

DOCUMENTATION

REF. CV-41 / HMF-101

MASK ULTRA PROTECTION FFP2

MASCARILLA ULTRA PROTECCIÓN FFP2

MASQUE FFP2 ULTRA PROTECTION FFP2

MASCHERINA PROTEZIONE ULTRA FFP2



MASTER BOX: 1000 pcs



CV-41

COLOR: BLANCO/WHITE

ITEM: HMF-101

DESCRIPTION: NAAMIO

MATERIAL:

5 PLY (47% non woven, 31% Meltblown, 22% algodón).

QUANTITY: 1.000

G.W:

N.W:

CNT SIZE:

BATCH NUMBER:

PRODUCTION DATE:

VALIDITY:

MADE IN P.R.C.

BOX: 25 pcs

L138xW138xH110mm

BAG: 1 pc
133x133 mm

Regulación/Regulation: 2016/425

FFP2

MASCARILLA ULTRA PROTECCIÓN
ULTRA PROTECTION MASK

Equipo de Protección Individual (EPI)
Personal Protective Equipment (PPE)

Model: HMF-101

CE 0370
EN 149:2001+A1:2009
FFP2 NR

Filtration Efficiency ≥ 94%

Importado por / Imported by:
BOSQUEBETA, S.L. (Spain)
C/ Sofia, 3-5
P.I. Ind. Cabezo Beaza 30353 Cartagena (Spain)

Organismo notificado / Notified body:
LGA1 Technological center, s.l. (Spain)
Campus UAB - Ronda de la Font del Camar, s/n
08193 Bellaterra (Barcelona)

MADE IN P.R.C.

Cantidad por caja 25 Piezas
Quantity per box 25 Pieces

Comprobación certificados/
Certificate verification:
www.certificados.cifra.es

INSTRUCCIONES DE USO:

1. Abra la máscara plegable.
2. Ajuste la máscara en la parte superior de la nariz.
3. Ajuste las cintas elásticas por detrás de las orejas.
4. Amolde la pinta nasal a la parte superior de la nariz.
5. Asegúrese de poder respirar bien y ajústelo si es necesario.

STEP FOR USAGE:

1. Open the foldable mask.
2. Make the nose bridge bar on the up side.
3. Put the strap onto the ear.
4. Adjust the soft bar to fit the nose.
5. Make sure you can breathe well and readjust if necessary.

ATENCIÓN:

1. Esta máscara "NR" es recomendada para un solo uso.
2. Esta máscara ayuda a proteger contra ciertas partículas contaminantes, pero no elimina por completo la exposición al riesgo de contraer enfermedades o infecciones.
3. Cambie la máscara inmediatamente si la respiración se vuelve difícil o si la máscara se daña o se distorsiona.

WARNING:

1. This mask marked "NR" is for single use only.
2. This mask helps protect against certain particulate contaminants but does not completely eliminate exposure to the risk of contracting disease or infection.
3. Change the mask immediately if breathing becomes difficult or the mask becomes damaged or distorted.

MATERIAL:
46% Non-woven, 30% Meltblown, 24% algodón

MATERIAL:
46% Non-woven, 30% Meltblown, 24% cotton



NOTA IMPORTANTE:

En todos los procesos de fabricación de nuestras mascarillas, no se utiliza grafeno o derivados del mismo.

Colaboramos con



Reconocimiento a la responsabilidad ambiental



Universidad Politécnica de Cartagena



UCAM UNIVERSIDAD CATOLICA DE MURCIA

UIMP Cartagena
Universidad Internacional Menéndez Pelayo



Asociaciones y Entidades a las que pertenecemos





MASKSPRING

AnHui Humei Medical Instrument Co.,Ltd

Declaration of Conformity

Manufacturer

Name: AnHui Humei Medical Instrument Co.,Ltd

Address: Heping East Road,Tongcheng Economic and Technological Development
Zone,Anqing City,Anhui Province

Product

Name: Particle filtering half mask

Model: HMF-101,HMF-201,HMF-301

We, AnHui Humei Medical Instrument Co, Ltd, Heping East Road, Tongcheng Economic and Technological development zone, Anqing City, Anhui province, China, hereby declare that the PPE unit described above is in conformity with the National Standard. This Declaration of Conformity is issued under the sole responsibility of the Manufacturer.

LGAI TECHNOLOGICAL CENTER (APPLUS) (NB 0370) performed the EU Type Examination (Module B) and issued the Type Examination Certificate as follows:

No.	EU Type Examination (Module B) Certificate Number
1	0370-5432-PPE/B

LGAI TECHNOLOGICAL CENTER (APPLUS) (NB 0370) performed the Module C2, N° 0370-5724-PPE/C2

This Product complies with the requirements of EU Regulation(EU)2016/425 for personal Protective Equipment and meets the requirements of European Standard

EN149:2001+A1:2009
FFP2 NR

Signature: 

