



**EKOTEKS**

**EKOTEKS LABORATUVAR ve GÖZETİM  
HİZMETLERİ A.Ş.**  
Esenyurt Firuzköy Bulvarı No:29 34325 Avcılar  
İstanbul/ TÜRKİYE



**TEST REPORT**  
*DENEY RAPORU*

AB-0583-T
23007700- ing
05-23

**Customer name:** HASSAN TEKSTİL SANAYİ VE TİCARET AŞ.

**Address:** AKÇABURGAZ MAH.HADIMKÖY YOLU NO:88  
ESEN YURT/İSTANBUL

**Buyer name:** HASSAN TEKSTİL SANAYİ VE TİCARET AŞ.

**Contact Person:** -

**Order No:** 2023-02

**Article No:** -

**Name and identity of test item:** One sample of grey panel.(claimed to be;1000 gsm/Grey)

**The date of receipt of test item:** 28.03.2023

**Re-submitted/re-confirmation date:** -

**Date of test:** 28.03.2023-25.05.2023

**Remarks:** -

**Sampling:** The results given in this report belong to the received sample by vendor.

**End-Use:** -

**Care Label:** -

**Number of pages of the report:** 6

*The Turkish Accreditation Agency (TURKAK) is signatory to the multilateral agreements of the European co-operation for the Accreditation (EA) and of the International Laboratory Accreditation (ILAC) for the Mutual recognition of test reports.*

*EKOTEKS LABORATUVAR ve GÖZETİM HİZMETLERİ A.Ş. accredited by TÜRKAK under registration number [AB-0583-T] for ISO 17025:2017 as test laboratory.*

*The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.*

**Seal**

**Date**  
25.05.2023

**Customer Representative**  
Zahide TAPAN

**Head of Testing Laboratory**  
Sevim A. RAZAK  
25.05.2023

This report shall not be reproduced other than in full except with the permission of the laboratory.  
Testing reports without signature and seal are not valid.

**EKOTEKS LABORATUVAR ve GÖZETİM  
HİZMETLERİ A.Ş.**

AB-0583-T
23007700- ing
05-23

REQUIRED TESTS	EVALUATION	COMMENTS
<b>MICROBIOLOGICAL TESTS</b>		
Determination of Antibacterial Activity of Textile Products	P	
No requirement was given		

**REMARK:** Original samples are kept for 3 months and all technical records are kept for 5 years unless otherwise specified. If requested, measurement uncertainty will be reported. But unless otherwise specified, measurement uncertainty is not considered while stating compliance with specification or limit values. The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor  $k=2$ , providing a level of confidence of approximately 95 %. The declaration of conformity was given in accordance with the Simple Acceptance Decision Rule. Tests marked (\*) in this report are not included in the accreditation schedule



This report shall not be reproduced other than in full except with the permission of the laboratory.  
*Testing reports without signature and seal are not valid.*

## TEST RESULTS

**Test Method:** ISO 20743:2021 - Determination of Antibacterial Activity of Textile Products

**Sample details**

**EKOTEKS LABORATUVAR ve GÖZETİM  
HİZMETLERİ A.Ş.**

AB-0583-T
23007700- ing
05-23

<b>Type of material tested</b>	FABRİC
<b>Weight of specimens</b>	0.4 g
<b>Sterilization method of specimens</b>	Autoclave (121°C, 15 min)
<b>Washing method and number</b>	-

<b>Control specimens</b>	100 % cotton fabric without fluorescent brighteners or other finish
--------------------------	---

**Methods and test conditions**

<b>Inoculation method</b>	Absorption method
<b>Measuring method</b>	Plate count method
<b>Test temperature (°C)</b>	37 ± 2
<b>Contact time</b>	24 h
<b>The date the test was done</b>	16.05.2023

**Microorganism**

<b>Species and strain number</b>	<i>Staphylococcus aureus</i> ATCC 6538 (Gram (+))
<b>Concentration of test inoculum</b>	2.33 x 10 <sup>5</sup> CFU/mL
<b>Inoculation volume</b>	0.2 mL

