

AATCC TEST METHOD 100 – 2012

*Antibacterial Finishes on Textile Materials:
Assessment of*

FINAL REPORT: R2018-478

Prepared for:
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Accredited Testing Provided by:



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TESTING CERT: #2832.01

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Testing Completed: October 1, 2018

Report Issued: October 11, 2018

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Title: Quality Manager



Objective:

To provide a quantitative evaluation of the antibacterial activity in two samples as demonstrated by AATCC Test Method 100-2012.

Test Sample Identification:

1. KissAway™ Wipes Pail
2. KissAway™ Wipes 24ct package

Test Procedure Summary:

Sample swatches were stacked and placed into sterile containers. The number of swatches to be tested was determined by the number of swatches that could absorb 1.0 ± 0.1 mL of inoculum without leaving any free liquid. One (1.0) mL of the 10^5 CFU/mL inoculum was placed onto the top swatch and allowed to wick through the sample stack. The inoculated swatches were incubated for a specified contact time. At the appropriate contact time, neutralizing broth was added to each container and the containers were shaken for 1 minute to release the inoculum from the test swatches and into the neutralizing broth. Serial dilutions were made, and the plates incubated. After incubation, colonies of recovered bacteria are counted and used to determine percent reductions.

Test Variables

Test Organism:	<i>Escherichia coli</i> O157:H7 ATCC#35150 <i>Listeria monocytogenes</i> ATCC#19115
Dilution Medium Used:	E. coli – Phosphate Buffered Saline with 0.05% Triton X 100 L. monocytogenes - 1:500 Tryptic Soy Broth/Phosphate Buffered Saline with 0.05% Triton X 100
Neutralizing Broth Used:	100mL D/E Neutralizing Broth
Method of Sterilization /Pre-Cleaning:	None
Sample Description:	4.8cm diameter disc cut from larger submitted wet wipes
Sample Preparation:	Samples were prepared prior to test set up to prevent drying. For both samples, the first 3 wipes were removed from the container and discarded. The next three wipes in each container were used to prepare 12 discs (6 swatches for each test organism).
Number of Swatches per Sample:	Six
Untreated Control:	Untreated Fabric Control - ISO 105-F02 Adjacent Cotton
Contact Time:	24 Hours
Deviations from Standard Test Method:	None, testing performed per AATCC 100 without deviation.



Test Results:

The results below pertain only to samples tested. Results are reported as CFU/sample (colony forming units).

Percent reduction against *Escherichia coli O157:H7 ATCC#35150*

Sample	Recovered Bacteria After Contact Time-24 hours	Percent Reduction
KissAway™ Wipes Pail	<1.0 x 10 ²	>99.96
KissAway™ Wipes 24ct package	<1.0 x 10 ²	>99.96

The average number of *Escherichia coli ATCC#35150* recovered from the untreated fabric control immediately after inoculation was 2.7 x 10⁵ CFU/sample.

Percent reduction against *Listeria monocytogenes ATCC#19115*

Sample	Recovered Bacteria After Contact Time-24 hours	Percent Reduction
KissAway™ Wipes Pail	<1.0 x 10 ²	>99.94
KissAway™ Wipes 24ct package	<1.0 x 10 ²	>99.94

The average number of *Listeria monocytogenes ATCC#19115* recovered from the untreated fabric control immediately after inoculation was 1.7 x 10⁵ CFU/sample.

Percent reductions were determined by comparing each test sample after the contact time to untreated fabric control immediately after inoculation.

Percent reduction is translated into log reduction by the following:

90% reduction = 1 log reduction; i.e. 1,000,000 reduced to 100,000 is a 1 log reduction

99% reduction = 2 log reduction; i.e. 1,000,000 reduced to 10,000 is a 2 log reduction

99.9% reduction = 3 log reduction; i.e. 1,000,000 reduced to 1,000 is a 3 log reduction

99.99% reduction = 4 log reduction; i.e. 1,000,000 reduced to 100 is a 4 log reduction

< 1.0 x 10² means there were no test organisms found on the lowest dilution plate. The detection limit on this test is 1.0 x 10² due to the 100x dilution that occurs with the addition of the neutralizing broth. When no bacterial colonies are found on the lowest dilution, the results are reported as < 1.0 x 10² CFU/Sample, which means less than 100 Colony Forming Units.