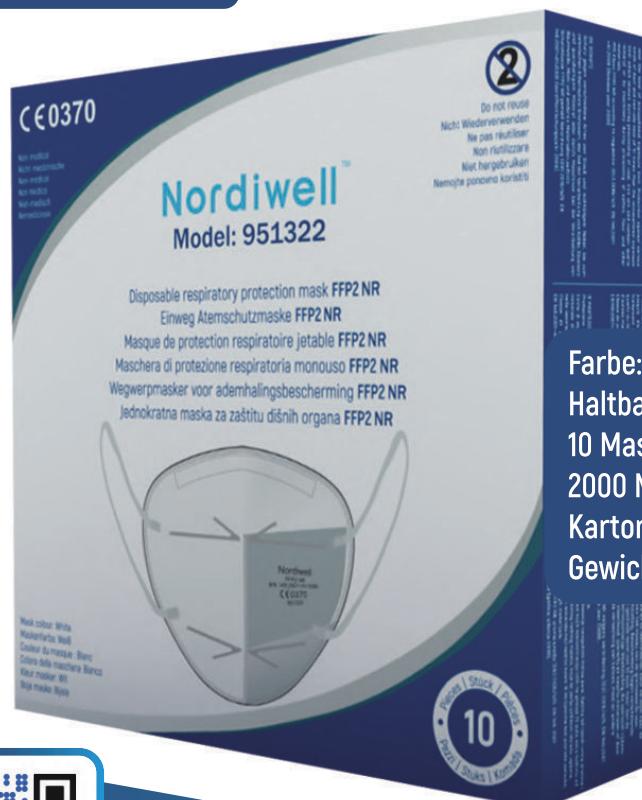




# Nordiwell<sup>TM</sup>

# FFP2 NR Masken

Filternde Halbmaske



Produkt: FFP2 NR Masken

Model: 951322

CE-Norm: EN 149:2001+A1:2009

Lagerstandort EU

Einzelne verpackt

CE-zertifizierte FFP2 NR Masken

Farbe: Weiß, Schwarz

Haltbarkeitsdauer: 2 Jahre

10 Masken pro Box

2000 Masken pro Karton

Karton Abmessungen: 72.5x37x58.5cm

Gewicht des Kartons: 17.5kg



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General-Guisan-Str. 8  
6300 Zug, Schweiz

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[www.OdemShop.de](http://www.OdemShop.de)  
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## CERTIFICADO DE EXAMEN UE DE TIPO EU-TYPE EXAMINATION CERTIFICATE



No. 0370-4900-PPE/B

ORGANISMO NOTIFICADO Nº NOTIFIED BODY NUMBER	0370 - LGAI TECHNOLOGICAL CENTER (APPLUS)
SOLICITANTE / FABRICANTE APPLICANT / MANUFACTURER	<b>Changzhou Combat Protective Equipment Co.,Ltd</b> Qingsitang, Henglin, Changzhou, Jiangsu, 213101 China
PLANTA DE PRODUCCIÓN PRODUCTION SITE	<b>Changzhou Combat Protective Equipment Co.,Ltd</b> Qingsitang, Henglin, Changzhou, Jiangsu, 213101 China
REGLAMENTO DE APLICACIÓN PARA DAR LA CONFORMIDAD / APPLICABLE REGULATION TO GIVE CONFORMITY: REGLAMENTO (UE) 2016/425 SOBRE LOS EQUIPOS DE PROTECCIÓN INDIVIDUAL REGULATION (EU) 2016/425 PERSONAL PROTECTIVE EQUIPMENT	
PROCEDIMIENTO DE EVALUACIÓN DE LA CONFORMIDAD CONFORMITY ASSESSMENT PROCEDURE	Módulo // Module B EXAMEN UE DE TIPO / EU TYPE EXAMINATION
IDENTIFICACIÓN DEL EPI (NÚMERO DE TIPO) IDENTIFICATION OF THE PPE (TYPE NUMBER)	Ref.: 951322 Particulate Respirator
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. EN 149:2001 + A1:2009 Respiratory protective devices. Filtering half masks to protect against particles. Requirements, testing, marking
FECHA DE EMISIÓN / ISSUE DATE	09/12/2020
VALIDEZ HASTA / VALIDITY UNTIL	09/12/2025

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).

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).



Xavier Ruiz Pela  
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.