Hong Xiaoying

Date:2021/07/18



3408810170986

3408810170986



Notified Body No. 0370

CERTIFICADO DE EXAMEN UE DE TIPO

EU-TYPE EXAMINATION CERTIFICATE

No. **0370-5432-PPE/B**

ORGANISMO NOTIFICADO Nº <i>NOTIFIED BODY NUMBER</i>	0370 - LGAI TECHNOLOGICAL CENTER (APPLUS)
SOLICITANTE / FABRICANTE <i>APPLICANT / MANUFACTURER</i>	Anhui Humei Medical Instrument Co., Ltd Heping East Road, Tongcheng Economic and Technological Development Zone, Anqing City, Anhui Province
PLANTA DE PRODUCCIÓN <i>PRODUCTION SITE</i>	Anhui Humei Medical Instrument Co., Ltd Heping East Road, Tongcheng Economic and Technological Development Zone, Anqing City, Anhui Province
REGLAMENTO DE APLICACIÓN PARA DAR LA CONFORMIDAD APPLICABLE REGULATION TO GIVE CONFORMITY: REGLAMENTO (UE) 2016/425 SOBRE LOS EQUIPOS DE PROTECCIÓN INDIVIDUAL <i>REGULATION (EU) 2016/425 PERSONAL PROTECTIVE EQUIPMENT</i>	
PROCEDIMIENTO DE EVALUACIÓN DE LA CONFORMIDAD <i>CONFORMITY ASSESSMENT PROCEDURE</i>	Módulo // <i>Module</i> : B EXAMEN UE DE TIPO EU TYPE EXAMINATION
IDENTIFICACIÓN DEL EPI (NÚMERO DE TIPO) <i>IDENTIFICATION OF THE PPE (TYPE NUMBER)</i>	Ref.: HMF-101 Particle filtering half mask
NIVEL O NIVELES DE RENDIMIENTO O LA CLASE DE PROTECCIÓN DEL EPI PERFORMANCE LEVEL OR PROTECTION CLASS OF THE PPE	FFP2 NR
NORMAS ARMONIZADAS HARMONISED STANDARDS	EN 149:2001 + A1:2009 Dispositivos de protección respiratoria. Medias máscaras filtrantes de protección contra partículas. Requisitos, ensayos, marcado. <i>EN 149:2001 + A1:2009 Respiratory protective devices. Filtering half masks to protect against particles. Requirements, testing, marking</i>
FECHA DE EMISIÓN ISSUE DATE	22/03/2021
VALIDEZ HASTA VALIDITY UNTIL	22/03/2026
<p>El presente certificado se mantendrá vigente durante 5 años siempre que el producto descrito no sea modificado y cumpla los requisitos esenciales de salud y seguridad establecidos en el Reglamento (UE) 2016/425. Para asegurar dicho cumplimiento, este certificado deberá ir acompañado de la documentación correspondiente a la Evaluación de Conformidad con el tipo según módulo C2, D (realizada por un Organismo Notificado, según frecuencia establecida).</p> <p><i>This certificate will remain valid for 5 years as long as the indicated product is not modified and fulfills the essential requirements of health and safety established in (EU) Regulation 2016/425. To ensure such compliance, this certificate must be accompanied by the documentation corresponding to the Conformity Assessment to type according to C2, D (carried out by a Notified Body according, to the established frequency).</i></p>	



Xavier Ruiz Peña
Managing Director, Product Conformity B.U.



Este documento carece de validez sin su anexo técnico, cuyo número coincide con el del certificado.
This document is not valid without its technical annex, whose number coincides with the number of certificate.

Puede comprobarse la validez de este certificado en nuestra página web / *You can check the validity of this certificate on our website:*
www.appluslaboratories.com/certified_products

ANEXO TÉCNICO TECHNICAL ANNEX

0370-5432-PPE/B

I. MODELOS INCLUIDOS EN EL CERTIFICADO

REFERENCES INCLUDED IN THIS CERTIFICATE

MARCA <i>BRAND</i>	MASKSPRING
IDENTIFICACIÓN DEL EPI (NÚMERO DE TIPO) <i>IDENTIFICATION OF THE PPE (TYPE NUMBER)</i>	Ref.: HMF-101 Particle filtering half mask
NIVEL O NIVELES DE RENDIMIENTO O LA CLASE DE PROTECCIÓN DEL EPI <i>PERFORMANCE LEVEL OR PROTECTION CLASS OF THE PPE</i>	FFP2 NR
DESCRIPCIÓN <i>DESCRIPTION</i>	MEDIA MÁSCARA FILTRANTE SIN VÁLVULA, DE TIPO PLEGABLE VERTICAL, DE 5 CAPAS, DE COLOR BLANCO, CON LAZOS DE OREJA Y CLIP NASAL INTERIOR. TAMAÑO: 160mm*105mm. // VALVELESS FILTERING HALF MASK, VERTICAL FOLDING TYPE, 5 LAYERS, WHITE COLOUR, WITH EARLOOPS AND INTERIOR NOSE CLIP. SIZE: 160mm*105mm
INFORME DE ENSAYO <i>TEST REPORT</i>	MTI210201026P002 issued by Shenzhen Microtest Co.,Ltd.

