EPA Reg. No. 9480-9

SANI-CLOTH® AF3
GERMICIDAL DISPOSABLE WIPE

Technical Data Bulletin

1-800-999-6423 in USA
www.pdipdi.com

PRODUCT DESCRIPTION

Sani-Cloth® AF3 is a non-woven, disposable cloth, pre-saturated with a quaternary disinfectant. Recommended for use in hospitals and critical care areas where control of the hazards of cross contamination between treated surfaces is of prime importance. Use on hard, nonporous surfaces and equipment. Disinfects in just three minutes.

CHEMICAL COMPOSITION

Active Ingredients

n-Alkyl (68% C_{12}, 32% C_{14}) dimethyl ethylbenzyl ammonium chlorides	0.14%
n-Alkyl (60% C_{14}, 30% C_{16}, 5% C_{12}, 5% C_{18}) dimethyl benzyl ammonium chlorides	0.14%
Other ingredients	99.72%
TOTAL *(Does not include the weight of the cloth)*	100.00%

Each cloth is saturated with 2,800 parts per million of active quaternary ammonium chlorides.

EFFICACY

BACTERIAL ORGANISM EFFICACY

BACTERIA:

Bordetella bronchiseptica [ATCC 10580]
Bordetella pertussis [ATCC 12743]
Burkholderia cepacia [ATCC 25416]
Campylobacter jejuni [ATCC 29428]
Enterobacter aerogenes [ATCC 13048]
Escherichia coli [ATCC 11229]
Escherichia coli O157:H7 [ATCC 35150]
Klebsiella pneumoniae [ATCC 4352]
Listeria monocytogenes [ATCC 19111]
Proteus vulgaris [ATCC 9920]
Pseudomonas aeruginosa [ATCC 15442]
Salmonella enterica [ATCC 10708]
Serratia marcescens [ATCC 14756]
Shigella dysenteriae [ATCC 11835]
Staphylococcus aureus [ATCC 6538]
Streptococcus pyogenes [ATCC 19615]
Vibrio cholera [ATCC 11623]
Yersinia enterocolitica [ATCC 23715]

Test Method Used:	Modified AOAC Germicidal Spray Method for Hard Surface Disinfection
Organic Soil Load:	5% Fetal Bovine Serum
Exposure Time:	3 minutes at 68 - 69.8° F
Incubation:	2 – 6 days at 95 – 98.6° F
Results:	No growth observed

MULTI-DRUG RESISTANT BACTERIA:

Acinetobacter baumannii, Multi-Drug Resistant [ATCC 19606]
ESBL Resistant *Escherichia coli* [ATCC BAA-196]
Escherichia coli – NDM-1 Positive [CDC 1001728]
ESBL Resistant *Klebsiella pneumoniae* [ATCC 700603]
Klebsiella pneumoniae - Carbapenem Resistant [ATCC BAA-1705]
Klebsiella pneumoniae - NDM-1 Positive [CDC 1000527]
Community Acquired Methicillin Resistant *Staphylococcus aureus* (CA-MRSA) [NARSA NRS384] [Genotype USA 300]
Community Acquired Methicillin Resistant *Staphylococcus aureus* (CA-MRSA) [NARSA NRS123] [Genotype USA 400]
Methicillin Resistant *Staphylococcus aureus* (MRSA) [ATCC 33592]
Streptococcus pneumoniae – Penicillin Resistant [ATCC 700677]
Vancomycin Resistant *Staphylococcus aureus* (VRSA) [NARSA VRS1]
Vancomycin Resistant *Enterococcus faecalis* (VRE) [ATCC 51575]

Test Method Used:	Modified AOAC Germicidal Spray Method for Hard Surface Disinfection
Organic Soil Load:	5% Fetal Bovine Serum
Exposure Time:	3 minutes at 68-69.8° F
Incubation:	2-8 days at 95-98.6° F
Results:	No growth observed

MYCOBACTERIUM BOVIS - BCG (TB)

Test Method Used:	Modified AOAC Method for Pre-saturated Towelettes for Hard Surface Disinfection to Determine Tuberculocidal Effectiveness
Organic Soil Load:	5% Horse Serum
Exposure Time:	3 minutes at 68° F
Incubation:	90 days at 98.6° F
Results:	No growth observed

VIRAL ORGANISM EFFICACY

ENVELOPED VIRUSES

Avian Influenza A H5N1 virus [Strain VNH5N1-PR8/CDC-RG CDC #2006719965]
Cytomegalovirus [ATCC VR-538], Strain AD-169
Herpes simplex virus type 2 [ATCC VR-734], Strain G
Human Coronavirus [ATCC VR-740], Strain 229E
Influenza A virus/Hong Kong Strain [ATCC VR-544]*
**Pandemic 2009 H1N1 influenza A virus (kill claim included)*
Influenza B virus, Strain B/Hong Kong /5/72 [ATCC VR-823]
Respiratory syncytial virus (RSV) [ATCC VR-26], Strain Long

NON-ENVELOPED VIRUSES

Rotavirus [Strain WA]

Test Method Used:	Tests were conducted according to U.S. Environmental Protection Agency guidelines in effect at the time for determining virucidal efficacy of disinfectants intended for use on dry inanimate surfaces.
Organic Soil Load:	5% Fetal Bovine Serum
Exposure Time:	3 minutes at 68° F
Results:	Virucidal according to the criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a virucide.

