

Testing Disinfectant Agents for Antimicrobial Action on Hard Surfaces Preliminary Data

Test Article: 1) Citrus Oil Eco-Cleaner (1) Bottle
2) Six in One (1) Bottle
Laboratory Number: 620702
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Preliminary Results:

Efficacy of Sponsor's In-House Disinfectants:

Coupon Surface: Tiles

Application Method: Spray and Wipe

Organism: *Staphylococcus aureus*, ATCC #6538

Average Control Titer (CFU/Test Article): 5.3×10^7

Disinfectant Identification	Time Interval	Average Recovery (CFU/Test Article)	Percent Reduction(%)	Log ₁₀ Reduction
1	15 Minute	9.5×10^4	99.82	2.75
2	15 Minute	6.1×10^5	98.9	1.94

Coupon Surface: Tiles

Application Method: Spray and Wipe

Organism: *Escherichia coli*, ATCC #11229

Average Control Titer (CFU/Test Article): 5.1×10^6

Disinfectant Identification	Time Interval	Average Recovery (CFU/Test Article)	Percent Reduction(%)	Log ₁₀ Reduction
1	15 Minute	$<2.0 \times 10^2$	>99.9961	>4.40
2	15 Minute	$<2.0 \times 10^2$	>99.9961	>4.40

Coupon Surface: Tiles

Application Method: Spray and Wipe

Organism: *Aspergillus brasiliensis*, ATCC #16404

Average Control Titer (CFU/Test Article): 1.3×10^6

Disinfectant Identification	Time Interval	Average Recovery (CFU/Test Article)	Percent Reduction(%)	Log ₁₀ Reduction
1	15 Minute	7.5×10^4	94.0	1.22
2	15 Minute	1.0×10^5	91.9	1.09

This document contains preliminary data. Although not anticipated, some changes may be reflected in the results of the detailed final report that will follow. Please contact the Client Service Department if you have any questions.

Neutralization:

Disinfectant Identification	Organism	Percent Neutralization Recovery (%)
1	<i>S. aureus</i>	104
	<i>E. coli</i>	112
	<i>A. brasiliensis</i>	125
2	<i>S. aureus</i>	87
	<i>E. coli</i>	94
	<i>A. brasiliensis</i>	100

Please let me know if you have any questions. I can be reached at (801) 290-7861 or npatterson@nelsonlabs.com. Thank you for testing with Nelson Laboratories, Inc.