



Protected by
livinguard

Livinguard Technologie

Zerstört Coronaviren*

PRO MASK



Medizinische Gesichtsmaske
Typ I, EN 14683

100 % Livinguard Technologie. Vernichtet nachweislich **SARS-CoV-2**.

Schutz

Die Livinguard Technologie zerstört kontinuierlich Bakterien und Viren und verhindert deren Ausbreitung.

Sicherheit

Frei von giftigen Metallen, kein Auswaschen von Chemikalien

Nachhaltig und wiederverwendbar

Eine Maske ersetzt 210 Einwegmasken und ist bis zu 30-mal waschbar.



Komfort

Seidenweicher Stoff, geruchsfrei und für perfekten Sitz mit verstellbaren Ohrschlaufen und Nasenklammer ausgestattet

Style

Erhältlich in Black, Bombay Blue, Forest Green und Cosmic Red



Konzipiert und entwickelt in der Schweiz

100 % Livinguard Technologie	Gewebe getestet gegen SARS-CoV-2*	Filtrierung	Atmungsaktivität
✓	✓	hoch 3 Lagen	gut

* Zerstört nachweislich 99,9 % von SARS-CoV-2, dem Virus, das COVID-19 verursacht

Scannen und
mehr erfahren:





Die Livinguard Technologie – erwiesene antivirale Wirkung:

Virusart	Prüfstelle	Virusinaktivierung in %
SARS-CoV-2	Freie Universität Berlin, Deutschland	99.9%
Humanes Coronavirus 229E	University of Arizona, Tucson, USA	99.5%
Influenza A	Bundesamt für Bevölkerungsschutz, BABS, Schweiz	> 99.96%
Gelbfieber	Bundesamt für Bevölkerungsschutz, BABS, Schweiz	> 99.97%
Bakteriophage MS2	BTS, Mumbai, Indien	> 99.99%

Die Livinguard Technologie – wirksam gegen eine Vielzahl von Bakterien, wie:

Escherichia coli, *Staphylococcus aureus*, multidrug-resistant *Enterococcus faecium* (VRE - ATCC 51559), Methicillin-resistent *Staphylococcus aureus* (MRSA - ATCC 33591), *Mycobacterium tuberculosis* (ATCC 25177), *Klebsiella pneumoniae*, *Clostridium difficile* (*C. diff*), *Mycobacterium terrae*, *Mycobacterium avium*, *Salmonella Typhi*, *Pseudomonas aeruginosa*

Livinguard AG

Bahnhofstrasse 12
6300 Zug
Schweiz

Tel.: +41 41 726 16 60
E-Mail: info@livinguard.com
Web: www.livinguard.com



EC DECLARATION OF CONFORMITY

This declaration of conformity is issued under the sole responsibility of the supplier

Livinguard AG
Bahnhofstrasse 12
6300 Zug, Switzerland

and declares that the medical mask described hereafter

Livinguard Pro Mask



is in conformity with the relevant Union harmonization legislation Directive 93/42/EEC on Medical Devices Class I and the European harmonized standards EN14683:2019 Medical Mask Type I.

These medical masks also comply with the REACH regulation 1907/2006 with regards to the requirements of Article 33 (duty to communicate information on substances in articles) and Article 67 (restriction in Annex XVII), and Biocidal Products Regulation (BPR, Regulation (EU) 528/2012).

Signed for and on behalf of:

Mr. Sanjeev Swamy
CEO
Livinguard AG



Livinguard AG

Bahnhofstrasse 12, 6300 Zug, Switzerland

Freie Universität Berlin, FB Veterinärmedizin,
Inst. f. Tier- u. Umwelthygiene, Robert-von-Ostertag-Str. 7-13, 14163 Berlin

Livinguard AG
Bahnhofstrasse 12
6300 Zug
Switzerland

**Fachbereich Veterinärmedizin
Zentrum für Infektionsmedizin**

**Institut für
Tier- und Umwelthygiene**

gf. Direktor
Univ.-Professor Dr. Uwe Rösler
Robert-von-Ostertag-Str. 7-13
14163 Berlin

