

EU DECLARATION OF CONFORMITY

Rotoform srl-via Ardeatina km 20,400 (via dei tamarindi, 14) 00134 Roma - Italy - tel. 0671300197 FAX. 0671302974 P.IVA 02111231003 - C.F. 08653830581

Declare under our sole responsability, that the product below:

Description of the product: no-valve FFP2 Foldable Respirator/Half Face/Non-Reusable

Brand name: 501 FFP2 NR

Model name: 501 FFP2 NR

Meets the following European regulation:

2016/425 (UE) Regulation

Applicable harmonized standard:

EN 149:2001+A1:2009

The notified body

GEPTESZT KFT. (No. 2233)

1037 Budapest, Jablonka u. 79

Hungary

Performed the EU type-examination (Module B) and iussed the EU type-examination certificate:

No. TD11/GT285/312/2104/E/2233

The PPE is subject to the following conformity assesment procedure:

Conformity to tape based on internal production control plus supervised product checks at random intervals (Module C2) under surveillance of the notified body: GEPTESZT KFT. (No.2233)

Rome, 29/04/2021

Signed for and on behailf of Rotoform srl

Tel. 06.7 300197 - Fax 06.71302974 P.Iva 02711231003 -

Rotoform s.r.l.

Sede e Stabilimento: 00134 Roma (S. Palomba) Via dei Tamarindi, 14 (già Via Ardeatina km. 20,400) Tel. 06.71.30.01.97 r.a. Fax 06.71.30.29.74 Internet: www.rotoform.it E-mail: info@rotoform.it









Il marchio della gestione forestale



GÉPTESZT Kft. Inspection Body

Notified Body under regulation 2016/425 (EU) personal protective equipment Notified Body number in the EU on n°2233 Registration number: 3/2018

CERTIFICATE

of conformity to type assessment based on internal production control plus supervised product checks at random intervals (**module C2**)

N° ED29/E199/2104/E/2233

Requirement: fullfillment of Article 19 c.) i. point of the regulation 2016/425 EU in accordance with Annex VII, module C2 conformity to type assessment

Name of manufacturer (controlled):

Rotoform SRL

Address: Via Ardeatina, km. 20, 400 (Via dei Tamarindi, 14) 00134 Roma, ITALY

The above mentioned company is authorized to affix marking

€ 2233

on the personal protective equipment listed in Annex 1 of the certificate

Type of inspection: module C2

Method used during inspection:

On-site production control according to regulation 2016/425 module C2 and relevant RfU sheets. Supervised product checks according to the harmonised standards.

GÉPTESZT KFT. EVE Ellenőrző Szervezet NB 2233

037/Budapest, Jablonka u. 79.

Hajdu Márton

Head of the Inspection Body

2021.04.29. issue date

2021.12.31. expiry date



Date of inspection: 2021.04.29.

Inspection report number: VD35/285/2104/E/2233

Annex 1 of N° ED29/E199/2104/E/2233

Description	Model/Type	EU type-examination certificate	Issued by
Particle filtering half-mask	501 FFP2 NR	TD11/GT285/312/2104/E/2233	GÉPTESZT

Budapest, 2021.04.29.

GÉPTESZT KFT. EVE Ellenőrző Szervezet NB 2233 1037 Budapest, Jablonka u. 79.

Hajdu Márton

Head of the Inspection Body





EU TYPE-EXAMINATION CERTIFICATE

Name of Certification Body: GÉPTESZT Kft. Phone: +3612503531
EU notified body identification number: 2233 Fax: +3614300888
Address: Jablonka St. 79, 1037 Budapest, HUNGARY E-mail: gepteszt@gepteszt.hu

Present EU type-examination certificate is valid only with the sealed identification sample (authentic sample) and the documents identified below. The EU type-examination certificate is not transferable.

1. Product designation: Particle filtering half mask

501 FFP2 NR FFP2 non reusable particle filtering half mask without valves.

Serial / Model No.: 501 FFP2 NR

Year of production: 2021

2. Name and address of the holder of the certificate (<u>Manufacturer</u> or authorized representative): **Rotoform srl**

Address: Via Ardeatina, km. 20, 400 (Via dei Tamarindi, 14) 00134 Roma, ITALY

- 3. Name and address of the Manufacturer: same as above (point 2)
- 4. Protecting ability of PPE: Personal protective equipment providing respiratory system protection Category III. EN 149:2001+A1:2009 class FFP2 NR
- 5. Identification data of the records of examination for compliance of PPE:

a. Certification Body: GÉPTESZT Kft.

