



TEST REPORT



Test
TS EN ISO/IEC 17025
AB-0505-T

AB-0505-T
72243530294
12-24

LAB LOCATION: TURKEY
LAB NO.: (7224)353-0294
SERVICE TYPE: Regular
DATE IN: December 18, 2024
DATE OUT: December 30, 2024

MATERIAL SUBMITTED : MICROPUL BOYA KİMYA SAN. TİC. LTD. ŞTİ.
(Address: Balçık Mah. Mustafa Kemal Cad. 3273 Sok. No:8
Gebze/Kocaeli)
(Attn: Nesrin Gülmez)

SUPPLIER REFERENCE : /
BUYER : /
MANUFACTURER : /
COUNTRY OF ORIGIN : /
COUNTRY OF DESTINATION : /
SAMPLE DESCRIPTION : Aluminium Plate / PE Shiny White
COLOR : Shiny-White
GENERAL CONCLUSION : **PASS**



Date Out
(30/12/2024)

Ezgi Aleyna Vardar
Hardline Client Group
Leader

Recep YARLIĞAN
Hardlines Manager
(30/12/2024)

C/N GK/EAV

BV CPS Test Laboratuvarları Ltd. Sti. accredited by TÜRKAK under registration number AB-0505-T for TS EN ISO/IEC 17025:2017 as test laboratory.

Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the recognition of test reports.

BV CPS TEST LABORATUVARLARI LTD. STI.
BUREAU VERITAS CONSUMER PRODUCTS SERVICES
Yalcin Kores Caddesi No:22 Erdinc Binalari A Blok
2. Kule 1. Kat 34209 Gunesli, Istanbul / Turkey
Tel:+90.212.494 35 35 Fax:+90.212.494 35 60
email:info.turkey@bvcp.com.tr
website: www.bureauveritas.com/cps

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SUMMARY OF TEST RESULTS

TEST REQUIRED	Sample
Measurement of Antibacterial Activity on Plastics and Other Non-Porous Surfaces*	P
*TURKAK ACCREDITED TESTS	

REMARKS	
1	: P: Pass, F: Fail, DATA: No Evaluation
2	: The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%. Unless otherwise is specified, the uncertainty of measurement has not been taken into account when assessing pass/fail of the sample against the requirements of the standard. In case consideration of measurement uncertainties when assessing pass/ fail limits, some results may be in borderline.
3	: The test result, the uncertainties (if applicable) with confidence probability are given on the following pages which are part of this report.
4	: Test reports without authorised signatures are invalid.
5	: Conclusions are based on the test result from the actual sampling of the received sample(s).

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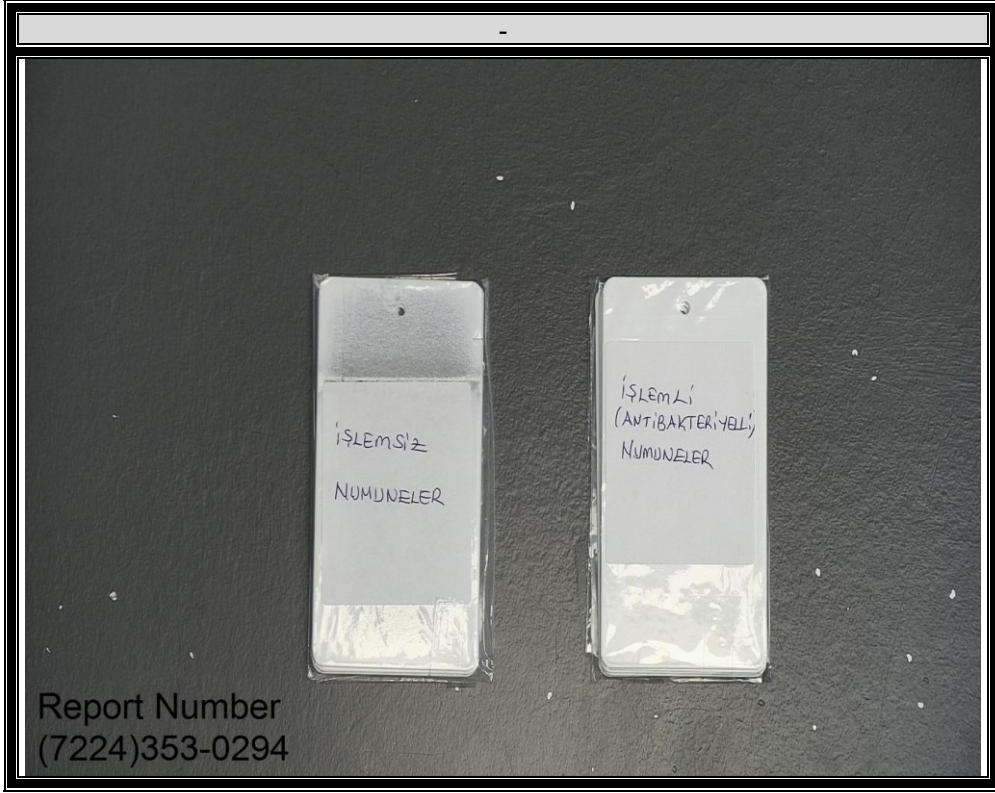
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-Photo of the Submitted Sample-



