

Occupational Safety Research Institute, v.v.i.

Notified Body 1024

Jeruzalémská 1283/9, CZ - 110 00 Praha 1

FINAL REPORT ON CERTIFICATION *

No. 1024/ZZ-073/2024

Pages: 8

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Annexes: 0

I. Source data

Name: **Respirator GPP2 FFP2 NR**

Type: **GPP2 FFP2 NR**

PPE category: III. according to Regulation (EU) 2016/425 Annex I

Manufacturer: General Public s.r.o., Hybešova 167/18, Karlovy Vary 360 05, Czech Republic

Application: S-205/2024 dated: 14. 10. 2024

Contract: 096/2024 dated: 15. 10. 2024

Certified by: Ing. L. Zavřel

Date of report issue: 22. 11. 2024



signature

The product was certified according to Regulation (EU) 2016/425, Module B. The conformity of the product with the essential requirements of this Regulation was carried out in the form of EU type examination.

Distribution list: 1. Manufacturer (electronic version)
2. NB 1024 archive in electronic form (PDF)

*This Final report has been issued in Czech and English versions. Both versions have the same validity.

II. Basic information

1. Description of product function and use

The particle filtering half masks **GPP2 FFP2 NR** provides the protection of the respiratory system of a user against solid and liquid aerosols in the air in accordance with the information supplied by the manufacturer.

The particle filtering half mask meet the class FFP2 requirements.

The GPP2 FFP2 NR respirator has already been tested according to EN 149:2001+A1:2009 (ProBa Sp. z o.o. Al. 1-Maja 31/33/1, 90-739 Lodz). The results reported in Test report no. 38/2024 will be used in this report.

Production site: General Public s.r.o., U Porcelánky 1, 35735 Chodov, Czech Republic

2. Sample withdrawal

Samples of GPP2 FFP2 NR filtering half masks for laboratory tests were delivered by the manufacturer on October 16, 2024, in the amount of 30 pieces. The samples were registered in the Laboratory Register under numbers 1045 - 1074.

see Test report no. 38/2024

Samples of GPP2 FFP2 NR filtering half masks for laboratory tests were delivered by the manufacturer on September 16, 2024, in the amount of 48 pieces. The samples were registered in the Laboratory Register under number 38/2024.

III. List of submitted technical documentation

According to Regulation (EU) 2016/425 Annex III.

a) a complete description of the PPE and of its intended use	+
b) an assessment of the risks against which the PPE is intended to protect	+
c) a list of the essential health and safety requirements that are applicable to the PPE	+
d) design and manufacturing drawings and schemes of the PPE and of its components, sub-assemblies and circuits	+
e) the descriptions and explanations necessary for the understanding of the drawings and schemes referred to in point (d) and of the operation of the PPE	0
f) the references of the harmonised standards referred to in Article 14 that have been applied for the design and manufacture of the PPE. In the event of partial application of harmonised standards, the documentation shall specify the parts which have been applied	+
g) where harmonised standards have not been applied or have been only partially applied, descriptions of the other technical specifications that have been applied in order to satisfy the applicable essential health and safety requirements	0
h) the results of the design calculations, inspections and examinations carried out to verify the conformity of the PPE with the applicable essential health and safety requirements	+
i) reports on the tests carried out to verify the conformity of the PPE with the applicable essential health and safety requirements and, where appropriate, to establish the	+

relevant protection class	
j) a description of the means used by the manufacturer during the production of the PPE to ensure the conformity of the PPE produced with the design specifications	+
k) a copy of the manufacturer's instructions and information set out in point 1.4 of Annex II	+
l) for PPE produced as a single unit to fit an individual user, all the necessary instructions for manufacturing such PPE on the basis of the approved basic model	0
m) for PPE produced in series where each item is adapted to fit an individual user, a description of the measures to be taken by the manufacturer during the fitting and production process to ensure that each item of PPE complies with the approved type and with the applicable essential health and safety requirements	0

Evaluation: + available, range is satisfactory; - requirement not fulfilled; 0 not applicable

The submitted technical documentation was found to be complete according to Regulation (EU) 2016/425 ANNEX III and it has been adequate for the assessment of the conformity with the technical requirements mentioned in this Regulation.

IV. Testing

The tests were performed in accordance with:

EN 149:2001+A1:2009 Respiratory protective devices. Filtering half masks to protect against particles. Requirements, testing, marking (idt. ČSN EN 149:2002+A1:2009, ČSN EN 149+A1 OPRAVA 1:2018)

Notice: Report clause numbering is consistent with the above-mentioned standard numbering.