Record of examination: VD35/285/2104/E/2233

b. Identification of body: NB2233

6. Documentation of the compliance with the essential health and safety protection requirements: Fully applied nationalized standard(s) during the production of the PPE:

Category III. EN 149:2001+A1:2009 class FFP2 NR

Annexes:

- Users information
- Technical file
- 7. **CE** Requirements for indicating the CE mark: The size of the CE marking may not be less than 5 mm. The CE mark must be located on the product label
- 8. Further notes relating to the PPE: Manufacturer cannot place on the market or bring into service any Category III PPE without having established a formal agreement with a Notified Body about conformity to type assessment.

The EU type-examination certificate will be withdrawn in case of existence of conditions stated in Article 32 point 5. and in Annex V. 7.7. of regulation (EU) 2016/425 of the European Parliament of the Council.

Legal remedy can be applied against the condition stated in the EU type-examination Certificate. The application for appeal should be submitted to the Director Manager of GÉPTESZT Kft., and the application will be judged by the board of GÉPTESZT Kft. Certificate Body.

The type tested complies with the regulation (EU) 2016/425 of the European Parliament of the Council.

The present certificate is valid until 29th April, 2026

Budapest, 29th April, 2021- HUNGARY

GÉPTESZT Kft. EVE Tanusitó Szervezet NB 2233 1037 Budapest, Jabionka u.79.

Guden John

Budai István
Head of Certification Body

GÉPTESZT Kft. Notified Body No. 2233 registered in the European Union

Address: Jablonka St. 79., Budapest, 1037, HUNGARY

e-mail: nb2233@gepteszt.hu web: www.gepteszt.hu Phone: +3612503531



PERSONAL PROTECTIVE EQUIPMENT EU TYPE-EXAMINATION TEST REPORT

EN 149:2001+A1:2009 Particle filtering half mask

The examination and testing of Personal Protective Equipment were carried out in accordance with MSZ EN ISO/IEC 17025:2005 standard

by GÉPTESZT Kft. Notified Body, identified under number 2233 in the EU

Customer: Rotoform srl

Address: Via Ardeatina, km. 20, 400 (Via dei Tamarindi, 14)

00134 Roma, ITALY

Model: 501 FFP2 NR Classification: FFP2 NR

Exhalation valve: NO Inhalation valve: NO

Uses: non reusable

Project number: GT285

Test report number: VD35/285/2104/E/2233

Project worksheet number: VD-34-2021-285 Date of the test: 2021.04.16-04.29.

 Samples received date:
 2021.04.15.

 Sample numbers:
 285-1 - 285-46

Attachment: no

GÉPTESZT KFT.
EVE Vizsgáló Laboratórium
NB 2233
1037 Budapest, Jablonka u. 79.
Labor: 1032 Budapest, Gyenes u.12.

Issued: Budapest, 2021.04.29.

Budai Dániel **Director of Laboratory**



Relevant standards, directives and requirements:

EN 149:2001+A1:2009 Filtering half masks to protect against particles

Description of the sample

The foldable mask is sold in white colour and consists of 5 layers:

- 1. Layer 1 (external) 50 GSM no-woven cloth, waterproof, providing robustness to the mask such that it does not deforms while breathing. White color.
- 2. Layer 2 25 GSM ultra-fine polypropylene filter cloth; combined with the filtering layer it ensures a barrier to particulates. White color
- 3. Layer 3 25 GSM ultra-fine polypropylene filter cloth; combined with the filtering layer it ensures a barrier to particulates. White color.
- 4. Layer 4 25 GSM no-woven cloth waterproof fabric, White color.
- 5. Layer 5 (internal) 25 GSM no-woven cloth waterproof fabric, for a perfect and hypoallergenic seal on the face. It does not cause irritation or any other adverse effect to health. White color.

The elastic ear loop is made of spandex+polyester. The nose bat is made of PE, PP, galvanized wire.











Short description of EU-type tests:

Requirement	Test method	Description	Result
7.4	8.2	Packaging	Passed
7.5	8.2	Material	Passed
7.6	8.11	Cleaning and disinfecting	NA
7.7	8.4	Practical performance	Passed
7.8	8.2	Finish of parts	Passed
7.9.1	8.5	Total inward leakage	Passed
7.9.2	8.11	Penetration of filter material: NaCl	Passed
7.9.2	8.11	Penetration of filter material: paraffin oil	Passed
7.10	8.4 and 8.5	Compatibility with skin	Passed
7.11	8.6	Flammability	Passed
7.12	8.7	Carbon dioxide content of the inhalation air	Passed
7.13	8.4 and 8.5	Head harness	Passed
7.14	8.4	Field of vision	Passed
7.15	8.2, 8.3.4, 8.8	Exhalation valve(s)	NA
7.16	8.9	Breathing resistance	Passed
7.17	8.10	Clogging	NA
7.18	8.2	Demountable parts	NA
9	-	Marking	Passed
10	-	Information to be supplied by the manufacturer	Passed

Analysis and details of EU-type test results:

7.4 Packaging

Each mask is packed in a transparent polypropylene bag.