CERTIFICADO DE CONFORMIDAD CON EL TIPO CONFORMITY TO TYPE CERTIFICATE

Organismo Notificado / Notified Body Nr. 0370

No. **0370-5724-PPE/C2**

SOLICITANTE / FABRICANTE <i>APPLICANT / MANUFACTURER</i>	Anhui Humei Medical Instrument Co., Ltd Heping East Road, Tongcheng Economic and Technological Development Zone, Anqing City, Anhui Province
PLANTA DE PRODUCCIÓN <i>PRODUCTION SITE</i>	Anhui Humei Medical Instrument Co., Ltd Heping East Road, Tongcheng Economic and Technological Development Zone, Anqing City, Anhui Province
REGLAMENTO DE APLICACIÓN PARA DAR LA CONFORMIDAD / <i>APPLICABLE REGULATION TO GIVE CONFORMITY:</i> REGLAMENTO (UE) 2016/425 SOBRE LOS EQUIPOS DE PROTECCIÓN INDIVIDUAL <i>REGULATION (EU) 2016/425 PERSONAL PROTECTIVE EQUIPMENT</i>	
PROCEDIMIENTO DE EVALUACIÓN DE LA CONFORMIDAD CON EL TIPO <i>CONFORMITY ASSESSMENT PROCEDURE TO TYPE</i>	Módulo // <i>Module:</i> C2 BASADA EN EL CONTROL INTERNO DE LA PRODUCCIÓN MÁS EL CONTROL SUPERVISADO DE LOS PRODUCTOS A INTERVALOS ALEATORIOS <i>BASED ON INTERNAL PRODUCTION CONTROL PLUS SUPERVISED CONTROL OF PRODUCTS AT ALEATORY INTERVALS</i>
IDENTIFICACIÓN DEL EPI (NÚMERO DE TIPO) <i>IDENTIFICATION OF THE PPE (TYPE NUMBER)</i>	Ref.: HMF-101 Particle filtering half mask
NIVEL O NIVELES DE RENDIMIENTO O LA CLASE DE PROTECCIÓN DEL EPI / <i>PERFORMANCE LEVEL OR PROTECTION CLASS OF THE PPE</i>	FFP2 NR
FECHA DE EMISIÓN / <i>ISSUE DATE</i>	10/08/2022
VALIDEZ HASTA / <i>VALIDITY UNTIL:</i>	11/05/2023
El presente certificado se mantendrá vigente durante 1 año siempre que no se modifiquen las condiciones establecidas en el Certificado de Examen UE de Tipo referenciado en el Anexo. <i>This certificate will remain in force for 1 year as long as the conditions established in the EU Type certificate referenced in the annex are not modified.</i>	



P.A.

Xavier Ruiz Peña
Managing Director, Product Conformity B.U.



Este documento carece de validez sin su anexo técnico, cuyo número coincide con el del certificado.
This document is not valid without its technical annex, whose number coincides with the number of certificate.

Puede comprobarse la validez de este certificado en nuestra página web / *You can check the validity of this certificate on our website:*
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El fabricante, después de completar la documentación técnica, el procedimiento de evaluación de la conformidad y la declaración UE de conformidad puede colocar el marcado CE bajo su responsabilidad / *The manufacturer, after the completion of the technical documentation, the conformity assessment procedures and the EU Declaration of conformity, may affix the CE Marking under his responsibility.*



ANEXO TÉCNICO TECHNICAL ANNEX

0370- 5724-PPE/C2

I. MODELOS INCLUIDOS EN EL CERTIFICADO

REFERENCES INCLUDED IN THIS CERTIFICATE

Nº CERTIFICADO DE EXAMEN UE DE TIPO <i>NR. EU TYPE EXAMINATION CERTIFICATE</i>	0370-5432-PPE/B
EMITIDO POR <i>ISSUED BY</i>	LGAI TECHNOLOGICAL CENTER S.A. (Organismo notificado nº 0370 / Notified Body nr. 0370).
FECHA EMISIÓN <i>ISSUE DATE</i>	22/03/2021
VALIDEZ HASTA <i>VALIDITY UNTIL</i>	22/03/2026
MARCA <i>BRAND</i>	MASKSPRING
IDENTIFICACIÓN DEL EPI (NÚMERO DE TIPO) <i>IDENTIFICATION OF THE PPE (TYPE NUMBER)</i>	Ref.: HMF-101 Particle filtering half mask
NIVEL O NIVELES DE RENDIMIENTO O LA CLASE DE PROTECCIÓN DEL EPI <i>PERFORMANCE LEVEL OR PROTECTION CLASS OF THE PPE</i>	FFP2 NR
DESCRIPCIÓN <i>DESCRIPTION</i>	MEDIA MÁSCARA FILTRANTE SIN VÁLVULA, DE TIPO PLEGABLE VERTICAL, DE 5 CAPAS, DE COLOR BLANCO, CON LAZOS DE OREJA, CLIP NASAL INTERIOR, SIN ACCESORIOS. TAMAÑO: 160mm*105mm. <i>VALVELESS FILTERING HALF MASK, VERTICAL FOLDING TYPE, 5 LAYERS, WHITE COLOUR, WITH EARLOOPS, INTERIOR NOSE CLIP, WITHOUT ACCESSORIES. SIZE: 160mm*105mm</i>
INFORME DE ENSAYO <i>TEST REPORT</i>	MTi220718008P001 issued by Shenzhen Microtest Co., Ltd.

Test Report

Report No.: MTi220718008P001

Date of Issue:2022.08.05

Client: Anhui Humei Medical Instrument Co., Ltd

Product:Particle filtering half mask

Test Type: Commissioned Inspection

Shenzhen Microtest Co., Ltd.

<http://www.mtitest.com>



Instructions

1. The report shall not be partially reproduced without the written consent of the Laboratory ;
2. The test results of this report are only responsible for the samples submitted ;
3. This report is invalid without the seal and signature of the laboratory ;
4. This report is invalid if transferred, altered or tampered with in any form without authorization ;
5. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

TEST REPORT

Report No.: MTi220718008P001

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Basic Information			
Client	Anhui Humei Medical Instrument Co., Ltd		
Client Address	Heping East Road, Tongcheng Economic and Technological Development Zone, Anqing City, Anhui Province		
Manufacturer	Anhui Humei Medical Instrument Co., Ltd		
Manufacturer Address	Heping East Road, Tongcheng Economic and Technological Development Zone, Anqing City, Anhui Province		
Sample Information			
Product	Particle filtering half mask	Sample No.	MTi220718008-1-S0001
Brand/ Trademark	MASKSPRING	Model	HMF-101
Sample Number	70 Pcs	Sample Description	White ear wearing type, folding type mask
Inspection Company	Shenzhen Microtest Co., Ltd.	Sampling Form No.	Random selection
Sampling Company	Anhui Humei Medical Instrument Co., Ltd	Production Date	2022/07/29
APPLUS+ with ID number	22/32305886	Product No./ Batch No.	2022/07/29
Sampling Address	Heping East Road, Tongcheng Economic and Technological Development Zone, Anqing City, Anhui Province		
Testing Information			
Sample Receive Date	2022.08.01	Sample Source	Customer provided
Test Specification	EN 149:2001+A1:2009		
Classification	FFP2 NR		
Date of Tests	2022.08.01~2022.08.05		