BLOODBORNE PATHOGENS

Hepatitis B virus (HBV) - Duck HBV [Strain 7/31/07]
Hepatitis C virus (Human) (HCV) - Bovine Diarrhea Virus [Strain Oregon C24v-genotype 1]

Test Method Used:	Tests were conducted according to U.S. Environmental Protection Agency guidelines in effect at the time for determining virucidal efficacy of disinfectants intended for use on dry inanimate surfaces.
Organic Soil Load	Hepatitis B Virus (HBV) 100% Duck Serum Hepatitis C Virus (HCV) 5% Horse Serum
Exposure Time:	3 minutes at 68° F
Results:	Virucidal against Hepatitis B and Hepatitis C viruses according to the criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a virucide.

HIV-1 (AIDS VIRUS) [STRAIN HTLV-III_B]

Test Method Used:	This test was conducted according to U.S. Environmental Protection Agency guidelines in effect at the time for determining virucidal efficacy of disinfectants intended for use on dry inanimate surfaces.
Organic Soil Load:	5% Fetal Bovine Serum
Exposure Time:	30 seconds at 68° F
Results:	Virucidal against Human Immunodeficiency Virus Type 1 according to the criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a virucide.

PATHOGENIC FUNGI EFFICACY

YEAST ORGANISM

Candida albicans [ATCC 10231]

Test Method Used:	Modified AOAC Germicidal Spray Method for Hard Surface Disinfection
Organic Soil Load:	5% Fetal Bovine Serum
Exposure Time:	3 minutes at 69.8° F
Incubation:	3 days at 77-86° F
Results:	No growth observed

NON-FOOD CONTACT SANITIZER ORGANISM EFFICACY

BACTERIAL ORGANISMS	*Campylobacter Jejuni* [ATCC 29428] *Escherichia Coli O157:H7* [ATCC 35150] *Escherichia Coli* [ATCC 11229] *Klebsiella Pneumoniae* [ATCC 4352] *Listeria Monocytogenes* [ATCC 19111] Methicillin Resistant *Staphylococcus Aureus* (CA-MRSA) *[NARSA NRS384] (Genotype Usa 300)* Methicillin Resistant *Staphylococcus Aureus* (CA-MRSA) *[NARSA NRS123] [Genotype Usa 400]* *Pseudomonas Aeruginosa* [ATCC 15442] *Salmonella Enterica* [ATCC 10708] *Staphylococcus Aureus* [ATCC 6538] *Staphylococcus Aureus (MRSA)* [ATCC 33592] *Streptococcus Pyogenes* [ATCC 19615]
Test Method Used:	Modified ASTM Standard Test Method for Efficacy of Sanitizers Recommended For Non-Food Contact Surfaces
Organic Soil Load:	5% Fetal Bovine Serum
Exposure Time:	15 seconds at 68^0 F – 71.6^0 F
Incubation:	48 hrs +/- 4 hrs at 95 – 98.6^0 F
Results:	Meets the efficacy data requirements set forth by the by the U.S. Environmental Protection Agency for non-food sanitizer label claims that a minimum of a 99.9% reduction of the test organism was achieved.

TOXICITY

ACUTE ORAL TOXICITY OF SANI-CLOTH® AF3

Conclusion: A single dose of Sani-Cloth® AF3 solution was administered and observed for 14 days. No signs of toxicity were observed during the 14 day observation period of this study. Based on the results of this study, the acute oral toxicity LD50 of Sani-Cloth® AF3 was greater than 5gm/Kg of body weight.

ACUTE EYE IRRITATION OF SANI-CLOTH® AF3

Conclusion: One eye of each subject was instilled with the undiluted solution, while the contralateral eye remained untreated and served as a control. Under the conditions of the test, Sani-Cloth® AF3 produced eye irritation clearing in 7 days or less.

ACUTE DERMAL TOXICITY OF SANI-CLOTH® AF3

Conclusion: Following the single dermal administration, the subjects were observed for 14 days. Under the conditions of this test, the acute dermal LD50 of Sani-Cloth® AF3 was found to be greater than 5g/Kg of body weight.

ACUTE SKIN IRRITATION OF SANI-CLOTH® AF3

Conclusion: This test was conducted according to U.S. Environmental Protection Agency guidelines in effect at the time of testing. The subjects were exposed to the undiluted solution for 72 hours. Under the conditions of the test, Sani-Cloth® AF3 produced minimal irritation in one subject clearing within 72 hours.

SKIN SENSITIZATION OF SANI-CLOTH® AF3

Conclusion: This test was conducted according to U.S. Environmental Protection Agency guidelines in effect at the time of testing to determine the potential for Sani-Cloth® AF3 to produce sensitization after repeated topical applications. Based on the results of this test, Sani-Cloth® AF3 would not be considered a dermal sensitizing agent.

ACUTE INHALATION TOXICITY OF SANI-CLOTH® AF3

Conclusion: This test was conducted according to U.S. Environmental Protection Agency guidelines in effect at the time of testing. The subjects were exposed to the aerosolized product for a four hour period. Based on the results of this study, the acute inhalation toxicity LD50 of Sani-Cloth® AF3 is greater than 2.57mg/L of air.

PDI04125797 042012

1-800-999-6423 in USA
www.pdipdi.com