The packaging gives enough protection against mechanical damage or contamination.

PASSED

7.5 Material

- conditioning S.W.: Sample nr: 285-16 to 285-18
 - None of the particle filtering half masks have suffered mechanical failure of the facepiece or straps.
- conditioning T.C.: Sample nr.: 285-41 to 285-43
 Particle filtering half masks did not collapse.

PASSED

7.6 Cleaning and disinfecting (only for reusable masks)

Because the mask is non-reusable, this test was not carried out.

NA

7.7 Practical performance

The particle filtering half masks are tested by practical performance tests under realistic conditions.

- 1. Walking test for 10 min
- 2. Work simulation tests: walking on the level with headroom of (1.3 ± 0.2) m for 5 min;
 - crawling on the level with headroom of (0.70 ± 0.05) m for 5 min;
 - filling a small basket 20x in 10 min;

Subjects	Samples	Conditioning	Result
RE	285-1	A.R.	PASSED
SA	285-2	A.R.	PASSED

There were not any imperfections related to the wearer's acceptance.

PASSED

Number of document: VD35/285/2104/E/2233



7.8 Finish of parts

Parts of the device are likely to come into contact with the wearer have no sharp edges or burrs.

PASSED

7.9.1 Total inward leakage

With sodium chloride aerosol. The masks were in good condition.

Number of subjects were replaced, because of not fitting/facial dimensions:0......

	Subjects facial dimensions						
Subject	Face length, mm	Face width, mm	Face depth, mm	Mouth width, mm			
BB	75	90	70	30			
BF	110	125	115	50			
VB	100	110	80	75			
NT	122	134	142	57			
GL	90	85	80	50			
NA	130	120	130	50			
DF	108	136	105	55			
BL	110	140	130	50			
RE	115	138	112	48			
BD	120	130	135	55			

			Total inward leakage, %					
Subject	Sample	Cond.	Walk	Head left/right	Head up/down	Talk	Walk	Mean, %
BB	285-3	A.R.	3,78	2,86	2,64	1,68	1,70	2,53
BF	285-4	A.R.	3,09	3,70	2,31	7,08	2,89	3,81
VB	285-5	A.R.	3,52	3,08	2,41	3,12	3,56	3,14
NT	285-6	A.R.	3,72	3,75	2,70	1,97	2,63	2,95
GL	285-7	A.R.	2,16	1,79	2,19	1,73	1,55	1,88
NA	285-8	T.C.	1,41	3,05	3,83	3,34	1,33	2,59
DF	285-9	T.C.	1,77	0,97	1,93	1,33	1,44	1,49
BL	285-10	T.C.	3,73	3,34	3,20	1,54	3,25	3,01
RE	285-11	T.C.	2,32	2,36	2,31	1,94	2,13	2,21
BD	285-12	T.C.	3,05	2,82	2,31	4,30	2,97	3,09

50 out of the 50 individual exercise results for total inward leakage were not greater than 11 % and 10 out of the 10 individual wearer arithmetic means for the total inward leakage were not greater than 8%.

PASSED

7.9.2 Penetration of filter material: NaCl

NaCl aerosol: concentration: 4-12 mg/m³, flow: 95 l/min

Sample	ple Conditioning Penetration, %		Exposure, %
285-13	A.R.	0,44	NA
285-14	A.R.	0,41	NA
285-15	A.R.	0,43	NA
285-16	5-16 S.W. 0,30		NA
285-17	S.W.	0,35	NA
285-18	S.W.	0,37	NA
285-19	M.S→T.C.	NA	0,65
285-20	M.S→T.C.	NA	0,67
285-21	M.S→T.C.	NA	1,05
Maxin	num permitted:	6 %	/0

The penetration of the filter material did not exceed the maximum permitted 6 % in case of any masks.



7.9.2 Penetration of filter material: paraffin oil

Paraffin aerosol: concentration: 15-25 mg/m³, flow: 95 l/min

Sample	Conditioning	Penetration, %	Exposure, %
285-22	A.R.	0,45	NA
285-23	A.R.	0,83	NA
285-24	A.R.	0,98	NA
285-25	5-25 S.W. 0,41		NA
285-26	S.W.	0,36	NA
285-27	S.W.	0,37	NA
285-28	M.S→T.C.	NA	2,09
285-29	M.S→T.C.	NA	0,99
285-30	M.S→T.C.	NA	1,48
Maxi	mum permitted:	6 (/ o

The penetration of the filter material did not exceed the maximum permitted 6 % in case of any masks.

