complete inactivation of Human Coronavirus under these test conditions as required by the U.S. EPA
Test Method Used:	Human Immunodeficiency virus type 1 (HIV) [Strain HTLV-III <sub>B</sub> ]
Organic Soil Load:	Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces
Exposure time:	5% fetal bovine serum
Results:	10 seconds
	The results indicate complete inactivation of Human Immunodeficiency virus type 1 (HIV) under these test conditions as required by the U.S. EPA
Test Method Used:	Avian Influenza A (H3N2) Reassortant virus [ATCC VR-2072]
Organic Soil Load:	Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces
Exposure time:	5% fetal bovine serum
Results:	10 seconds
	The results indicate complete inactivation of Avian Influenza A (H3N2) Reassortant virus under these test conditions as required by the U.S. EPA
Test Method Used:	2009-H1N1 Influenza A virus (Novel H1N1) CDC 2009712192
Organic Soil Load:	Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces
Exposure time:	5% fetal bovine serum
Results:	10 seconds
	The results indicate complete inactivation of 2009-H1N1 Influenza A virus (Novel H1N1) under these test conditions as required by the U.S. EPA

**ENVELOPED VIRUS– 10 SECONDS:**

Test Method Used: Respiratory Syncytial virus (RSV) [ATCC VR-26]  
 Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces  
 Organic Soil Load: 5% fetal bovine serum  
 Exposure time: 10 seconds  
 Results: The results indicate complete inactivation of Respiratory syncytial virus (RSV) under these test conditions as required by the U.S. EPA

**BACTERIA–1 MINUTE:**

*Acinetobacter baumannii* Multi-drug resistant (MDR) [ATCC BAA-1605]  
*Enterobacter aerogenes* [ATCC 13048]  
*Escherichia coli* ESBL (Extended spectrum beta-lactamase) [ATCC BAA-196]  
*Escherichia coli* O157:H7 [ATCC 35150]  
*Enterococcus faecalis* VRE (Vancomycin resistant enterococcus) [ATCC 51575]  
*Klebsiella pneumoniae* CRE (Carbapenem resistant Enterobacteriaceae) [ATCC BAA-2146]  
*Pseudomonas aeruginosa* [ATCC 15442]  
*Salmonella enterica* [ATCC 10708]  
*Staphylococcus aureus* [ATCC 6538]  
*Staphylococcus aureus* (Methicillin Resistant) (MRSA) [ATCC 33592]  
*Staphylococcus epidermidis* (Methicillin Resistant) (MRSE) [ATCC 51625]  
*Staphylococcus aureus* (VISA) (Vancomycin–Intermediate) [HIP5836]  
*Staphylococcus aureus* (VRSA) (Vancomycin–Resistant) [HIP11714]  
 Test Method Used: GLP AOAC Germicidal Spray Products Test  
 Organic Soil Load: 5% fetal bovine serum  
 Exposure time: 1 minute  
 Incubation: 46–50 hours  
 Results: Passed

**CONTINUOUSLY  
 ACTIVE DISINFECTION  
 BACTERIA–5 MINUTE:**

*Enterobacter aerogenes* ATCC 13048  
*Enterococcus faecalis* VRE (Vancomycin resistant enterococcus) ATCC 51575  
*Pseudomonas aeruginosa* ATCC 15442  
*Staphylococcus aureus* ATCC 6538  
*Staphylococcus aureus* (Methicillin Resistant) (MRSA) ATCC 33592  
 Test method used: Modified EPA 01-1A for hospital use claims  
 Organic Soil Load: 5% fetal bovine serum  
 Dry Contact time: 5 minutes  
 Incubation: 46–50 hours  
 Results: 99.999% reduction

**HARD, NONPOROUS  
 NON-FOOD-CONTACT  
 SURFACE SANITIZATION  
 BACTERIA–10 SECONDS:**

*Enterobacter aerogenes* ATCC 13048  
*Staphylococcus aureus* ATCC 6538  
 Test method: ASTM E 1153  
 Organic Soil Load: 5% Fetal Bovine Serum  
 Incubation: 46–50 hours  
 Results: 99.9% reduction

**SOFT SURFACE  
 SPOT SANITIZATION  
 BACTERIA–10 SECONDS:**

*Enterobacter aerogenes* ATCC 13048  
*Staphylococcus aureus* ATCC 6538  
 Test method: Modified ASTM E 1153  
 Organic Soil Load: 5% Fetal Bovine Serum  
 Incubation: 46–50 hours  
 Results: 99.9% reduction

## STANDARD DISINFECTION

### LARGE NON-ENVELOPED

#### VIRUS-2 MINUTES:

Test Method Used:	Rotavirus [ATCC VR-2018]
Organic Soil Load:	Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces
Exposure time:	5% fetal bovine serum
Results:	2 minutes
	The results indicate complete inactivation of Rotavirus under these test conditions as required by the U.S. EPA.

#### TB-3 MINUTES:

Test Method Used:	<i>Mycobacterium bovis</i> -BCG
Organic Soil Load:	AOAC Tuberculocidal Activity of Disinfectant Spray Products
Exposure time:	5% fetal bovine serum
Results:	3 minutes
	No growth observed

#### FUNGI-3 MINUTES:

Test Method Used:	<i>Aspergillus niger</i> [ATCC 6275]
Organic Soil Load:	<i>Candida albicans</i> [ATCC 10231]
Exposure time:	<i>Trichophyton interdigitale</i> [ATCC 9533]
Results:	Fungicidal Germicidal Spray Method
	5% fetal bovine serum
	3 minutes
	No growth observed

### SMALL NON-ENVELOPED

#### VIRUSES-5 MINUTES:

Test Method Used:	Norovirus (Feline Calicivirus as surrogate) [ATCC VR-782]
Organic Soil Load:	Poliovirus type 1 [ATCC VR-1562]
Exposure time:	Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces
Results:	5% fetal bovine serum
	5 minutes
	No growth observed

## TOXICITY

### ACUTE INHALATION

Based on the inhalation test results, **Sani-24** Germicidal Spray has been classified as Toxicity Category IV for acute inhalation.

### ACUTE ORAL TOXICITY

Based on the results of this study, **Sani-24** Germicidal Spray has been classified as Toxicity Category IV for acute oral toxicity.

### ACUTE EYE IRRITATION

Based on the results of this study, **Sani-24** Germicidal Spray produced eye irritation that indicates the product would be classified as Toxicity Category II for acute eye irritation.

### ACUTE DERMAL TOXICITY

Based on the results of this study, **Sani-24** Germicidal Spray has been classified as Toxicity Category IV for dermal toxicity.

### ACUTE DERMAL IRRITATION

Based on the results of primary skin irritation study, **Sani-24** Germicidal Spray has been classified as Toxicity Category IV for dermal effects.

### DERMAL SENSITIZATION

Based upon the sensitization test results, **Sani-24** Germicidal Spray would not be considered a dermal sensitizing agent.

1. These 5 organisms are: *Enterobacter aerogenes*, *Enterococcus faecalis* VRE (Vancomycin resistant enterococcus), *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Staphylococcus aureus* MRSA (Methicillin Resistant)