SUPER SANI-CLOTH®
GERMICIDAL DISPOSABLE WIPE

Technical Data Bulletin
PRODUCT DESCRIPTION

Super Sani-Cloth® is a premoistened non-woven durable wipe containing a quaternary/alcohol based solution. Recommended 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. Some organisms are removed from the surface by thoroughly wiping the surface with the wipe. Most remaining organisms are killed within two (2) minutes by exposure to the liquid in the wipe.

CHEMICAL COMPOSITION

Active Ingredients
n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride...........................................................................................0.25%
n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chloride........................................................................0.25%
Other ingredients ..................................................................................................................................................................................................99.50%

TOTAL .........................................................................................................................................................................................................100.00%

Each cloth is saturated with 5,000 parts per million of active quaternary ammonium chlorides.

EFFICACY

BACTERIAL ORGANISM EFFICACY

<table>
<thead>
<tr>
<th>BACTERIA:</th>
<th>Burkholderia cepacia [ATCC 25416]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Campylobacter jejuni [ATCC 29428]</td>
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<tr>
<td></td>
<td>Escherichia coli [ATCC 11229]</td>
</tr>
<tr>
<td></td>
<td>Escherichia coli O157:H7 [ATCC 35150]</td>
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<tr>
<td></td>
<td>Klebsiella pneumoniae [ATCC 4352]</td>
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<td></td>
<td>Pseudomonas aeruginosa [ATCC 15442]</td>
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<td></td>
<td>Salmonella enterica [ATCC 10708]</td>
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<td></td>
<td>Staphylococcus aureus [ATCC 6538]</td>
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<tr>
<td>Test Method Used:</td>
<td>Modified AOAC Germicidal Spray Method for Hard Surface Disinfection</td>
</tr>
<tr>
<td>Organic Soil Load:</td>
<td>5% Horse Serum</td>
</tr>
<tr>
<td>Exposure Time:</td>
<td>2 minutes at 68-77°F</td>
</tr>
<tr>
<td>Incubation:</td>
<td>48 hours at 95-98.6°F</td>
</tr>
<tr>
<td>Results:</td>
<td>No growth observed</td>
</tr>
</tbody>
</table>

MULTI-DRUG RESISTANT BACTERIA:

<table>
<thead>
<tr>
<th>Acinetobacter baumannii [ATCC 19606]</th>
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</thead>
<tbody>
<tr>
<td>ESBL Producing Escherichia coli (E. coli) [ATCC BAA-196]</td>
</tr>
<tr>
<td>Methicillin Resistant Staphylococcus aureus (MRSA) [ATCC 33592]</td>
</tr>
<tr>
<td>Vancomycin Resistant Enterococcus faecales (VRE) [ATCC 51299]</td>
</tr>
<tr>
<td>Test Method Used:</td>
</tr>
<tr>
<td>Organic Soil Load:</td>
</tr>
<tr>
<td>Exposure Time:</td>
</tr>
<tr>
<td>Incubation:</td>
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<tr>
<td>Results:</td>
</tr>
</tbody>
</table>

MYCOBACTERIUM BOVIS - BCG (TB):

<table>
<thead>
<tr>
<th>Mycobacterium bovis BCG (Tuberculosis) [ATCC 35743]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Method Used:</td>
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<tr>
<td>Organic Soil Load:</td>
</tr>
<tr>
<td>Exposure Time:</td>
</tr>
<tr>
<td>Incubation:</td>
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<tr>
<td>Results:</td>
</tr>
</tbody>
</table>
VIRAL ORGANISM EFFICACY

ENVELOPED VIRUSES:

- Adenovirus type 5 [ATCC VR-5]
- Herpes Simplex type 2 [ATCC VR-734]
- Human Coronavirus [ATCC VR-740]
- Influenza A virus/Hong Kong Strain [ATCC VR-544]*
  * Pandemic 2009 H1N1 Influenza A virus (Kill claim included)
- Influenza A (H1N1) virus [ATCC VR-98] Strain A/Malaya/302/54
- Rhinovirus [ATCC VR-1110]
- Vaccinia virus [ATCC VR-1354]

Test Method Used:
This test was conducted according to 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.

Organic soil load: 5% fetal bovine serum.
Exposure Time: 2 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.

- 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 inanimate surfaces.

Organic soil load: 5% fetal bovine serum.
Exposure Time: 1 minute at room temperature (68º-77ºF)
Results: Virucidal against Respiratory Syncytial virus (RSV) according to the criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a virucide.

NON-ENVELOPED VIRUSES:

- Rotavirus [Strain WA]

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 inanimate surfaces.

Organic soil load: 5% fetal bovine serum.
Exposure Time: 2 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
- Hepatitis C virus (HCV) - Bovine 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 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 (68º-77ºF)
Results: Virucidal against Hepatitis B and Hepatitis C virus 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)

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 14053]

Test Method Used: Modified AOAC Germicidal Spray Method
Organic Soil Load: 5% Horse Serum
Exposure Time: 2 minutes at 72 - 74°F
Incubation: 7 days at 95 - 98.6°F
Results: No growth observed
TOXICITY

ACUTE ORAL TOXICITY STUDY OF SUPER SANI-CLOTH®
Conclusion: A single-dose of Super Sani-Cloth® solution was administered and observed for 14 days. Based on the results of this study, Super Sani-Cloth® has an acute oral toxicity LD50 greater than 5 g/kg of body weight.

PRIMARY EYE IRRITATION OF SUPER SANI-CLOTH®
Conclusion: There were positive eye irritation reactions in all three test subjects at the 24 hour observation. In accordance with the OPPTS/OECD Guidelines, Super Sani-Cloth® would be classified as Toxicity Category 1.

ACUTE DERMAL TOXICITY OF SUPER SANI-CLOTH®
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.

PRIMARY DERMAL IRRITATION OF SUPER SANI-CLOTH®
Conclusion: The subjects were exposed to the moist towelette with an occlusive wrap for a total of 72 hours. Under the conditions of this study, no dermal irritation was evident at 72 hours.