PASSED

7.10 Compatibility with skin

Materials that may come into contact with the wearer's skin are not known to be likely to cause irritation or any other adverse effect to health.

During the Practical performance test there were no problems.

During the Total inward leakage test there were no problems.

PASSED

7.11 Flammability

Sample	Conditioning
285-33	T.C.
285-34	T.C.
285-31	A.R.
285-32	A.R.

The materials used do not present a danger for the wearer and are not of highly flammable nature. The samples did not burn.

PASSED

7.12 Carbon dioxide content of the inhalation air

Air supplied from breathing machine: 25 cycles/min and 2,0 l/stroke, carbon dioxide content of exhaled air 5 V/V%, air flow 0,5 m/s.

Ambient carbon dioxide level: 0,08 % (less than 0,1 %.)

Sample	CO ₂ , V/V%
285-35	0,46
285-36	0,50
285-37	0,52
Average	0,49

The carbon dioxide content of the inhalation air (dead space) did not exceed an average of 1,0 V/V %.

PASSED

7.13 Head harness

There were no adverse comments regarding security following limited practical performance and total inward leakage testing.

The product satisfied the total inward leakage requirements. See part 7.9.1. for results.

PASSED

Number of document: VD35/285/2104/E/2233



7.14 Field of vision

Sample			
285-1			
285-2			

During the practical performance test the field of vision was not affected adversely by wearing mask. **PASSED**

7.15 Exhalation valve(s)

NA

7.16 Breathing resistance

			resistance, bar		Exhalat	ion reistance 160 l/min	e, mbar	
Sample	Conditioning	30 l/min	95 l/min	ahead	vert.upw ards	vert downwar ds	left	right
285-38	A.R.	0,40	1,32	2,13	2,12	2,12	2,14	2,16
285-39	A.R.	0,41	1,35	2,17	2,18	2,16	2,17	2,16
285-40	A.R.	0,40	1,34	2,16	2,15	2,15	2,17	2,18
285-41	T.C.	0,37	1,22	1,92	1,93	1,93	1,92	1,92
285-42	T.C.	0,39	1,25	2,03	2,04	2,05	2,04	2,03
285-43	T.C.	0,38	1,21	1,97	1,99	1,98	1,97	1,98
285-44	S.W.	0,40	1,38	2,18	2,19	2,18	2,17	2,18
285-45	S.W.	0,40	1,31	2,17	2,18	2,17	2,17	2,16
285-46	S.W.	0,41	1,36	2,19	2,19	2,20	2,19	2,20
Maximu	ım permitted	0,7	2,4			3,0		

None of the measured values exceeded the maximum values.

PASSED

7.17 Clogging

The optional dolomit clogging test was not required by manufacturer.

NA

7.18 Demountable parts

The device does not contain demountable parts.

NA

9. Marking

The marking information is complete and clearly and durably marked on the packaging.

The marking information is complete and clearly and durably marked on the particle filtering half mask.

PASSED

10. Information to be supplied by the manufacturer

Information to be supplied by the manufacturer accompany every smallest commercial available package and contain all information necessary for trained and qualified persons.

PASSED

Result of EU-type test:

The above described **501 FFP2 NR particle filtering half mask** at the time of the test **conformed** to the test requirements of EN 149:2001+A1:2009 class FFP2 NR at the close date of test report.



Rotoform s.r.l.

Sede e Stabilimento: Via dei Tamarindi, 14 - 00134 Roma (Loc. S. Palomba) Tel. 06.71300197 - Fax 06.71302974 info@rotoform.it - www.rotoform.it

Part. IVA 02111231003 - Cod. Fisc. 08653830581 Cap. Soc. € 98.800,00 i.v. C.C.I.A.A. 671019 - Iscr. Trib. Roma 870/89















PICTOGRAM LEGEND INSERTED ON THE PACKAGING OF THE WHITE AND COLORED MASKS: MOD. 501 FFP2 NR

PITTOGRAMMI

LOT	Lotto numero	(2)	Dispositivo monouso
M	Data di fabbricazione	7	Proteggere il dispositivo dall'umidità e dagli agenti atmosferici.
- W	Fabbricante	浴	Proteggere dalla luce solare diretta
	Leggere il manuale prima di ogni utilizzo	-5°C 38°C	Stoccare a temperatura compresa tra -5° e +38°C
8	Dispositivo con scadenza	-80%J	Umidità massima di stoccaggio < 80%.
C € 2233	Marcatura CE + numero di identific valutazione della conformità	azione univoca de	ll'Organismo Notificato coinvolto nella procedura di