

Test Method for Antibacterial Finishes on Textile Materials: Assessment of (AATCC TM100-2019)

Test specimen: As received

Enro - Tech 3D mask outer fabric (after 50 machine washes and tumble dry)

Test bacteria: *Staphylococcus aureus* (ATCC 6538)

Tested Specimen	Bacterial count (number of bacteria per sample) over contact period		Result: Percent reduction of bacteria	Specified requirement	Comment
	0 hour	24 hours			
As received	2.81×10^5	7.49×10^4	99.93%	/	/
Untreated control / Viability control	2.91×10^5	1.01×10^8	/	≥ 1 log increase	Valid

Test bacteria: *Klebsiella pneumoniae* (ATCC 4352)

Tested Specimen	Bacterial count (number of bacteria per sample) over contact period		Result: Percent reduction of bacteria	Specified requirement	Comment
	0 hour	24 hours			
As received	2.20×10^5	7.85×10^3	>99.99%	/	/
Untreated control / Viability control	2.13×10^5	2.07×10^8	/	≥ 1 log increase	Valid

Note: The untreated control sample is standard antimicrobial test viability control fabric from International Antimicrobial Council.

Remarks:

- 1 The number of circular swatches (4.8 +/- 0.1 cm in diameter) used per jar: 4
- 2 Sterilization of samples by autoclave: No
- 3 Culture medium used for bacterial culture preparation: Nutrient broth
- 4 Diluent used for inoculum dilution: 1:20 Nutrient broth with 0.05% Triton X-100
- 5 Neutralizing solution: Dey Engley Neutralizing broth
- 6 Percent (%) reduction of bacteria = $100(B - A)/B$, where:
 A = the number of bacteria recovered from the inoculated treated test specimen swatches in the jar incubated over the 24-h contact period
 B = the number of bacteria recovered from the inoculated untreated test specimen swatches in the jar incubated over the 24-h contact period

End of Report