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Technical Annex Ed. 1  
09/12/2020

## ANEXO TÉCNICO TECHNICAL ANNEX

0370-4900-PPE/B

### I. MODELOS INCLUIDOS EN EL CERTIFICADO

REFERENCES INCLUDED IN THIS CERTIFICATE

MARCA BRAND	Nordiwell
IDENTIFICACIÓN DEL EPI (NÚMERO DE TIPO) IDENTIFICATION OF THE PPE (TYPE NUMBER)	Ref.: 951322 Particulate Respirator
NIVEL O NIVELES DE RENDIMIENTO O LA CLASE DE PROTECCIÓN DEL EPI / PERFORMANCE LEVEL OR PROTECTION CLASS OF THE PPE	FFP2 NR
INFORME DE ENSAYO TEST REPORT	S20111202201E issued by Shenzhen NTEK Testing Technology Co., Ltd. (NTEK)



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## CERTIFICADO DE CONFORMIDAD CON EL TIPO CONFORMITY TO TYPE CERTIFICATE



Organismo Notificado N° 0370

No. 0370-6133-PPE/D

ORGANISMO NOTIFICADO N° NOTIFIED BODY NUMBER	0370 - LGAI TECHNOLOGICAL CENTER (APPLUS)
SOLICITANTE/FABRICANTE APPLICANT/MANUFACTURER	<b>Changzhou Combat Protective Equipment Co., Ltd.</b> QingSiTang, Henglin, Changzhou, Jiangsu, 213101 China
PLANTA DE PRODUCCIÓN PRODUCTION PLANT	<b>Changzhou Combat Protective Equipment Co., Ltd.</b> QingSiTang, Henglin, Changzhou, Jiangsu, 213101 China
<b>REGLAMENTO DE APLICACIÓN PARA DAR LA CONFORMIDAD / APPLICABLE REGULATION TO GIVE CONFORMITY:</b>	
<b>REGLAMENTO (UE) 2016/425 SOBRE LOS EQUIPOS DE PROTECCIÓN INDIVIDUAL REGULATION (EU) 2016/425 PERSONAL PROTECTIVE EQUIPMENT</b>	
PROCEDIMIENTO DE EVALUACIÓN DE LA CONFORMIDAD CON EL TIPO CONFORMITY ASSESSMENT PROCEDURE TO TYPE	Módulo // Module: D <b>BASADA EN EL ASEGURAMIENTO DE LA CALIDAD DEL PROCESO DE PRODUCCIÓN BASED ON QUALITY ASSURANCE OF THE PRODUCTION PROCESS</b>
IDENTIFICACIÓN DEL EPI (NÚMERO DE TIPO) IDENTIFICATION OF THE PPE (TYPE NUMBER)	VER ANEXO / SEE ANNEX
FECHA DE EMISIÓN / ISSUE DATE	10/11/2021
FECHA DE MODIFICACIÓN / MODIFICATION DATE	16/02/2022
VALIDEZ HASTA / VALIDITY UNTIL:	10/11/2022
El presente certificado se mantendrá vigente durante 1 año siempre que no se modifiquen las condiciones establecidas en los Certificados de Examen UE de Tipo referenciados en el Anexo y no cambie el sistema de calidad aprobado. This certificate will remain in force for 1 year as long as the conditions established in the EU Type certificates referenced in the annex are not modified and the approved quality management system does not change.	



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.

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Technical Annex Ed. 2  
 16/02/2022

## ANEXO TÉCNICO TECHNICAL ANNEX

0370-6133-PPE/D

### I. CERTIFICADOS INCLUIDOS EN LA EVALUACIÓN DEL SISTEMA DE CALIDAD

CERTIFICATES INCLUDED IN THE QUALITY SYSTEM ASSESSMENT

Nº CERTIFICADO DE EXAMEN UE DE TIPO NR EU TYPE EXAMINATION CERTIFICATE	0370-4375-PPE/B
EMITIDO POR ISSUED BY	LGAI TECHNOLOGICAL CENTER S.A. (APPLUS) (Organismo notificado n° 0370   Notified Body nr. 0370)
FECHA EMISIÓN ISSUE DATE	10/09/2020
VALIDEZ HASTA VALIDITY UNTIL	10/09/2025

Nº CERTIFICADO DE EXAMEN UE DE TIPO NR EU TYPE EXAMINATION CERTIFICATE	0370-4514-PPE/B
EMITIDO POR ISSUED BY	LGAI TECHNOLOGICAL CENTER S.A. (APPLUS) (Organismo notificado n° 0370   Notified Body nr. 0370)
FECHA EMISIÓN ISSUE DATE	30/09/2020
VALIDEZ HASTA VALIDITY UNTIL	30/09/2025