7.3 Visual inspection

Requirement: The visual inspection shall also include the marking and the information supplied by the manufacturer.

Evaluation: Samples have satisfied the requirement

7.4 Packaging

Requirement: Particle filtering half masks shall be offered for sale packaged in such a way that they are protected against mechanical damage and contamination before use.

Evaluation: Samples have satisfied the requirement

7.5 Material

Requirement: Materials used shall be suitable to withstand handling and wear over the period for which the particle filtering half mask is designed to be used. After undergoing the simulated wearing treatment none of the particle filtering half masks shall have suffered mechanical failure of the facepiece or straps. After the temperature conditioning or the simulated wearing treatment the particle filtering half mask shall not collapse. Any material from the filter media released by the air flow through the filter shall not constitute a hazard or nuisance for the wearer.

Discovered: see Test report no. 38/2024

After test of temperature resistance particle filtering half masks show no visible changes. After the mechanical resistance test, particle filtering half masks show no mechanical flaws. After simulated wearing treatment test particle filtering half masks show no visible changes.

Evaluation: Samples have satisfied the requirement

7.6 Cleaning and disinfecting

Not applicable

7.7 Practical performance

Requirement: The particle filtering half mask shall undergo practical performance tests under realistic conditions.

Discovered: see Test report no. 38/2024

During practical tests no noticeable failures were found.

Evaluation: Samples have satisfied the requirement

7.8 Finish of parts

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

Discovered: The particle filtering half masks have no sharp parts or burrs.

Evaluation: Samples have satisfied the requirement

7.9 Leakage

7.9.1 Total inward leakage

Requirement: The laboratory tests shall indicate that the particle filtering half mask can be used by the wearer to protect with high probability against the potential hazard to be expected. The total inward leakage consists of three components: face seal leakage, exhalation valve leakage (if exhalation valve fitted) and filter penetration. For particle filtering half masks at least 46 out of the 50 individual exercise results for total inward leakage shall not be greater than 11 % for class FFP2 and, in addition, at least 8 out of the 10 individual wearer arithmetic means for the total inward leakage shall not be greater than 8 % for class FFP2.

Discovered: Test subjects 2, 8 and 9 were measured without the clip. The other test subjects had the respirator fastened with the clip behind the head.

test subject		sample	condition	exercises					mean
				a)	b)	c)	d)	e)	
1	MKu	1052	TC	1,338	2,103	0,774	3,676	8,222	3,223
2	JFo	1054	TC	1,531	2,785	3,143	1,793	2,571	2,365
3	JBo	1055	TC	4,318	2,817	0,599	0,019	0,074	1,565
4	MDo	1056	TC	2,657	1,799	4,008	2,866	3,064	2,879
5	ZKo	1057	TC	2,093	2,465	7,075	7,994	5,895	5,105
6	RN	1046	AR	0,077	5,406	1,253	0,203	0,380	1,464
7	PM	1045	AR	0,170	2,126	0,643	0,013	0,103	0,611
8	MDr	1047	AR	2,167	4,799	5,658	5,430	5,562	4,723
9	LZ	1049	AR	2,697	7,234	12,668	4,762	9,825	7,437
10	KH	1053	AR	2,156	13,750	14,469	10,877	5,773	9,405
mean				1,920	4,528	5,029	3,763	4,147	3,878

Exercises: a) walk only
b) head side to side
c) head up and down
d) reciting an alphabet
e) walk only

AR As received
TC Temperature conditioned

Facial dimensions of test subjects

test subject		face length mm	face width mm	face depth mm	mouth width mm
1	MKu	113	132	130	61
2	JFo	114	122	123	56
3	JBo	104	145	104	60
4	MDo	110	140	104	58
5	ZKo	116	129	126	62
6	RN	117	133	134	54
7	PM	113	129	145	55
8	MDr	128	132	133	56
9	LZ	109	132	131	50
10	KH	106	124	123	54

Evaluation: Samples have satisfied the requirement

7.9.2 Penetration of filter material

Requirement: The penetration of sodium chloride aerosol shall not exceed for class FFP2 the value of 6 %.

Discovered: see Test report no. 38/2024
penetration of sodium chloride aerosol

sample	condition	penetration %
5	AR	0,005
8	AR	0,005
9	AR	0,008
37	SW	0,010
38	SW	0,010
39	SW	0,008
22	MS+TC	0,120
24	MS+TC	0,140
25	MS+TC	0,250

Notice: AR - As received
MS - Mechanical strength
TC - Temperature conditioned
SW - Simulated wearing treatment

Requirement: The penetration of paraffin oil aerosol shall not exceed for class FFP2 the value of 6 %.

