



Microbe Investigations AG

LS21-01037

Report date: April 14, 2021

Customer: U-Earth Biotech Ltd

Index

- Test overview and summary
- Application data
- Antiviral 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	Key Account Manager
Customer	U-Earth Biotech Ltd		-
Distributor	-	-	-
Brand owner	-	-	-
Brand label	-	Application at	Client
Reason for testing	Quality validation	Application by	Not specified
Effects	-	Scale	2 - lab scale-up

Test methods carried out in this report

Effect / Property	Testing standard	Test parameter
Quantitative antiviral test on textiles	ISO 18184:2019	Human coronavirus 229E (ATCC VR-740)

Test results: Good effect level

Test summary / comments:

- In the test ISO 18184, the "U-Mask Biolayer" sample showed good antiviral activity against *Human coronavirus 229E*.

Samples, finishing process and textile information

Sample	Sample description
1	U-Mask Biolayer 100% Polyester Spunlace material coated with Biolayer Mix*

Recipe	Sample number
Substrates	1
Polyester [%]	100
Textile information	1
Weight [g/m2]	-
Construction	VLE
Structure	OTR

Legend:

Construction process	Textile structure
VLE = Nonwoven	OTR = Other

Antiviral Testing

Recipe	Sample number
ISO 18184: Human coronavirus 229E (ATCC VR-740)	
Sub-Samples	1-1
Infective titer test	TCID50 method
Ig(Va) (control, immediately) Human coronavirus 229E	6.50
Contacting time Human coronavirus 229E [min]	120
Ig(Vc) (sample, after contacting) Human coronavirus 229E	3.50
Antiviral activity value Mv Human coronavirus 229E	3.00
Percent reduction Human coronavirus 229E [%]	99.900
Activity Human coronavirus 229E	++