



Shirley
Technologies
Limited

Confidential Report

Our Ref: 33128-2



Shirley Technologies Limited. Registered Office :
Wira House, West Park Ring Road, Leeds, LS16 6QL.
A company registered in England & Wales with company number 04669651.
VAT Number GB 816764800.
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Our laboratories are accredited to EN ISO/IEC 17025



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Our Ref: 33128-2
Your Ref: OB-I-007AA/XI/12
Client: Coulisse B.V.
Address: Coulisse B.V.
Vonderweg 48
7468 DC Enter
The Netherlands
Job Title: Antifungal testing
Client's Order Ref: -
Date of Receipt: 4th January 2012
Description of Sample(s): Cream sample labelled Coulisse Screens
Work Requested: BS ISO EN 846 A and B: 1997



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Client: Coulisse B.V.

INTRODUCTION

One sample of a cream textile labelled Coulisse Screens was sent for testing for antifungal testing to BS EN 846: 1997 Methods A and B.

Method A is suitable for the assessment of the inherent resistance of plastics to fungal attack in the absence of other organic matter.

Method B is used when surface contamination is expected and any inhibition of growth shows fungistatic activity of the material or the presence of a fungicidal treatment.

METHODOLOGY

Methods

Method A (Fungal growth test)

Two batches of test specimens were prepared.

Inoculated test specimens. Test specimens were placed on an incomplete agar medium and inoculated with a mixed spore suspension, suspended in a mineral salt solution, as specified in the standard, comprising the following microfungi:

Aspergillus niger (ATCC 6275), *Penicillium funiculosum* (IMI 114933), *Paecilomyces variotii* (ATCC 18502), *Gliocladium virens* (ATCC 9645) and *Chaetomium globosum* (ATCC 6205).

Sterile test specimens. These were prepared as a control. The specimens were placed on the incomplete agar medium and sprayed with microbicidal solution (ethanol-water mixture) instead of the mixed spore suspension.

The agar plates of both batches were then inoculated with the mixed spore suspension.

The plates were then incubated for 28 days at 29°C ± 1°C.



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Method B (Determination of fungistatic effect)

This method is similar to method A except complete agar medium is used, i.e. the test is undertaken in the presence of a carbon source. Glucose is added to the incomplete agar medium and the mixed spore suspension is made in mineral salt / glucose solution.

RESULTS

After incubation, any growth on the test specimens was assessed according to the following scale.

<u>Intensity of growth</u>	<u>Evaluation</u>
0	No growth apparent under the microscope
1	No growth visible to the naked eye, but clearly visible under the microscope
2	Growth visible to the naked eye, covering up to 25% of the test surface
3	Growth visible to the naked eye, covering up to 50% of the test surface
4	Considerable growth, covering more than 50% of the test surface
5	Heavy growth, covering the entire test surface



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BS EN ISO 846: 1997 Method A

The following growth intensities were observed.

Method A Coulisse Screens Replicate	Growth intensity	
	Inoculated	Sterile
1	0	0
2	0	0
3	0	0
4	0	0

BS EN ISO 846: Method B

The following growth intensities were observed.

Method A Coulisse Screens Replicate	Growth intensity	
	Inoculated	Sterile
1	4	0
2	4	0
3	4	0
4	5	0



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COMMENTS

According to our testing, all replicates of the cream textile sample Coulisse Screens, to BS EN ISO 846: 1997: Method A, exhibited no fungal growth, therefore exhibited antifungal or inert properties, against this particular test.

According to our testing to BS EN ISO 846: 1997, Method B all replicates exhibited considerable to heavy fungal growth, showing that the material is a potential nutritive medium for the microorganisms, with a nutrient source present.

Reported by:  Christopher Kitch
Technical Officer

Countersigned by:  Nibela Asghar
Operational Head

Enquiries concerning this report should be addressed to Customer Services.



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