Nº CERTIFICADO DE EXAMEN UE DE TIPO NR EU TYPE EXAMINATION CERTIFICATE	0370-4516-PPE/B
EMITIDO POR ISSUED BY	LGAI TECHNOLOGICAL CENTER S.A. (APPLUS) (Organismo notificado n° 0370   Notified Body nr. 0370)
FECHA EMISIÓN ISSUE DATE	30/09/2020
VALIDEZ HASTA VALIDITY UNTIL	30/09/2025



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**ANEXO TÉCNICO**  
TECHNICAL ANNEX

**0370-6133-PPE/D**

<b>Nº CERTIFICADO DE EXAMEN UE DE TIPO</b> NR EU TYPE EXAMINATION CERTIFICATE	<b>0370-4900-PPE/B</b>
<b>EMITIDO POR</b> ISSUED BY	LGAI TECHNOLOGICAL CENTER S.A. (APPLUS) (Organismo notificado nº 0370 / Notified Body nr. 0370)
<b>FECHA EMISIÓN</b> ISSUE DATE	09/12/2020
<b>VALIDEZ HASTA</b> VALIDITY UNTIL	09/12/2025

<b>Nº CERTIFICADO DE EXAMEN UE DE TIPO</b> NR EU TYPE EXAMINATION CERTIFICATE	<b>0370-5124-PPE/B</b>
<b>EMITIDO POR</b> ISSUED BY	LGAI TECHNOLOGICAL CENTER S.A. (APPLUS) (Organismo notificado nº 0370 / Notified Body nr. 0370)
<b>FECHA EMISIÓN</b> ISSUE DATE	25/01/2021
<b>VALIDEZ HASTA</b> VALIDITY UNTIL	25/01/2026

<b>Nº CERTIFICADO DE EXAMEN UE DE TIPO</b> NR EU TYPE EXAMINATION CERTIFICATE	<b>0370-6234-PPE/B</b>
<b>EMITIDO POR</b> ISSUED BY	LGAI TECHNOLOGICAL CENTER S.A. (APPLUS) (Organismo notificado nº 0370 / Notified Body nr. 0370)
<b>FECHA EMISIÓN</b> ISSUE DATE	02/02/2022
<b>VALIDEZ HASTA</b> VALIDITY UNTIL	02/02/2027

**Changzhou Combat Protective Equipment Co.,Ltd**  
**Qingsitang, Henglin, Changzhou, Jiangsu, 213101 China**

**EU DECLARATION OF CONFORMITY**

**1. Personal protective equipment:** Particulate Respirator (Model: 951322, Classification: FFP2 NR)

**2. Name and address of the manufacturer:**

Name: Changzhou Combat Protective Equipment Co.,Ltd

Address : Qingsitang, Henglin, Changzhou, Jiangsu, 213101 China

**3. This declaration of conformity is issued under the sole responsibility of the manufacturer:** Changzhou Combat Protective Equipment Co.,Ltd

**4. Object of the declaration is:** Particulate Respirator (Model: 951322, Classification: FFP2 NR) for respiratory protection against particulate.

**5. The object of the declaration described in point 4 is in conformity with the relevant Union Harmonization legislation:** REGULATION (EU) 2016/425 on personal protective equipment and repealing Council Directive 89/686/EEC.

**6. Particulate Respirator (Model: 951322, Classification: FFP2 NR) meets the FFP2 NR requirements of the harmonized standard EN 149:2001+A1:2009 used in order to confirm the conformity with the relevant Union harmonization legislation:** REGULATION (EU)2016/425 on personal protective equipment and repealing Council Directive 89/686/EEC.

**7. The notified body:** NB 0370 - LGAI TECHNOLOGICAL CENTER (APPLUS), with address: Campus UAB, Ronda de la Font del Carme s/n, E-08193 Bellaterra (Barcelona), Spain

**8. Certification Module:** EU TYPE EXAMINATION (Module B) + CONFORMITY TO TYPE BASED ON QUALITY ASSURANCE OF THE PRODUCTION PROCESS (Module D).

