

Technical Data Bulletin

Sani-24[®]



EPA Reg. No. 42182-13-9480 (wipe)
EPA Reg. No. 42182-9-9480 (spray)

Product Description

Sani-24[®] Germicidal Spray and Wipes give 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 hours¹.

Chemical Composition

Active Ingredients:

Alkyl dimethyl benzyl ammonium chloride (50% C ₁₄ , 40% C ₁₂ , 10% C ₁₆).....	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:

Organic Soil Load:

Exposure Time:

Results:

Hepatitis B Virus (HBV) (Duck Hepatitis B virus as Surrogate)

Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

Whole duck serum (100% duck serum) with an additional 5% fetal bovine serum

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:

Organic Soil Load:

Exposure time:

Results:

Hepatitis C Virus (HCV) (Bovine Viral Diarrhea Virus as Surrogate)

Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

5% horse serum

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:

Organic Soil Load:

Exposure time:

Results:

Herpes simplex virus type 1 [ATCC VR-733]

Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

5% fetal bovine serum

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:

Organic Soil Load:

Exposure time:

Results:

Herpes simplex virus type 2 [ATCC VR-734] [Strain G]

Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

5% fetal bovine serum

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:

Organic Soil Load:

Exposure time:

Results:

Severe Acute Respiratory Syndrome-Related Coronavirus 2 (SARS-CoV-2)
(Strain: USA-WA1/2020)

Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

5% fetal bovine serum

10 seconds

The results indicate complete inactivation of Severe Acute Respiratory Syndrome-Related Coronavirus 2 (SARS-CoV-2) under these test conditions as required by the U.S. EPA

Test Method Used:

Organic Soil Load:

Exposure time:

Results:

Human Coronavirus [ATCC VR-740] [Strain 229E]

Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

5% fetal bovine serum

10 seconds

The results indicate complete inactivation of Human Coronavirus under these test conditions as required by the U.S. EPA

Test Method Used:

Organic Soil Load:

Exposure time:

Results:

Human Immunodeficiency virus type 1 (HIV) [Strain HTLV-III_B]

Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

5% fetal bovine serum

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:

Organic Soil Load:

Exposure time:

Results:

Avian Influenza A (H3N2) Reassortant virus [ATCC VR-2072]

Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

5% fetal bovine serum

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

Organic Soil Load: 5% fetal bovine serum
 Exposure time: 10 seconds
 Results: The results indicate complete inactivation of 2009-H1N1 Influenza A virus (Novel H1N1) under these test conditions as required by the U.S. EPA

Efficacy

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 minutes:

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

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

TB-3 minutes:

Test Method Used: AOAC Tuberculocidal Activity of Disinfectant Spray Products
 Organic Soil Load: 5% fetal bovine serum
 Exposure time: 3 minutes
 Results: No growth observed

Fungi-3 minutes:

Test Method Used: Fungicidal Germicidal Spray Method
 Organic Soil Load: 5% fetal bovine serum
 Exposure time: 3 minutes
 Results: No growth observed

Small Non-enveloped

Viruses-5 minutes: Norovirus (Feline Calicivirus as surrogate) [ATCC VR-782]
 Poliovirus type 1 [ATCC VR-1562]
 Test Method Used: Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces
 Organic Soil Load: 5% fetal bovine serum
 Exposure time: 5 minutes
 Results: 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. CAD addresses *Acinetobacter baumannii* MDR, *Enterobacter aerogenes*, *Enterobacter aerogenes* MDR, *Enterococcus faecalis* VRE (Vancomycin resistant enterococcus), New Delhi Metallo-beta-lactamase-1 (NDM-1) producing *Klebsiella pneumoniae* (CRE – Carbapenem resistant *Enterobacteriaceae*), *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Staphylococcus aureus* MSRA (Methicillin Resistant).