

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 GÖZETIM HİZMETLERİ A.Ş.

| AB-0583-T |
| :---: |
| 18027890 |
| $07-18$ |


| REQUIRED TESTS | RESULT | COMMENTS |  |
| :--- | :---: | :---: | :---: |
| MICROBIOLOGICAL TESTS | - |  |  |
| Determination of Antibacterial Activity |  |  |  |
|  |  |  |  |
| No requirement was given by vendor. |  |  |  |

REMARK: Original samples are kept for 3 months and all technical records are kept for 5 years unless otherwise specified. The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a level of confidence of approximately $95 \%$. 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.

## EKOTEKS LABORATUVAR ve GÖZETIM HIZMETLERİ A.S.

| AB-0583-T |
| :---: |
| 18027890 |
| $07-18$ |

## TEST RESULTS

Test Method: ASTM E2149:2013a

| RESULTS |  |
| :---: | :---: |
| Untreated (Control) Sample | Treated (Test) Sample |
| after specified contact time* | after specified contact time ${ }^{*}$ |
| $1.50 \times 10^{6} \mathrm{cfu} / \mathrm{ml}$ | $<30 \mathrm{cfu} / \mathrm{ml}$ |
| 6.18 log | - |

*The amount of growing bacteria on fabric cfu: colony forming units

| Antimicrobial Activity | RESULT | Evaluation |
| :--- | :---: | :---: |
| Reduction, \% | $\% 99.99$ | Effective |


| Mikroorganism | Staphylococcus aureus (ATCC 6538 (Gram(+)) |
| :--- | :--- |
| Bacterial concentration (cfu/ ml ) | $2.83 \times 10^{\circ}$ |
| Inoculum volume | 50 ml |
| Size of sample | 1 g |
| Number of washing | - |
| Washing method | - |
| Incubation time, temperature | 24 hours, $35^{\circ} \mathrm{C} \pm 2^{\circ} \mathrm{C}$ |
| Contact time | 24 hours |

$\mathrm{R} \%=$ Reduction is calculated by the following formula;
$\% \mathrm{R}=((\mathrm{C}-\mathrm{A}) / \mathrm{C}) \times 100$
$A=C F U$ per millilitre for the flask containing the treated substrate after the specified contact time.
$B=$ CFU per millilitre for the 'inoculum only' flask after the specified contact time.
$C=$ CFU per millilitre for the flask containing the untreated substrate after the specified contact time

## EKOTEKS LABORATUVAR ve GÖZETIM HIZMETLERİ A.S.

| AB-0583-T |
| :---: |
| 18027890 |
| $07-18$ |

## TEST RESULTS

Test Method: ASTM E2149:2013a

| RESULTS |  |
| :---: | :---: |
| Untreated (Control) Sample | Treated (Test) Sample |
| after specified contact time* | after specified contact time* |
| $5.20 \times 10^{6} \mathrm{cfu} / \mathrm{ml}$ | $<30 \mathrm{cfu} / \mathrm{ml}$ |
| 6.72 log | - |

*The amount of growing bacteria on fabric cfu: colony forming units

| Antimicrobial Activity | RESULT | Evaluation |
| :--- | :---: | :---: |
| Reduction, \% | $\% 99.99$ | Effective |


| Mikroorganism | Esherichia coli (ATCC 25922 (Gram(-)) |
| :--- | :--- |
| Bacterial concentration (cfu/ ml ) | $2.43 \times 10^{\circ}$ |
| Inoculum volume | 50 ml |
| Size of sample | 1 g |
| Number of washing | - |
| Washing method | - |
| Incubation time, temperature | 24 hours, $35^{\circ} \mathrm{C} \pm 2^{\circ} \mathrm{C}$ |
| Contact time | 24 hours |

$\mathrm{R} \%=$ Reduction is calculated by the following formula;
$\% \mathrm{R}=((\mathrm{C}-\mathrm{A}) / \mathrm{C}) \times 100$
$A=C F U$ per millilitre for the flask containing the treated substrate after the specified contact time.
$B=$ CFU per millilitre for the 'inoculum only' flask after the specified contact time.
$C=$ CFU per millilitre for the flask containing the untreated substrate after the specified contact time