TEST REPORT

Report No.: MTi220718008P001

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Test Address	Medical protection laboratory	
Test Requirement	According to the requirement of the Module C2 (SPC CE-062_ EN M6 PPE) of Applus+, the test item(s) of the sample is according to the standard EN149:2001+A1:2009.	
Test Result	Please refer to the following page(s)	
Remarks	"/" in the report means this item is blank,"N/A" in the report means this item is not application.	
Compiled: <i>Naok Zhang</i>	Reviewed: <i>Daniel . Shi</i>	Approved: <i>Tom Xue</i>

Item Name	File No	Uncertainty	
Penetration of filter material	MTI-SOP-PH-U005	$u_{rel} = 2.1\%, k=2$	
Carbon dioxide content of the inhalation air	MTI-SOP-PH-U007	$u_{rel} = 2.0\%, k=2$	
Total inward leakage	MTI-SOP-PH-U008	$u_{rel} = 1.9\%, k=2$	
Breathing resistance	MTI-SOP-PH-U006	30L/min	$u_{rel} = 2.2\%, k=2$
		95L/min	$u_{rel} = 2.1\%, k=2$
		160L/min	$u_{rel} = 2.0\%, k=2$

TEST REPORT

Report No.: MTi220718008P001

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No.	Test Items	Spec Chapter	Requirements	Test Data	Asses sment
1	Cleaning and disinfecting	7.6	Meet the requirements of 7.6	Only applicable to Re-useable Particle filtering half mask.	N/A
2	Practical performance	7.7	The particle filtering half mask shall undergo practical performance tests under realistic conditions.	Meet the requirements.	Pass
3	Total inward leakage	7.9.1	For particle filtering half masks fitted in accordance with the manufacturer's information, at least 46 out of the 50 individual exercise results (i.e. 10 subjects x 5 exercises) for total inward leakage shall be not greater than: 25 % for FFP1, 11 % for FFP2, 5 % for FFP3 . and, in addition, at least 8 out of the 10 individual wearer arithmetic means for the total inward leakage shall be not greater than: 22 % for FFP1, 8 % for FFP2, 2 % for FFP3.	Test results are shown in Annex A Table 7.9.1-A&B.	Pass
4	Penetration of filter material	7.9.2	Sodium chloride test 95L/min: FFP1 ≤ 20%, FFP2 ≤ 6%, FFP3 ≤ 1%. Paraffin oil test 95L/min: FFP1 ≤ 20%, FFP2 ≤ 6%, FFP3 ≤ 1%.	Test results are shown in Annex A Table 7.9.2.	Pass
5	Compatibility with skin	7.10	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.	Meet the requirements.	Pass

TEST REPORT

Report No.: MTi220718008P001

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6	Flammability	7.11	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.	A.R.: 29#:not burn 30#: not burn T.C.: 31#: not burn 32#: not burn	Pass
7	Carbon dioxide content of the inhalation air	7.12	The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1,0 % (by volume).	A.R.: 33#:0.71% 34#:0.73% 35#:0.74% Mean:0.73%	Pass
8	Head harness	7.13	Meet the requirements of 7.13	Meet the requirements.	Pass
9	Field of vision	7.14	The field of vision is acceptable if determined so in practical performance tests.	Meet the requirements.	Pass
Note: A.R.:As received S.W.: Simulated wearing treatment M.S.:Mechanical strength T.C.:Temperature conditioning F.C.:Flow conditioning					

TEST REPORT

Report No.: MTi220718008P001

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Annex A: Summarization of Test Data

Table 7.9.1-A Total inward leakage test data

Test specification: EN 149:2001+A1:2009 Clause 8.5

Subject	No.	Condition	Walk(%)	Head Side/side(%)	Head Up/down(%)	Talk(%)	Walk(%)	Mean(%)
Baron	1#	A.R.	5.39	5.64	6.42	5.01	4.13	5.32
Sunshing	2#	A.R.	6.24	5.75	5.72	4.23	4.57	5.30
Olinia	3#	A.R.	4.66	5.85	6.23	6.85	6.99	6.12
Honk	4#	A.R.	5.66	6.98	5.67	4.65	5.10	5.61
Tobey	5#	A.R.	7.57	6.58	7.35	6.57	7.01	7.02
Elaine	6#	T.C.	3.67	3.45	4.03	3.22	2.84	3.44
Micro	7#	T.C.	4.39	3.99	4.21	5.14	4.17	4.38
Harper	8#	T.C.	3.23	4.51	4.63	5.23	4.58	4.44
Noak	9#	T.C.	2.39	2.40	3.49	2.56	2.49	2.66
Neo	10#	T.C.	6.33	6.24	6.55	7.22	5.39	6.35

Table 7.9.1-B Facial dimension

Subject	Face Length (mm)	Face Width (mm)	Face Depth (mm)	Mouth Width (mm)
Baron	110	140	105	56
Sunshing	110	140	130	60
Olinia	120	125	125	50
Honk	116	149	111	60
Tobey	106	135	116	60
Elaine	102	142	103	59
Micro	125	135	126	50
Harper	133	149	116	65
Noak	110	138	115	57
Neo	130	146	130	55

