

Microbe Investigations AG

LS20-00927

Report date: June 12, 2020

Customer: Cai Textile
Distributor: HeiQ Shanghai Ltd.
Brand: Athletic Endeavour

Index

- Test overview and summary
- Application data
- Antimicrobial Testing management data
- Test costs information (Pro-Forma invoice)
- Annexes to the test report



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	HeiQ KAM
Customer	Cai Textile	D. Tchai	P. Middleton
Distributor	HeiQ Shanghai Ltd.	C. Huang	L. Vermeersch
Brand owner	Athletic Endeavour	-	P. Middleton
Brand label	-	Application at	Client
Reason for testing	-	Application by	Not specified
HeiQ Effects	HeiQ Viroblock	Scale	Laboratory

Test methods carried out in this report		
Effect / Property	Testing standard	Test parameter
Domestic laundering	ISO 6330:2013	4G: 40°C, gentle setting (wool silk synthetics)
Qualitative antibacterial activity test (hydrophilic fabrics)	HeiQ PM 6.7 WI1	Qualitative (pass/fail) test for antimicrobial activity
Quantitative antibacterial test (hydrophilic fabrics)	ISO 20743:2013	Bacterium: Staphylococcus aureus (ATCC 6538P)

Test results: Good - Correct application // always obey application/recipe parameters

Test summary / comments:

- Fabric S206483 (white) treated with HeiQ Viroblock NPJ03 shows initially very good antimicrobial activity with good activity after 15 x 40 °C washes.
- Fabric also passes HeiQ Viroblock coloration test

Samples, finishing process and textile information

Sample	Sample description
1	S206483, white; NPJ03 5%

Recipe	Sample number
Product	1
Viroblock NPJ03 (17200) [%]	5
Substrates	1
Polyester [%]	100
Textile information	1
Weight [g/m2]	-
Construction	CKN
Structure	-

Legend:

Construction process	Textile structure
CKN = Circular Knit	

Antimicrobial Testing

Recipe	Sample number	
Product	1	
Viroblock NPJ03 (17200) [%]	5	
ISO 6330 parameters	1-1	1-2
Wash cycles 4G	0	15
Drying conditions	A	

HeiQ Yogurt Bacteria Test

Sub-Samples	1-1	1-2
Odor	-	-
pH	-	-

ISO 20743: Staphylococcus aureus (ATCC 6538P)

Control	Initial	After 18 h
Log cfu	4.6	7.2
Sub-Samples	1-1	1-2
Log cfu Sample (staph)	2.0	5.1
Percent reduction Sample (staph) [%]	99.9994	99.2985
Log reduction Sample (staph)	5.2	2.2
Activity Sample (staph)	++	+

Coloration Test: HeiQ Viroblock NPJ03 Identifier

Sample No	Description	NPJ03 detected	Pass/Fail
1-1	S206483, white; NPJ03 5%, initial	yes	pass

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	2	300
HeiQ "Yogurt" antibacterial test	50	2	100
ISO 6330 4G (delicate)	8	16	128

Total value of this report: USD 778.-