

## TEST REPORT

**2021TM2066**

### DATE OF RECEPTION

05/08/2021

### APPLICANT

UAB "PDSA"  
Lakūnų g. 3A  
LT-09108 Vilnius

### DATE TESTS

Starting: 05/08/2021  
Ending: 30/08/2021

Att. Arūnas Mirinas

### IDENTIFICATION AND DESCRIPTION OF SAMPLES

#### REFERENCES

MELT-BLOWN REF. RE-M 2021.07.20

### TESTS CARRIED OUT

- IN VITRO DETERMINATION OF BACTERIAL FILTRATION EFFICIENCY (BFE).
- DETERMINATION OF BREATHABILITY (DIFFERENTIAL PRESSURE).



## RESUMEN / SUMMARY

Carried out on the following material (without making the mask):

**MELT-BLOWN REF. RE-M 2021.07.20**  
**ORIGINAL. No pretreatment has been performed.**

Tests according to the standard EN 14683:2019+AC: 2019.

Having obtained the following results:

TESTS	RESULTS
Pto 5.2.2 Bacterial Filtration Efficiency (BFE) (%)	<b>99,70</b>
Pto 5.2.3 Breathability: Differential pressure <sup>[1]</sup> (Pa/cm <sup>2</sup> )	<b>27,5</b>

### Notes

- The rest of the standard tests not indicated in this report, have not been evaluated.
- <sup>[1]</sup>There has been a deviation from the test standard due to 5 specimens have been analyzed instead of 25.

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## SAMPLE DESCRIPTION

### PHOTOGRAPHY



**Reference** <sup>(1)</sup>

MELT-BLOWN REF. RE-M 2021.07.20

**LOT number** <sup>(1)</sup>

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<sup>(1)</sup> Data provided for the customer

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## RESULTS

### IN VITRO DETERMINATION OF BACTERIAL FILTRATION EFFICIENCY (BFE)

**Standard**

EN 14683:2019+AC:2019

**Test date**

05/08/2021 - 06/08/2021

**Batch n<sup>o</sup>[1]**

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**Reference**

MELT-BLOWN REF. RE-M 2021.07.20

**Number of test specimen**

5

**Size of test specimen**

10 cm x 10 cm

**Tested area of the test specimen**

50 cm<sup>2</sup>

**Sample side was oriented toward the challenge aerosol**

Inner side

**Equipment**

Six stage Andersen Sampler (03285E12)

**Flow of air**

28.3 l/min

**Test germ**

*Staphylococcus aureus* ATCC 6538

**Incubation conditions**

24 h at 37 ± 2 °C

**Uncertainty of the test**

The relative expanded uncertainty of the test is ± 5 % assay value of the measured.

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## RESULTS

Test sample values							
	Level1 (cfu/plate)	Level2 (cfu/plate)	Level3 (cfu/plate)	Level4 (cfu/plate)	Level5 (cfu/plate)	Level6 (cfu/plate)	Total count (ufc)
1	0	0	0	1	2	2	5
2	0	0	0	1	3	1	5
3	0	0	0	4	1	0	5
4	0	0	0	2	3	0	5
5	0	0	2	2	2	0	6

**Legend meaning:** cfu: colony forming units

**Pre-treatment** Original. No pretreatment has been performed.

**Calculation of bacterial filtration efficiency:**

Test	Filtration efficiency (%)
1	99,71
2	99,71
3	99,71
4	99,71
5	99,65
<b>Mean</b>	<b>99,70</b>

### Notes

- The "positive hole" conversion factor described by A. Andersen has been applied to the number of CFU colony forming units collected by the cascade impactor for the sample and positive control.
- Tested samples were supplied by the customer.
- Mean of the plate counts of the negative controls: 0 ufc.
- Mean of the total plate counts of the two positive controls: 1713 cfu.

- <sup>[1]</sup> Data provided by the customer.

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## RESULTS

### DETERMINATION OF BREATHABILITY (DIFFERENTIAL PRESSURE)

**Standard**

EN 14683:2019+AC:2019

**Principle**

It is measure the differential pressure required to move air through a measured surface area at a constant flow of air, with the aim of measuring the pressure of air exchange of the material of the mask.

**Test date**

24/08/2021 - 25/08/2021

**Batch n<sup>o(1)</sup>**

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**Reference**

MELT-BLOWN REF. RE-M 2021.07.20

**Number of test specimen**

5

**Size of test specimen**

4.9 cm<sup>2</sup>

**Tested area of the test specimen**

Circular, diameter 2.5 cm

**Sample conditioning**

T<sup>a</sup> 21 ± 5 °C Hr 85 ± 5 %

**Flow of air**

(8 ± 0,3) l/min

**Pre-treatment**

Original. No pretreatment has been performed.

**Uncertainty of the test**

The relative expanded uncertainty of the test is ± 6 % assay value of the measured

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## RESULTS

### Results

Test specimen	Pa	$\Delta P$ (Pa/cm <sup>2</sup> )
1	120,6	24,6
2	142,6	29,1
3	135,2	27,6
4	133,1	27,2
5	141,6	28,9
	<b>Average</b>	27,5

### Notes

- Tested samples were supplied by the customer.
- There has been a deviation from the test standard due to 5 specimens have been analyzed instead of 25.
- The specimens have been cut in random areas of the material supplied by the customer.
- <sup>(1)</sup>Data provided by the customer.

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**Judit Sisternes**  
**Head of Health & Hygiene Products Division**

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