TEST REPORT

Report No.: MTi220718008P001

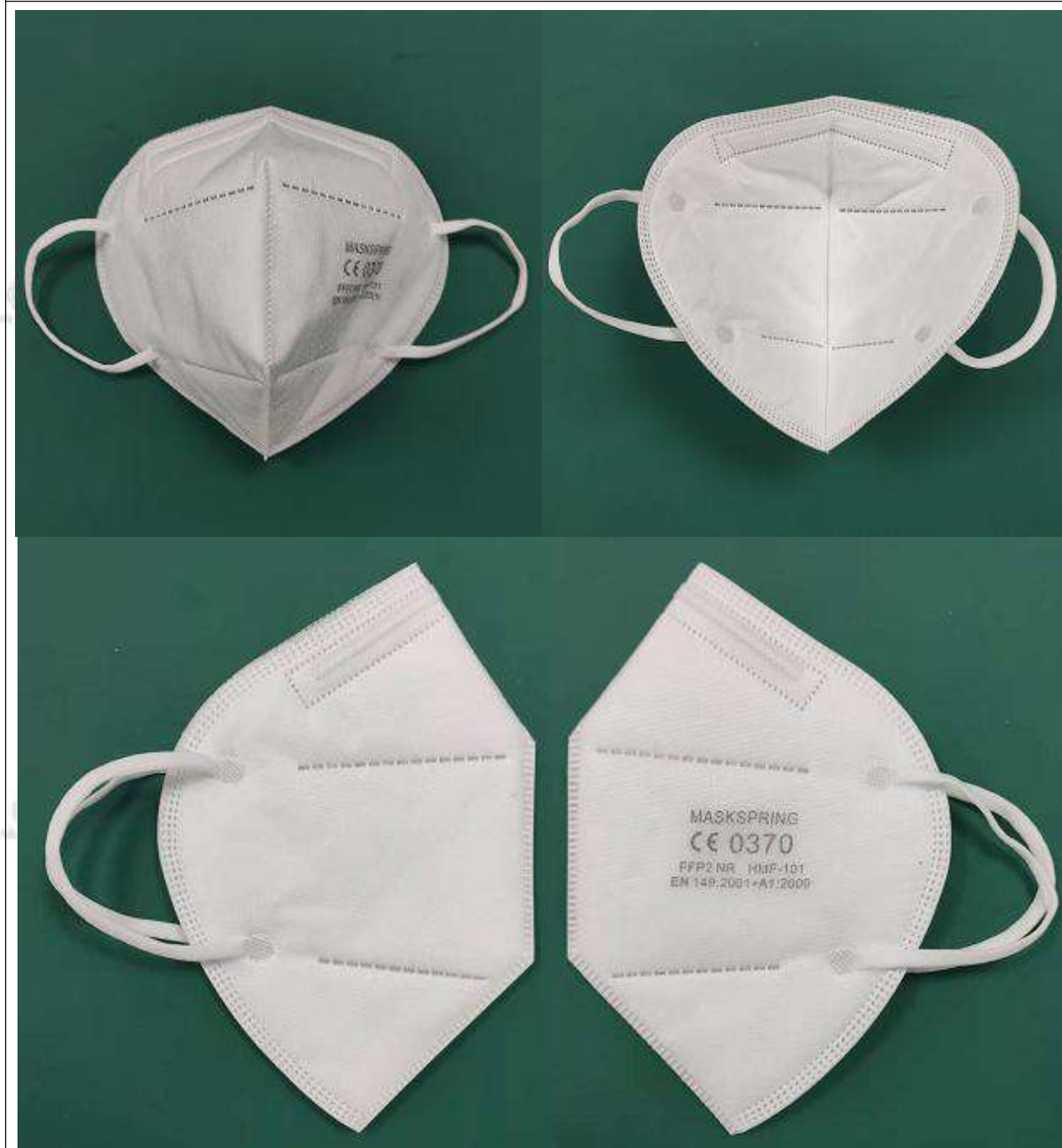
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Table 7.9.2 Penetration of filter material

Test specification: EN 149:2001+A1:2009 Clause 8.11

Aerosol	Condition	Sample No.	Average penetration after 3min (%)	Maximum penetration during exposure (%)
Sodium chloride test Aerosol concentration: 10 mg/m ³	As received	11#	0.01	/
		12#	0.04	/
		13#	0.05	/
	Simulated wearing treatment	14#	0.09	/
		15#	0.07	/
		16#	0.11	/
	Mechanical strength+ Temperature conditioned	17#	/	0.89
		18#	/	0.12
		19#	/	0.38
Paraffin oil Test Aerosol concentration: 22 mg/m ³	As received	20#	0.10	/
		21#	0.08	/
		22#	0.12	/
	Simulated wearing treatment	23#	0.13	/
		24#	0.35	/
		25#	0.44	/
	Mechanical strength+ Temperature conditioned	26#	/	0.21
		27#	/	0.04
		28#	/	0.30

