



Microbe Investigations AG

LS20-03282

Report date: November 06, 2020

Customer: Red Lab Sarl

Distributor: HeiQ Materials AG

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Microbe Investigations AG (MIS) is a spin-off company of ETH Zürich

MIS provides microbiological testing services primarily for industrial customers assessing the characteristics of developmental products. MIS also provides a depth of expertise in fundamental aspects of microbiology gained throughout many years of world-leading research. Target customers are primarily companies working with antimicrobial treatments on textiles, plastics, and coatings.

More information: www.microbe-investigations.com



Test report overview

General Info	Name	Contact	Key Account Manager
Customer	Red Lab Sarl	-	L. Vermeersch
Distributor	HeiQ Materials AG	L. Vermeersch	-
Brand owner	-	-	-
Brand label	-	Application at	Client
Reason for testing	Quality control	Application by	Not specified
Effects	HeiQ Viroblock	Scale	3 - bulk trial

Test methods carried out in this report		
Effect / Property	Testing standard	Test parameter
Quantitative antibacterial test on textiles	ISO 20743:2013	Bacterium: Staphylococcus aureus (ATCC 6538P)
Quantitative antiviral test on textiles	ISO 18184:2019	Betacoronavirus 1, strain OC43 (ATCC VR-1558)

Test results: Excellent - Perfect application // no adjustment on recipe or application needed

Test summary / comments:

- In the test ISO 20743, the test sample "REDFLAG LEAF Filter" shows excellent antibacterial activity against *staphylococcus aureus*
- In the test ISO 18184, the test sample "REDFLAG LEAF Filter" shows excellent antiviral activity against **Beta Coronavirus 1 (Strain: OC43)**



Samples, finishing process and textile information

Sample	Sample description
1	Polyester, Polyamid

Recipe	Sample number
Substrates	1
Polyester [%]	
Polyamid [%]	
Textile information	1
Weight [g/m2]	-
Construction	VLE
Structure	OTR

Legend:

Construction process	Textile structure
VLE = Nonwoven	OTR = Other

Antibacterial Testing

Recipe	Sample number
ISO 20743: Staphylococcus aureus (ATCC 6538P)	
Sub-Samples	1-1
Log cfu Sample (staph)	2.00
Percent reduction Sample (staph) [%]	100.000
Log reduction Sample (staph)	5.30
Activity Sample (staph)	++

Antiviral Testing

Recipe	Sample number
ISO 18184: Betacoronavirus 1 (ATCC VR-1558)	
Sub-Samples	1-1
Virus strain	Betacoronavirus 1 (ATCC VR-1558)
Ig(Va) (control, immediately) Betacoronavirus 1	4.48
Ig(Vc) (sample, after 2 hours) Betacoronavirus 1	1.40
Antiviral activity Value Mv Betacoronavirus 1	3.10
Percent reduction Betacoronavirus 1 [%]	99.917
Activity Betacoronavirus 1	++

Test costs information (Pro-Forma invoice)

Item	Price per item	No item	Costs
LIMS license + reporting	250	1	250
ISO 20743: Staphylococcus aureus (ATCC 6538P)	150	1	150

Total value of this report: USD 400.-