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Prepared by: Nihal Evrensel
Controlled by: Mükerrerem Keleş
Approved by: Dogukan Keskin



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Component List / List of Materials for Chemical Tests

Sample	Item No	Component	Material	Colour
A	I001	White Metal Plate Processed Sample	Metal	White

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TEST RESULTS

Measurement of Antibacterial Activity on Plastics and Other Non-Porous Surfaces*			
Test Method:	ISO 22196:2011		
Tested Bacteria:	<i>Staphylococcus aureus</i>		
Strain Number:	ATCC 6538		
Volume of Inoculum:	0.4 mL		
Concentration of Inoculum:	1.32x10 ⁵ cfu/mL		
Properties	Cover Film	Untreated Test Specimen	Treated Test Specimen
Material Type:	Plastic	Metal	Square (metal)
Size:	4x4 cm	5x5 cm	5x5 cm
Shape:	Square	Square	Square
Thickness:	0.23 mm	0.9 mm	0.9 mm
Parameter		Results	
Untreated Test Piece at Time Zero (U_0):		3.88	
Untreated Test Piece after 24 hours (U_t):		4.71	
Treated Test Piece after 24 hours (A_t):		2.49	
Antibacterial Activity Value (R):		2.22	
Requirement:		>2	
Conclusion:		PASS	
Remark(s):	1.	Formula used for calculation of R: $R = (U_t - U_0) - (A_t - U_0) = U_t - A_t$	
	2.	U_0 , U_t and A_t have been reported as average viable bacteria, expressed in logarithm number.	
	3.	cfu/mL = colony-forming unit(s) per milliliter	
	4.	ATCC: American Type Culture Collection No.	

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TEST RESULTS

Measurement of Antibacterial Activity on Plastics and Other Non-Porous Surfaces*			
Test Method:	ISO 22196:2011		
Tested Bacteria:	<i>Escherichia coli</i>		
Strain Number:	ATCC 8739		
Volume of Inoculum:	0.4 mL		
Concentration of Inoculum:	1.80x10 ⁵ cfu/mL		
Properties	Cover Film	Untreated Test Specimen	Treated Test Specimen
Material Type:	Plastic	Metal	Square (metal)
Size:	4x4 cm	5x5 cm	5x5 cm
Shape:	Square	Square	Square
Thickness:	0.23 mm	0.9 mm	0.9 mm
Parameter		Results	
Untreated Test Piece at Time Zero (U_0):		3.82	
Untreated Test Piece after 24 hours (U_t):		4.67	
Treated Test Piece after 24 hours (A_t):		2.54	
Antibacterial Activity Value (R):		2.13	
Requirement:		>2	
Conclusion:		PASS	
Remark(s):	1.	Formula used for calculation of R: $R = (U_t - U_0) - (A_t - U_0) = U_t - A_t$	
	2.	U_0 , U_t and A_t have been reported as average viable bacteria, expressed in logarithm number.	
	3.	cfu/mL = colony-forming unit(s) per milliliter	
	4.	ATCC: American Type Culture Collection No.	

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APPENDIX

Test Name	Standard Name	Measurement Uncertainty
Measurement of Antibacterial Activity on Plastics and Other Non-Porous Surfaces	ISO 22196	<i>S. aureus</i> : ± % 16 <i>E.coli</i> : ± % 22

- END OF REPORT -