Pictures



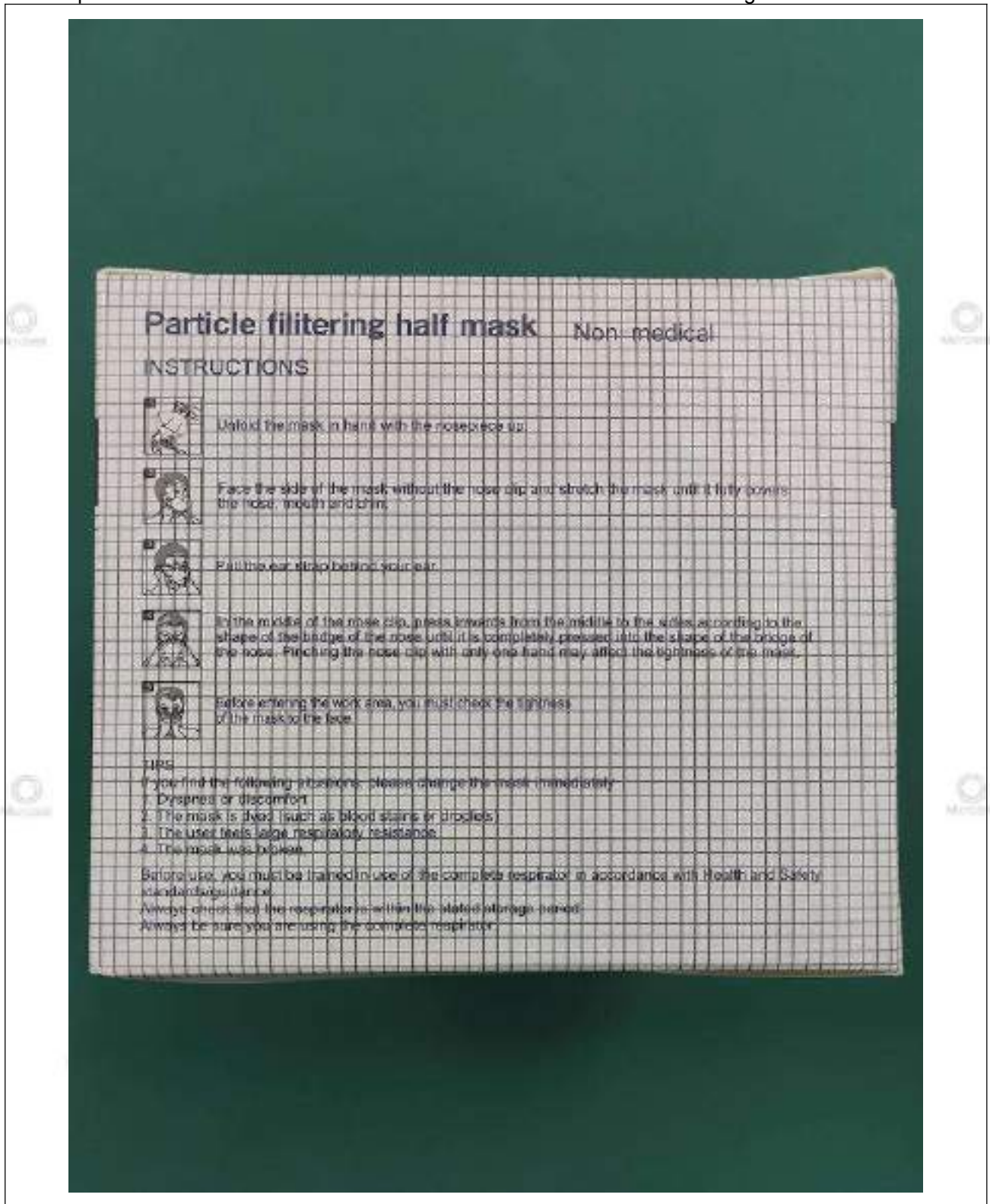
TEST REPORT

Report No.: MTi220718008P001

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TEST REPORT

Report No.: MTi220718008P001

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***** END *****

Test Report

Report No.: MTI210201026P002

Date of Issue: 2021.02.07

Client: Anhui Humei Medical Instrument Co., Ltd

Product: Particle filtering half mask

Test Type: Commissioned Inspection

Shenzhen Microtest Co., Ltd.

<http://www.mtitest.com>



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5. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

TEST REPORT

Report No.: MTI210201026P002

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Basic Information			
Client	Anhui Humei Medical Instrument Co., Ltd		
Client Address	Heping East Road, Tongcheng Economic and Technological Development Zone, Anqing City, Anhui Province		
Manufacturer	Anhui Humei Medical Instrument Co., Ltd		
Manufacturer Address	Heping East Road, Tongcheng Economic and Technological Development Zone, Anqing City, Anhui Province		
Sample Information			
Product	Particle filtering half mask	Sample No.	MTI210201026-1-S0002
Brand/ Trademark	MASKSPRING	Model	HMF-101
Sample Number	80 Pcs	Sample Description	White ear wearing type, folding type mask
Testing Information			
Sample Receive Date	2021.02.04	Sample Source	Customer provided
Test Specification	EN 149:2001+A1:2009		
Classification	FFP2 NR		
Date of Tests	2021.02.04~2021.02.07		
Test Address	Medical protection laboratory		
Test Result	The sample has been tested and the test items meet the requirements of EN 149:2001+A1:2009.		
Remarks	"/" in the report means this item is blank, "N/A" in the report means this item is not application.		
Compiled: <i>Hong Pu</i>	Reviewed: <i>Daniel Shi</i>	Approved: <i>Tom Xue</i>	

TEST REPORT

Report No.: MTI210201026P002

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No.	Test Items	Spec Chapter	Requirements	Test Data	Assesment
1	Visual inspection	7.3	The visual inspection shall also include the marking and the information supplied by the manufacturer.	Meet the requirements.	Pass
2	Material	7.5	Meet the requirements of 7.5	Meet the requirements.	Pass
3	Practical performance	7.7	The particle filtering half mask shall undergo practical performance tests under realistic conditions.	Meet the requirements.	Pass
4	Finish of parts	7.8	Parts of the device likely to come into contact with the wearer shall have no sharp edges or burrs.	Meet the requirements.	Pass
5	Total inward leakage	7.9.1	For particle filtering half masks fitted in accordance with the manufacturer's information, at least 46 out of the 50 individual exercise results (i.e. 10 subjects x 5 exercises) for total inward leakage shall be not greater than: 25 % for FFP1, 11 % for FFP2, 5 % for FFP3 . and, in addition, at least 8 out of the 10 individual wearer arithmetic means for the total inward leakage shall be not greater than: 22 % for FFP1, 8 % for FFP2, 2 % for FFP3.	Test results are shown in Annex A Table 7.9.1-A&B.	Pass
6	Penetration of filter material	7.9.2	Sodium chloride test 95L/min: FFP1 ≤ 20%, FFP2 ≤ 6% , FFP3 ≤ 1%. Paraffin oil test 95L/min: FFP1 ≤ 20%, FFP2 ≤ 6%	Test results are shown in Annex A Table 7.9.2.	Pass