Telefon +49 30 838 51845
Fax +49 30 838 4 51863
E-Mail tierhygiene@vetmed.fu-berlin.de
Internet www.vetmed.fu-berlin.de

Bearbeiter/in ur

30. Juli 2020

Report - Antiviral Activity of textile product HEFM47.CO.01

Tested by: Prof. Uwe Rösler and Dr. Anika Frieese

Freie Universitaet Berlin, Institute for Animal Hygiene and Environmental
Health, Robert-von-Ostertag-Straße 7-13, 14163 Berlin

Tested textile product

- reference textile: Cotton (Co), untreated, 11.04.2020, lab number: C1
- antiviral textile: HEFM47.CO.01, 13.05.2020, LIVINGUARD, lab number: C2-neu

Method

- modified according to ISO 18184 (First edition 2014-09-01)
 - washing of all tested textiles with deionized water 10 times at **40°C**, drying
 - cutting pieces of approximately 20x20mm and making up a mass of 0,4g with several pieces
 - sterilization at 121°C for 15 min, drying
 - before starting the test conditioning the textiles overnight in a humid environment (incubator 37°C)
 - controls: verification of cytotoxic effect and cell sensitivity to virus/inactivation of antiviral activity

- test: inoculation of 0,4g textile with 1ml (or 2ml) virus suspension (at least 10^7 TCID₅₀/ml)
- washing out using 19 ml (or 18 ml) cell culture medium (MEM Eagle EBSS + 10% fetal calf serum + 1% non-essential amino acids, +1 % penicillin (10.000 U/ml) / streptomycin (10 mg/ml)) after specific time points
- titration of washing solution in 96-well plate and titer calculation with method of Spearman and Karber in TCID/ml
- comparison of titer from untreated textile (reference) and treated textile for the specific time points

Results

Code ITU	C1	C2-neu	C1	C2-neu	C1	C2-neu	C1	C2-neu	C1	C2-neu	C1	C2-neu
sequential nr.	1	1	2	2	3	3	4	4	5*	5*	6*	6*
textile after 30 min in log(10) TCID ₅₀ /ml	7,6	6,35	7,6	6,6	7,35	6,35	7,35	6,475	7,35	7,1	7,475	6,975
Antiviral Activity after 30min in log(10)		1,25		1		1		0,875		0,25		0,5
Reduction after 30min in %		94,38		90,00		90,00		86,66		43,77		68,38
textile after 1h in log(10) TCID ₅₀ /ml	7,1	5,975	7,1	6,1	7,35	5,475	7,35	5,85	-	-	-	-
Antiviral Activity after 1h in log(10)		1,125		1		1,875		1,5	-	-	-	-
reduction after 1h in %		92,50		90,00		98,67		96,84	-	-	-	-
textile after 2h in log(10) TCID ₅₀ /ml	7,1	5,225	7,1	5,225	6,6	5,35	6,975	5,35	7,725	6,475	7,35	5,6
Antiviral Activity after 2h in log(10)		1,875		1,875		1,25		1,625		1,25		1,75
reduction after 2h in %		98,67		98,67		94,38		97,63		94,38		98,22
textile after 6h in log(10) TCID ₅₀ /ml	6,975	3,85	6,85	4,475	6,475	4,1	6,725	4,35	6,85	4,1	7,1	3,975
Antiviral Activity after 6h in log(10)		3,125		2,375		2,375		2,375		2,75		3,125
reduction after 6h in %		99,93		99,58		99,58		99,58		99,82		99,93
textile after 12h in log(10) TCID ₅₀ /ml	6,475	< 3,1	6,225	3,35	6,475	3,35	5,975	3,1	-	-	-	-
Antiviral Activity after 12h in log(10)		>3,375		2,875		3,125		2,875	-	-	-	-
reduction after 12h in %		>99,9		99,87		99,93		99,87	-	-	-	-

*inoculation with 2ml virus suspension instead of 1ml