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Antimicrobial Efficacy Test Report

1. Basic Application Information

Test Requester:	Sarbak Metal Tic. ve San. A.Ş.
Purpose of the Test:	To prove the antimicrobial property of ASTM – C69300 / ASTM - C87850, with tests carried out in EPA standards.
Test Date:	12.01.2021
Test Maker:	Akdeniz Univercity, Faculty of Science, Department of Chemistry
Sample Definition:	Copper Alloy (Plate)
Incubation Enviroment Conditions:	37±2 °C (Temperature)
Standart Used:	EPA "Test Method for Efficacy of Copper Alloy Surfaces as a Sanitizer"
Used Bacteria:	*Escherichia coli* (Gram-negative), *Staphylococcus aureus* (Gram-positive)
Report Register No:	AB-20012021
Number of report pages:	1

2. Results

Laboratory testing has shown that ASTM – C69300 / ASTM - C87850 continuously reduces bacterial* contamination, achieving 99.9% reduction within two hours of exposure. This product kills greater than 99.9% of Gram-negative and Gram-positive bacteria within two hours of exposure. Wearing or scratching of copper surfaces will not impair the antimicrobial effectiveness of the product. ASTM – C69300 / ASTM - C87850 can be used for antimicrobial purposes in hospitals, other healthcare facilities, various public places and residences.

* Testing demonstrates effective antimicrobial activity against *Staphylococcus aureus, Escherichia coli.*

Sample	Test Definition					
	Escherichia coli			*Staphylococcus aureus*		
	CFU/ml	Log_{10} Reduction	% Reduction	CFU/ml	Log_{10} Reduction	% Reduction
Applied CFU	2.66×10^6	–	–	2.38×10^6	–	–
Test sample after 2 hours	2.67×10^3	2.99	99,90	2.40×10^3	3.00	99.90
Test sample after 24 hours	2.68×10^2	3.99	99.99	2.42×10^2	4.00	99.99

CFU:colony forming unit

In this report, the term "antimicrobial" is used according to the definition of the relevant EPA standard.

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