TEST REPORT

Report No.: MTI210201026P002

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			,FFP3≤1%.		
7	Compatibility with skin	7.10	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.	Meet the requirements.	Pass
8	Flammability	7.11	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.	A.R.: 29#:not burn 30#: not burn T.C.: 31#: not burn 32#: not burn	Pass
9	Carbon dioxide content of the inhalation air	7.12	The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1,0 % (by volume).	A.R.: 33#:0.75% 34#:0.76% 35#:0.73% Mean:0.75%	Pass
10	Head harness	7.13	Meet the requirements of 7.13	Meet the requirements.	Pass
11	Field of vision	7.14	The field of vision is acceptable if determined so in practical performance tests.	Meet the requirements.	Pass
12	Exhalation valve(s)	7.15	Meet the requirements of 7.15	Only applicable to Exhalation valve(s) Particle filtering half mask.	N/A
13	Breathing resistance	7.16	Inhalation30L/min: FFP1≤0.6mbar,FFP2≤0.7mbar ,FFP3≤1.0mbar. Inhalation95L/min: FFP1≤2.1mbar,FFP2≤2.4mbar ,FFP3≤3.0mbar. Exhalation160L/min: FFP1≤3.0mbar,FFP2≤3.0mbar ,FFP3≤3.0mbar.	Test results are shown in Annex A Table 7.16.	Pass
14	Demountable parts	7.18	All demountable parts (if fitted) shall be readily connected and	/	N/A

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			secured, where possible by hand.		
Note: A.R.:As received S.W.: Simulated wearing treatment M.S.:Mechanical strength T.C.:Temperature conditioning F.C.:Flow conditioning					

Item Name	File No	Uncertainty	
Penetration of filter material	MTI-SOP-PH-U005	$U_{rel} = 2.1\%, k=2$	
Carbon dioxide content of the inhalation air	MTI-SOP-PH-U007	$U_{rel} = 1.8\%, k=2$	
Total inward leakage	MTI-SOP-PH-U008	$U_{rel} = 1.8\%, k=2$	
Breathing resistance	MTI-SOP-PH-U006	30L/min	$U_{rel} = 2.5\%, k=2$
		95L/min	$U_{rel} = 2.4\%, k=2$
		160L/min	$U_{rel} = 2.3\%, k=2$

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Annex A: Summarization of Test Data

Table 7.9.1-A Total inward leakage test data

Test specification: EN 149:2001+A1:2009 Clause 8.5

Subject	No.	Condition	Walk(%)	Head Side/side(%)	Head Up/down(%)	Talk(%)	Walk(%)	Mean(%)
Elaine	1#	A.R.	3.48	3.51	4.11	4.32	3.51	3.72
Harper	2#	A.R.	2.22	6.31	4.72	4.28	4.54	4.36
Lucy	3#	A.R.	5.47	7.29	7.35	5.35	6.10	6.31
Baron	4#	A.R.	3.67	3.11	2.20	4.00	3.57	3.31
Hong	5#	A.R.	6.23	6.59	5.11	6.84	5.96	6.15
Noak	6#	T.C.	2.68	2.86	3.04	2.75	1.78	2.62
Micro	7#	T.C.	6.72	7.64	7.87	9.98	7.41	7.92
Daniel	8#	T.C.	4.05	5.12	6.07	6.71	3.09	5.01
Olina	9#	T.C.	6.66	5.86	7.25	4.31	6.58	6.13
Shane	10#	T.C.	1.75	2.41	2.57	2.43	4.14	2.66

Table 7.9.1-B Facial dimension

Subject	Face Length (mm)	Face Width (mm)	Face Depth (mm)	Mouth Width (mm)
Elaine	102	142	103	59
Harper	133	149	116	65
Lucy	99	142	108	55
Baron	110	140	105	56
Hong	106	138	115	57
Noak	110	138	115	57
Micro	125	135	126	50
Daniel	120	140	110	55
Olina	120	125	125	50
Shane	110	142	122	60

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Table 7.9.2 Penetration of filter material

Test specification: EN 149:2001+A1:2009 Clause 8.11

Aerosol	Condition	Sample No.	Average penetration after 3min (%)	Maximum penetration during exposure (%)
Sodium chloride test Aerosol concentration: 10 mg/m ³	As received	11#	0.36	/
		12#	0.39	/
		13#	0.44	/
	Simulated wearing treatment	14#	0.49	/
		15#	0.44	/
		16#	0.61	/
	Mechanical strength+ Temperature conditioned	17#	/	0.38
		18#	/	0.33
		19#	/	0.36
Paraffin oil Test Aerosol concentration: 22 mg/m ³	As received	20#	1.30	/
		21#	1.45	/
		22#	1.47	/
	Simulated wearing treatment	23#	1.75	/
		24#	1.69	/
		25#	2.04	/
	Mechanical strength+ Temperature conditioned	26#	/	4.65
		27#	/	4.73
		28#	/	4.98

