



TEST REPORT
Antibacterial Activity Assessment On Textile Materials:
AATCC 100-2012

Customer	Goldshield Technologies Limited
Contact Name	Andrew Payne
Address	Unit C, Lincoln Lodge Farm, Castlethorpe, MK19 7HJ
Email	Andrew.payne@goldshieldtech.co.uk
PO Number	110416MSL

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Period of Analysis	03/05/2016 – 06/06/2016

Name of product	GS5 Concentrated Laundry Disinfectant/Protector
Batch number	GS5110416
Manufacturer / Supplier	Goldshield Technologies Limited
Storage Conditions	Ambient
Appearance of the Product	Clear liquid
Concentration	5% of supplied product
Method	AATCC 100-2012
Temperature of Incubation	Bacteria - 37°C ±1°C for 24hr to 48hrs
Identification of the Bacterial strains:	<i>Staphylococcus aureus</i> ATCC 6538



Introduction

This test method provides a quantitative procedure for the evaluation of the degree of antibacterial activity. Assessment of antibacterial activity finishes on textile material is determined by the degree of antibacterial activity intended in the use of such materials. If only bacteriostatic activity (inhibition of multiplication) is intended, a qualitative procedure which clearly demonstrates antibacterial activity as contrasted with lack of such activity by an untreated specimen may be acceptable. However, if bactericidal activity is intended or implied, quantitative evaluation is necessary. Quantitative evaluation also provides a clearer picture for possible uses of such treated textile materials.

Outline of Test Method

This method provides a quantitative procedure for the comparison and evaluation of the degree of antibacterial effectiveness after a 24 hour exposure to the test strains on the test fabric. After incubation, the bacterial challenge is eluted from the swatches and enumerated and a percent reduction by the fabric is calculated.

Deviations from Standard Method

The product under test was a liquid disinfectant, an inert fabric was used as a carrier and was repeatedly washed in the sample product. The control was the same fabric but unwashed in the test sample. We required the use of two identical 48mm circular swatches of fabric to fully absorb the inoculum strains.

Acceptance Criteria

The criterion for passing this test must be determined by the interested parties.

Conclusion

The product **GS5 CONCENTRATED LAUNDRY DISINFECTANT/PROTECTOR GS5110416 at 5%** has shown **antibacterial efficacy (>4log)** against the organism *Staphylococcus aureus*.

See raw data tables below for test results.

The sample will be retained for 1 month unless otherwise requested.

Microbiology Technician
Y Newall

Technical Project Manager
Carolyn Burney

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**Test Results:*****Staphylococcus aureus******Inoculum log – 6.81***

Sample	0 hr Contact Time (Log)	24 Hrs Contact Time (Log)	Log Reduction at 0 Hrs	Log Reduction after 24 Hrs
<i>Inoculated Control Unwashed Fabric</i>	4.77	5.81	2.04	1.00
<i>Uninoculated Fabric Washed in 5% Goldshield GS5</i>	0.00	0.00	0.00	0.00
<i>Inoculated Fabric Washed in 5% Goldshield GS5</i>	1.20	0.00	5.61	>5.00

Difference in test product compared to unwashed control sample = >4 log