SANI-CLOTH® PLUS
GERMICIDAL DISPOSABLE CLOTH

Technical Data Bulletin
PRODUCT DESCRIPTION

A quaternary/alcohol solution impregnated in a wiping cloth. A non-woven disposable cloth for use in hospitals and other critical care areas where the control of the hazards of cross-contamination between treated surfaces is required. Use on hard, non-porous surfaces and equipment made of stainless steel, plastic, Formica® and glass.

CHEMICAL COMPOSITION

<table>
<thead>
<tr>
<th>Active Ingredients</th>
<th>Percentage</th>
<th>Other ingredients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chlorides</td>
<td>0.125%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chlorides</td>
<td>0.125%</td>
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<tr>
<td>Other ingredients</td>
<td></td>
<td></td>
<td>99.750%</td>
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<tr>
<td>TOTAL (Does not include the weight of the cloth)</td>
<td></td>
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<td>100.000%</td>
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</tbody>
</table>

Each cloth is nominally saturated with 2,500 ppm of active quaternary ammonium chlorides.

EFFICACY

BACTERIAL ORGANISM EFFICACY

<table>
<thead>
<tr>
<th>ORGANISMS:</th>
<th>Test Method Used</th>
<th>Exposure Time</th>
<th>Incubation</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methicillin Resistant Staphylococcus aureus (MRSA) (ATCC 3592)</td>
<td>AOAC Germicidal Spray Slide Test-5% Horse Serum as organic soil</td>
<td>3 minutes at 69°–76°F</td>
<td>48 hours at 98.6°F</td>
<td>No growth observed</td>
</tr>
<tr>
<td>Staphylococcus aureus (ATCC 6538)</td>
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<tr>
<td>Salmonella enterica (ATCC 10708)</td>
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<tr>
<td>Pseudomonas aeruginosa (ATCC 15442)</td>
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<tr>
<td>Escherichia coli (E.coli) O157:H7 (ATCC 35150) (PATHOGENIC STRAIN)</td>
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<tr>
<td>Escherichia coli (E.coli) (ATCC 11229)</td>
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<tr>
<td>Campylobacter jejuni (ATCC 29428)</td>
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</tr>
</thead>
<tbody>
<tr>
<td>Vancomycin Resistant Enterococcus Faecalis (VRE) (ATCC 51299)</td>
<td>AOAC Germicidal Spray Slide Test-5% Horse Serum as organic soil</td>
<td>3 minutes at 68°F</td>
<td>48 hours at 98.6°F</td>
<td>No growth observed</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL HYGIENE
VIRAL ORGANISM EFFICACY

ORGANISMS: Hepatitis B Virus (HBV), DHBV 16 strain
            Hepatitis C Virus (HCV), Bovine viral diarrhea virus

Test Method Used: This test was conducted according to U.S. Environmental Protection Agency guidelines in effect at the time of test for determining virucidal efficacy of disinfectants intended for use on dry nonporous inanimate surfaces.

Organic Soil Load: Hepatitis B Virus (HBV) 100% duck serum
                   Hepatitis C Virus (HCV) 5% horse serum

Exposure Time: 2 minutes at room temperature (68°–77°F)

Results: Virucidal against Hepatitis B and Hepatitis C virus according to the criteria established by the U.S. Environmental Protection Agency.

ORGANISM: Respiratory Syncytial Virus (RSV)

Test Method Used: This test was conducted according to U.S. Environmental Protection Agency guidelines in effect at the time of test for determining virucidal efficacy of disinfectants intended for use on dry nonporous inanimate surfaces.

Organic Soil Load: 5% fetal bovine serum

Exposure Time: 1 minute at room temperature (68°–77°F)

Results: Virucidal against Respiratory Syncytial Virus (RSV) according to the criteria established by the U.S. Environmental Protection Agency.

ORGANISM: Influenza A (H1N1) Virus (ATCC VR-98) (Strain A/Malaya/302/54)

Test Method Used: This test was conducted according to U.S. Environmental Protection Agency guidelines in effect at the time of test for determining virucidal efficacy of disinfectants intended for use on dry nonporous inanimate surfaces.

Organic Soil Load: 5% fetal bovine serum

Exposure Time: 3 minutes at room temperature (68°–77°F)

Results: Virucidal against Hepatitis B and Hepatitis C virus according to the criteria established by the U.S. Environmental Protection Agency.

ORGANISMS: Influenza A2/Hong Kong
            Herpes Simplex Type 2

Test Method Used: This test was conducted according to U.S. Environmental Protection Agency guidelines in effect at the time of test for determining virucidal efficacy of disinfectants intended for use on dry nonporous inanimate surfaces.

Organic Soil Load: 5% fetal bovine serum

Exposure Time: 1 minute

Results: Virucidal according to the criteria established by the U.S. Environmental Protection Agency.

ORGANISM: HIV-1 (AIDS Virus)

Test Method Used: This test was conducted according to U.S. Environmental Protection Agency guidelines in effect at the time of test for determining virucidal efficacy of disinfectants intended for use on dry nonporous inanimate surfaces.

Organic Soil Load: 5% fetal bovine serum

Exposure Time: 1 minute at room temperature (68°–77°F)

Results: Virucidal against HIV-1 according to the criteria established by the U.S. Environmental Protection Agency.
TOXICITY

ACUTE ORAL TOXICITY STUDY OF SANI-CLOTH® PLUS
Conclusion: A single-dose of Sani-Cloth® Plus 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® Plus is greater than 5g/kg of body weight.

PRIMARY EYE IRRITATION OF SANI-CLOTH® PLUS
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® Plus produced eye irritation clearing in 7 days or less.

ACUTE DERMAL TOXICITY OF SANI-CLOTH® PLUS
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® Plus was found to be greater than 2g/kg of body weight.

PRIMARY DERMAL IRRITATION SANI-CLOTH® PLUS
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 moist towelette for a total of 4 hours. Under the conditions of this test, Sani-Cloth® Plus produced only very slight erythema at 72 hours.

DERMAL SENSITIZATION TEST: SANI-CLOTH® PLUS
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® Plus to produce sensitization after repeated topical applications. Based on the results of this test, Sani-Cloth® Plus would not be considered a dermal sensitizing agent.