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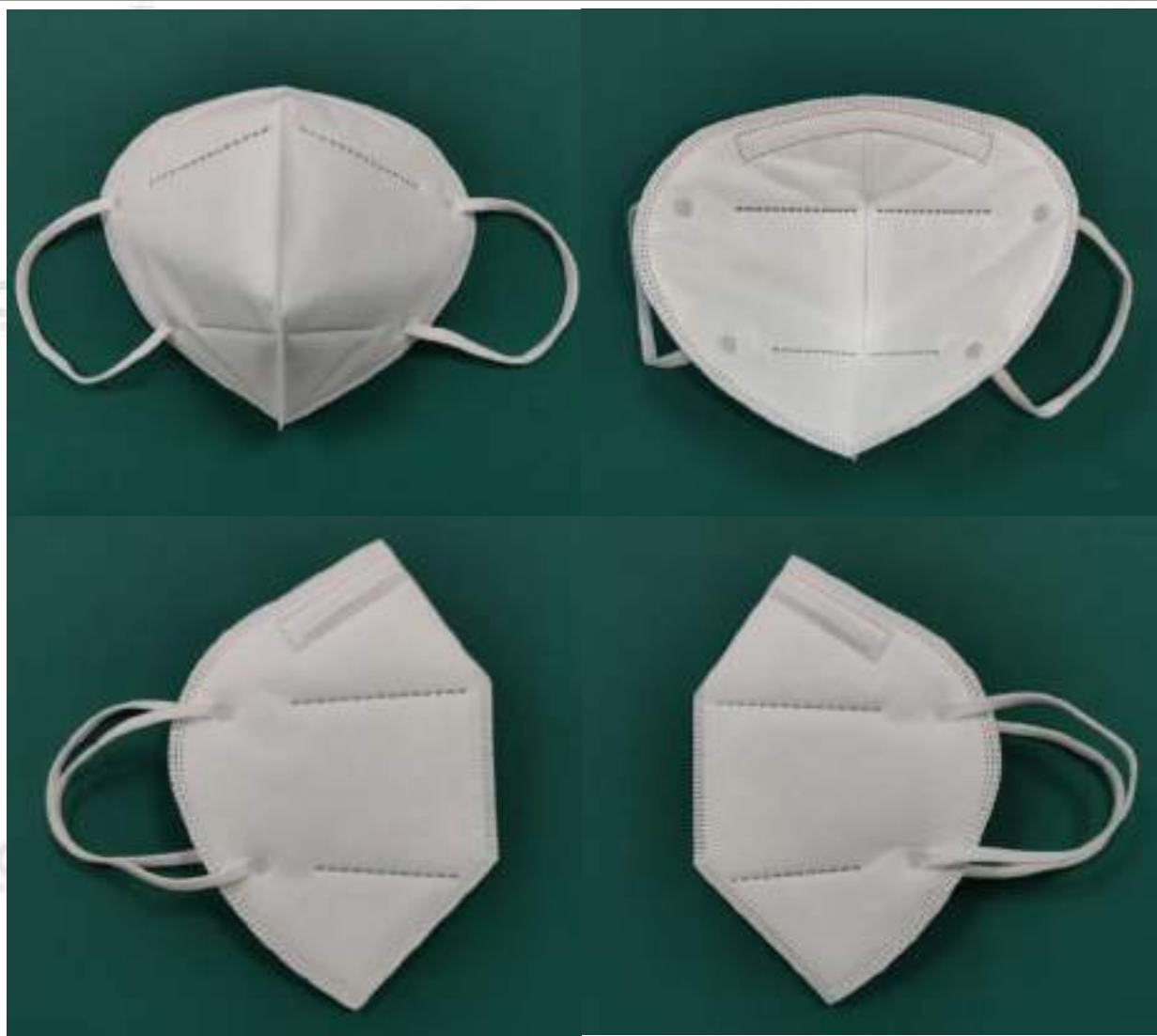
Table 7.16 Breathing resistance(mbar)

Test specification: EN 149:2001+A1:2009 Clause 8.9

	Flow rate		36#					37#					38#				
			A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
As received	Inhalation	30 l/min	0.61	0.62	0.61	0.61	0.60	0.62	0.63	0.62	0.62	0.61	0.59	0.59	0.59	0.58	0.58
		95 l/min	1.99	1.99	1.99	1.98	1.98	2.02	2.01	2.01	2.00	2.00	1.96	1.96	1.96	1.97	1.97
	Exhalation	160l/min	2.84	2.84	2.84	2.83	2.83	2.86	2.87	2.86	2.86	2.85	2.82	2.82	2.83	2.83	2.84
Simulated Wearing treatment	Flow rate		39#					40#					41#				
	Inhalation	30 l/min	0.62	0.61	0.62	0.62	0.63	0.59	0.59	0.60	0.59	0.60	0.59	0.57	0.58	0.58	0.58
		95 l/min	2.10	2.02	2.08	2.08	2.09	1.91	1.88	1.91	1.92	1.91	1.90	1.90	1.89	1.89	1.88
	Exhalation	160l/min	2.87	2.84	2.86	2.84	2.85	2.84	2.84	2.83	2.86	2.87	2.80	2.81	2.81	2.82	2.81
Temperature conditioned	Flow rate		42#					43#					44#				
	Inhalation	30 l/min	0.61	0.62	0.62	0.61	0.61	0.63	0.62	0.63	0.61	0.62	0.64	0.67	0.67	0.65	0.65
		95 l/min	2.04	2.06	2.06	2.05	2.05	2.09	2.07	2.06	2.07	2.08	2.09	2.11	2.07	2.09	2.10
	Exhalation	160l/min	2.86	2.86	2.88	2.86	2.84	2.88	2.89	2.89	2.89	2.89	2.89	2.91	2.93	2.92	2.90

A: facing directly ahead; B: facing vertically upwards; C: facing vertically downwards; D: lying on the left side; E: lying on the right side

Pictures



***** END *****