Discovered: see Test report no. 38/2024
penetration of paraffin oil aerosol

sample	condition	penetration %
12	AR	0,06
13	AR	0,03
15	AR	0,04
42	SW	0,04
43	SW	0,03
45	SW	0,04
21	MS+TC	0,65
23	MS+TC	0,60
26	MS+TC	0,95

Evaluation: Samples have satisfied the requirement

7.10 Compatibility with skin

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

Discovered: Based on the submitted documentation the material is not known to could cause an irritation or any other adverse effect to health.

Evaluation: Samples have satisfied the requirement

7.11 Flammability

Requirement: The material used shall not present a danger for the wearer and shall not be of highly flammable nature. When tested, the particle filtering half mask shall not burn or not to continue to burn for more than 5 s after removal from the flame.

Discovered: see Test report no. 38/2024

None materials of half mask burn, glow or drip. After passing through the flame, no part of half mask continues to burn.

Evaluation: Samples have satisfied the requirement

7.12 Carbon dioxide content of the inhalation air

Requirement: The carbon dioxide content of the inhalation air shall not exceed an average of 1 % (by volume).

Discovered: see Test report no. 38/2024

sample	condition	CO ₂ concentration % vol.
2	AR	0,74
7	AR	0,76
20	AR	0,76
mean		0,75

Evaluation: Samples have satisfied the requirement

7.13 Head harness

Requirement: The head harness shall be designed so that the particle filtering half mask can be donned and removed easily. The head harness shall be adjustable or self-adjusting and shall be sufficiently robust to hold the particle filtering half mask firmly in position and be capable of maintaining total inward leakage requirements for the device.

Discovered: The filtering half mask against particles has a head harness system with ear loops. For a better seal, it is necessary to fasten the filtering half mask with a clip behind the head. The particle filtering half mask is easily donned and removed.

Evaluation: Samples have satisfied the requirement

7.14 Field of vision

Requirement: The field of vision is acceptable if determined so in practical performance tests.

Evaluation: Samples have satisfied the requirement

7.15 Exhalation valve(s)

Not applicable.

7.16 Breathing resistance

Requirement: The inhalation resistance for class FFP2 shall not exceed 70 Pa at flow of 30 l/min and 240 Pa at flow of 95 l/min. The exhalation resistance for class FFP2 shall not exceed 300 Pa at flow of 160 l/min.

Discovered: see Test report no. 38/2024

Inhalation resistance

sample	condition	resistance Pa	
		at 30 l/min	at 95 l/min
1	AR	62	218
14	AR	61	215
16	AR	59	203
29	TC	61	205
33	TC	59	204
36	TC	58	201
40	SW	61	211
41	SW	62	216
44	SW	61	210

Exhalation resistance

sample	condition	position				
		ahead	down	up	left	right
		Pa	Pa	Pa	Pa	Pa
1	AR	262	264	260	261	261
14	AR	257	260	255	257	257
16	AR	255	257	253	254	254
29	TC	247	250	245	247	246
33	TC	247	249	246	246	247
36	TC	247	249	245	247	247
40	SW	258	261	257	257	259
41	SW	251	257	256	257	253
44	SW	263	265	253	255	263

Evaluation: Samples have satisfied the requirement

7.17 Clogging

Not applicable.

7.18 Demountable parts

Not applicable.

V. Conformity assessment to the essential requirements

The conformity of the product with all relevant essential health and safety requirements mentioned in Regulation (EU) 2016/425 ANNEX II, has been assessed during EU type examination.

The examination of the manufacturer's technical file, the tests and the evaluations have shown that the submitted model has been designed and manufactured

**in accordance with the essential requirements of Regulation (EU) 2016/425,
on personal protective equipment,**

the following harmonized standards have been used during the assessment: EN 149:2001+A1:2009.

VI. List of documents necessary for The Final report elaboration

1. Regulation (EU) 2016/425 of the European Parliament and of the Council on personal protective equipment and repealing Council Directive 89/686/EEC
2. Application for EU-type examination no. S-205/2024 dated 14. 10. 2024
3. Contract about EU-type examination no. 096/2024 dated 15. 10. 2024
4. Test report no. 149/2024 dated 12. 11. 2024
5. Test report no. 38/2024 dated 27. 9. 2024 (ProBa)
6. Technical documentation
7. EN 149:2001+A1:2009 Respiratory protective devices. Filtering half masks to protect against particles. Requirements, testing, marking (idt. ČSN EN 149:2002+A1:2009, ČSN EN 149+A1 OPRAVA 1:2018)