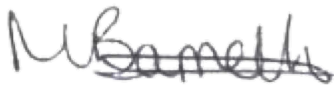


ISO 18184:2019 Textiles- Determination of antiviral activity of textile products

Microbiological Solutions Limited (MSL)
Gollinrod, Walmersley, Bury, BL9 5NB, UK

Angela Davies, CEO

Customer: Hunter Douglas Europe B.V.
Contact name: Andre Weiss
Email: andreweiss@mac.com
Address: Piekstraat 2 Rotterdam 3071EL The Netherlands
PO/Quote number: Q004364
Report Date: 06/05/2021
Issue Number: 1



Megan Barrett
Laboratory Manager



Peter Thistlethwaite
Technical Projects Manager

Test information		Deviation
Name of Product	Greenscreen Sea-TEX	/
Batch Number & Expiry Date	N/S	
Date of Delivery	19/02/2021	
Period of Analysis	06/04/2021	
Manufacturer / Supplier	Hunter Douglas Europe B.V.	
Storage Conditions	Ambient	
Appearance of the Product	Grey Textile	
Neutralisation Method	Dilution	
Test Concentrations	As supplied	
Test Temperature	25°C ± 1°C	
Temperature of Incubation	37°C ± 1°C	
Identification of the Viral Strains:	Influenza H1N1 ATCC VR-1683	
Contact Times	2 hours ± 10s	

Test Result Summary

The test fabric showed an overall 1.13 log(92.5%) reduction when tested against Influenza H1N1 with a 2 hour contact time.

The test results on this report refer only to the items tested as supplied by the customer. This report shall not be reproduced except in full and with written approval of Microbiological Solutions Ltd. All reports are archived for a minimum of 2 years.
 The sample will be retained for 1 month unless otherwise requested in writing.

Scope

This standard outlines the test method for the determination of the antiviral activity of the textile products against specified viruses.

Method

A 20mmx20mm sample of test material is cut (overall mass should be 0.40g and can be made up with extra material if required). 9 control pieces are required and 6 test pieces.

3 pieces of each material are used to test the effect of the fabric on cells without virus (cytotoxicity), 3 control pieces are used to recover the starting titre of virus. The remaining pieces are inoculated with 200µl of virus at a concentration of $\sim 10^7$ TCID₅₀ (giving a final concentration of 10^5) and left for the contact time.

Following the contact time, the fabric is recovered in 20ml of cell culture media and enumerated onto an appropriate cell line. TCID₅₀ is calculated following the appropriate incubation time. Antiviral activity is calculated by comparison of the antiviral test material to the immediate recover from the control fabric.

Test Results

0 hours		
Sample	Log recovery	Average
Control 1	4.96	4.90
Control 2	4.88	
Control 3	4.88	

Controls		
Initial inoculum	7.00	Valid
Cytotoxicity Control	3.75	Valid
Cytotoxicity Test 1	3.71	Valid

Contact time:2 hour				
Sample	Log recovery	Average	Reduction	Percentage
Control 1	4.63	4.49	0.42	61.69%
Control 2	4.63			
Control 3	4.21			
Test 1	4.00	3.78	1.13	92.50%
Test 2	3.67			
Test 3	3.67			

*Control fabric must not show >1 log reduction