

KLEEN™ ANTIMICROBIAL SAFETY CUTTERS

ISO 22196:2011 Certified



Test Method: Determination of Antibacterial Activity using Test Based on MOD ISO 22196:2011

CERTIFICATE NUMBER: BL075/2020

REPORT DATE: AUGUST 6, 2020

Sample	Test Bacteria ^	Contact Time*		Reduction against Initial	
		0 Hrs	24 Hrs	Log ₁₀	%
Advanced Antimicrobial KLEEN™ Plastic	MRSA	1.75 x10 ⁴	≤100	≥2.24	≥99.43%
	E. coli	1.15 x10 ⁴	≤100	≥2.06	≥99.13%
CONTROL	MRSA	1.75 x10 ⁴	1.95 x10 ³	0.95	88.89%
	E. coli	1.15 x10 ⁴	3.20 x10 ⁴	GROWTH	GROWTH

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Sample	Test Bacteria ^	Contact Time*		Reduction against Initial	
		0 Hrs	24 Hrs	Log ₁₀	%
Advanced Antimicrobial KLEEN™ Plastic (with/without ergonomic "Soft-Touch" handle)	MRSA	1.63 x10 ⁴	≤100	≥2.21	≥99.39%
	E. coli	1.56 x10 ⁴	≤100	≥2.19	≥99.36%
CONTROL	MRSA	1.17 x10 ⁴	5.47 x10 ³	0.33	53.09%
	E. coli	1.56 x10 ⁴	6.32 x10 ⁵	GROWTH	GROWTH

ISO 22196:2011 specifies a method of evaluating the antibacterial activity of antibacterial-treated plastics, and other non-porous, surfaces of products (including intermediate products).

* Numbers represent Colony Forming Units at representative contact times. Data show the changes in size of the initial MRSA (ATCC® 43300™) and E. coli (ATCC®8739™) populations due to their contact with the treated surface of the samples. The samples detailed in this CoA were tested for 24 hours (±1) at 35°C (±2) under a relative humidity of >90% as specified in the ISO 22196 method. The results detailed in this CoA relate only to the items tested.

^ These two particular bacteria, (MRSA and Ecoli) one being gram-positive and the other one gram-negative, are the two toughest bacteria to kill. They are used as analogues in the ISO 22196 testing because if an antimicrobial kills these bacteria, they will kill all others. In short, there is no need to test dozens of different bacteria, only these two. This is the accepted industry standard for antimicrobial activity because of this.

FOR INQUIRIES

Klever Innovations, Michigan USA
Pacific Handy Cutter, California USA
Safety Products Holdings, Inc

www.kleverinnovations.net
www.phcsafety.com
www.safetyproductsholdings.com