**Results of viable counts**

Number of viable bacteria recovered from the <b>control</b> specimens (n=3) <b>after contact time</b> CFU/specimen ( <i>C<sub>t</sub></i> ) log CFU/specimen ( <b>lg C<sub>t</sub></b> )	1,38 x 10 <sup>8</sup> 8,14
Number of viable bacteria recovered from the <b>control</b> specimens (n=3) <b>immediately after inoculation</b> CFU/specimen ( <i>C<sub>0</sub></i> ) log CFU/specimen ( <b>lg C<sub>0</sub></b> )	4,17 x 10 <sup>4</sup> 4.62
Number of viable bacteria recovered from the <b>test</b> specimens (n=3) <b>after contact time</b> CFU/specimen ( <i>T<sub>t</sub></i> ) log CFU/specimen ( <b>lg T<sub>t</sub></b> )	3,19 x 10 <sup>4</sup> 4,50
Number of viable bacteria recovered from the <b>test</b> specimens (n=3) <b>immediately after inoculation</b> CFU/specimen ( <i>T<sub>0</sub></i> ) log CFU/specimen ( <b>lg T<sub>0</sub></b> )	3,14x 10 <sup>4</sup> 4,50

**Growth values**

Growth value on the control specimens ( <b>F</b> )	<b>3,52</b>
Growth value on the test specimens ( <b>G</b> )	<b>0,01</b>

**Antibacterial activity (A)**

<b>A = F – G</b>	<b>3,51</b>	± measurement of uncertainty (95% CI)	1,76
The sample tested can be considered to have <b>significant</b> antibacterial efficacy according to the criteria given in the ISO 20743 (2 ≤ A < 3)			

**EKOTEKS LABORATUVAR ve GÖZETİM  
HİZMETLERİ A.Ş.**

AB-0583-T
23007700- ing
05-23

The sample tested can be considered to have **strong** antibacterial efficacy according to the criteria given in the ISO 20743 ( $A \geq 3$ )

The sample tested has **no significant** antibacterial efficacy according to the criteria given in the ISO 20743 ( $A < 2$ )

## **TEST RESULTS**

**Test Method:** ISO 20743:2021 - Determination of Antibacterial Activity of Textile Products

**Sample details**

**EKOTEKS LABORATUVAR ve GÖZETİM  
HİZMETLERİ A.Ş.**

AB-0583-T

23007700-  
ing

05-23

<b>Type of material tested</b>	FABRİC
<b>Weight of specimens</b>	0.4 g
<b>Sterilization method of specimens</b>	Autoclave (121°C, 15 min)
<b>Washing method and number</b>	-

<b>Control specimens</b>	100 % cotton fabric without fluorescent brighteners or other finish
--------------------------	---

### Methods and test conditions

<b>Inoculation method</b>	Absorption method
<b>Measuring method</b>	Plate count method
<b>Test temperature (°C)</b>	37 ± 2
<b>Contact time</b>	24 h
<b>The date the test was done</b>	16.05.2023

### Microorganism

<b>Species and strain number</b>	<i>Esherichia coli ATCC8739 (Gram (-))</i>
<b>Concentration of test inoculum</b>	2.57 x 10 <sup>5</sup> CFU/mL
<b>Inoculation volume</b>	0.2 mL

### Results of viable counts

Number of viable bacteria recovered from the <b>control</b> specimens (n=3) <b>after contact time</b> CFU/specimen ( $C_t$ ) log CFU/specimen ( <b>lg <math>C_t</math></b> )	5,12 x 10 <sup>8</sup> 8,71
Number of viable bacteria recovered from the <b>control</b> specimens (n=3) <b>immediately after inoculation</b> CFU/specimen ( $C_0$ ) log CFU/specimen ( <b>lg <math>C_0</math></b> )	4,63 x 10 <sup>4</sup> 4,67
Number of viable bacteria recovered from the <b>test</b> specimens (n=3) <b>after contact time</b> CFU/specimen ( $T_t$ ) log CFU/specimen ( <b>lg <math>T_t</math></b> )	1,03 x 10 <sup>7</sup> 7,01
Number of viable bacteria recovered from the <b>test</b> specimens (n=3) <b>immediately after inoculation</b> CFU/specimen ( $T_0$ ) log CFU/specimen ( <b>lg <math>T_0</math></b> )	3,93x 10 <sup>4</sup> 4,59

### Growth values

Growth value on the control specimens ( <b>F</b> )	<b>4,04</b>
Growth value on the test specimens ( <b>G</b> )	<b>2,42</b>

### Antibacterial activity (A)

<b>A = F - G</b>	<b>1,62</b>	± measurement of uncertainty (95% CI)	-
The sample tested can be considered to have <b>significant</b> antibacterial efficacy according to the criteria given in the ISO 20743 (2 ≤ A < 3)			

**EKOTEKS LABORATUVAR ve GÖZETİM  
HİZMETLERİ A.Ş.**

AB-0583-T
23007700- ing
05-23

The sample tested can be considered to have **strong** antibacterial efficacy according to the criteria given in the ISO 20743 ( $A \geq 3$ )

The sample tested has **no significant** antibacterial efficacy according to the criteria given in the ISO 20743 ( $A < 2$ )