Form 1 to PS7.

Issue 4

Issue date 15.05.2021

ProBa

ProBa spółka z ograniczoną odpowiedzialnością /a limited liability company/

Respiratory Tract Protection Equipment Laboratory

Al. 1-Maja 31/33/1, 90-739 Łódź, Poland

Phone: 608 629 257

e-mail: office@proba-lab.eu

TEST REPORT

Order number: 44/2021-B

Subject of the order: Filtering half-masks testing Test object: OPP3 FFP3 NR filtering half-mask

The Ordering Party: OPHARM sp. z o.o., Pokrzywnica 62, 99-120 Piątek, Poland

Date of preparing the report: 17.06.2021

Copy number: 1

The report was prepared by: mgr Anna Durys /a handwritten legible signature : Anna Durys/

The Report was authorized by: dr inż. Piotr Pietrowski

(Signature)

x- data according to information provided by the Ordering Party/Customer

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Order number: 44/2021-B

Test object (name, model, type, class)^X: OPP3 FFP3 NR filtering half mask

Manufacturer (name, address)^X: OPHARM Sp. z o.o., Pokrzywnica 62, 99-120 Piątek, Poland Other arrangements:

The test report will include a statement of compliance with the requirements including the decision making principle (requirements according to PN-EN 149+A1:2010).

Date of receiving samples: 31.05.2021

Number of samples: 60

Registration number of samples: 44/2021

Test start date: 31.05.2021

Test completion date: 17.06.2021

Test scope:

- Carbon dioxide content in inhaled air (in accordance with PN-EN 149+A1 :2010 p. 8.7) Test beyond the scope of accreditation
- Paraffin oil mist penetration (according to PN-EN 149+A1 :2010 p.8.11; PN-EN 13274-7:2019-07)
- Test beyond the scope of accreditation

Place of performing the tests: Respiratory Tract Protection Equipment Laboratory, ProBa Spółka z ograniczoną odpowiedzialnością, Al. 1 Maja 31/33, 90-739 Łódź

Filter-Service Company Laboratory 7a Sadowa Street, 95-100 Zgierz

In case of tests with estimated measurement uncertainty, the determination of compliance with the specification or test requirement is subject to a decision-making principle based on the consideration of the measurement uncertainty value. Determination of compliance/noncompliance of test results with the requirements is not included in the scope of accreditation

x- data according to information provided by the Principal/Customer

Number of pages: 5

Photographic documentation of the tested products

Test object: OPP3 FFP3 NR filtering half mask

Photographs of the tested object: (Pic. 1 and Pic. 2)



The samples delivered and tested were marked with the following information - in the form of a seal: OPHARM logo, CE mark 1463, OPP3 FFP3 NR, EN 149 2001+A1 :2009.

Test results for carbon dioxide content in inhaled air Test object: OPP3 FFP3 NR filtering half mask

Sample number	CO2 content in inhaled air, % by volume	Average CO2 content in inhaled air, % by volume	Requirements according to PN-EN 149+A I :2010 p. 7.12	Assessment of conformity/non-conformity with the requirements of the standard
37 N 39 N 41 N	0.87 0,85 0,85	0,86	the average carbon dioxide content in inhaled air shall not exceed 1,0 % by volume.	Half masks fulfil the requirement of the PN-EN 149+A1:2010 p.7.12 standard.

Measurement uncertainty: ±0.09%.

The results given relate only to the samples received and tested.

N- a new half mask

Paraffin oil mist penetration test results

Test object: OPP3 FFP3 NR filtering half mask

Sample number	Penetration of paraffin oil mist, % Flow rate 95 1/min	Requirements according to PN-EN 149+A1 p.7.9.2	Assessment of conformity/non-conformity with the requirements of the standard
34 N 35 N	0,18	FFPI < 20% FFP2 < 6% FFP3 < 1%	
49 N	0,05 0,06		The half masks fulfil the requirements of the
16 SWU17 SWU	0,11 0,12		PN-EN 149+A1:2010 p. 7.9.2 standard for paraffin oil mist
18 SWU	0,27		within the scope of the first (FFPI), second (FFP2) and the third (FFP3) protection class.
4 WM KT*	0,19		
5 WM KT* 6 WM KT*	0,13 0,16		

Measurement uncertainty: $\pm 10\%$ of the measured value

The results given refer only to samples received and tested.

N - a new half mask

SWU - a half mask after simulated use conditions

WM KT - a half mask after mechanical strength and thermal conditioning

END OF TEST REPORT

^{*-} exposure test.