Module B certificate number: 0370-4900-PPE/B

Module D certificate number: 0370-6133-PPE/D

Signed for and on behalf of: Changzhou Combat Protective Equipment Co.,Ltd  
Qingsitang, Henglin, Changzhou, Jiangsu, 213101 China

Place and date of issue: Changzhou Nov. 12, 2021

Title: General Manager:

(Signature & Stamp)



# Test Report

Applicant: Changzhou Combat Protective Equipment Co.,Ltd  
Address: Qingsitang, Henglin, Changzhou, Jiangsu, 213101 China

The following sample(s) was/were submitted and identified on behalf of the client as:

Product name: Particulate Respirator  
Model: 951322  
Trade mark: Nordiwell  
Manufacturer: Changzhou Combat Protective Equipment Co.,Ltd  
Address: Qingsitang, Henglin, Changzhou, Jiangsu, 213101 China  
Classification: FFP2 NR  
Sample quantity: 150 Pcs

Sample Received Date: Nov. 23, 2020  
Testing Period: Nov. 23, 2020~ Nov. 29, 2020

**Test Requirement:**

According to the requirement of the client, the test item(s) of the sample is according to the standard EN 149:2001+A1:2009.

**Test Result(s):** Please refer to the following page(s)

**Test Method:** Please refer to the following page(s)

Compiled by:



Reviewed by:

Aja

Approved by:

Date: 2020-11-29

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7.4 Packaging	Pass
7.5 Material	Pass
7.6 Cleaning and disinfecting	N.A.
7.7 Practical performance	Pass
7.8 Finish of parts	Pass
7.9.1 Total inward leakage	Pass
7.9.2 Penetration of filter material	Pass
7.10 Compatibility with skin	Pass
7.11 Flammability	Pass
7.12 Carbon dioxide content of the inhalation air	Pass
7.13 Head harness	Pass
7.14 Field of vision	Pass
7.15 Exhalation valve(s)	N.A.
7.16 Breathing resistance	Pass
7.17 Clogging	N.A.
7.18 Demountable parts	N.A.

**Key**

Pass	Requirement satisfied.
NRq	The clauses were not required.
Fail	Requirement not satisfied. Refer to the "Result details" section for more information.
N.A.	Requirement not applicable.

Test	Uncertainty
Total inward leakage	6.40 %
Penetration of filter material (NaCl)	1.60 %
Penetration of filter material (Paraffin Oil)	1.78 %
Carbon dioxide content of the inhalation air	5.34 %
Breathing resistance (30 L/min)	3.60 %
Breathing resistance (95 L/min)	2.20 %
Breathing resistance (160 L/min)	2.00 %

\* Assessment relates only to those specimens which were tested and subjects in this report.

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# NTEK北测

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## Test Result

Respiratory Protective Devices — Filtering Half Masks to Protect against Particles — Requirements, Testing, Marking  
(EN 149:2001+A1:2009)

### Clause 7.3 Visual inspection

Test Requirement	Results	Comment
Marking and the information supplied by the manufacturer, requirements refer to clause 9 and clause 10.	The clauses were not required.	NRq

### Clause 7.4 Packaging

(EN 149:2001+A1:2009 Clause 8.2)

Test Requirement	Results	Comment
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.	Comply	Pass

### Clause 7.5 Material

(EN 149:2001+A1:2009, Clause 8.2 & 8.3.1 & 8.3.2)

Test Requirement	Results	Comment
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.	Comply	Pass
After undergoing the conditioning described in 8.3.1 none of the particle filtering half masks shall have suffered mechanical failure of the facepiece or straps.	Comply	Pass
When conditioned in accordance with 8.3.1 and 8.3.2 the particle filtering half mask shall not collapse.	Comply	Pass
Any material from the filter media released by the air flow through the filter shall not constitute a hazard or nuisance for the wearer.	Comply	Pass

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# NTEK北测

Report No.: S20111202201E

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## Clause 7.6 Cleaning and Disinfecting

(EN 149:2001+A1:2009, Clause 8.4 & 8.5 & 8.11)

Test Requirement	Results	Comment
If the particle filtering half mask is designed to be re-usable, the materials used shall withstand the cleaning and disinfecting agent and procedures to be specified by the manufacturer. With reference to 7.9.2, after cleaning and disinfecting the re-usable particle filtering half mask shall satisfy the penetration requirement of the relevant class.	Not applicable (Not designed to be re-usable)	N.A.

## Clause 7.7 Practical Performance

(EN 149:2001+A1:2009, Clause 8.4)

Test Requirement	Results	Comment
General: a) head harness comfort b) security of fastenings c) field of vision d) any other comments reported by the wearer on request.	No imperfections	
Walking Test: The subjects wearing normal working clothes and wearing the particle filtering half mask shall walk at a regular rate of 6 km/h on a level course. The test shall be continuous, without removal of the particle filtering half mask, for a period of 10 min.	No imperfections	Pass
Work Simulation Test: a) walking on the level with headroom of $(1.3 \pm 0.2)$ m for 5min b) crawling on the level with headroom of $(0.7 \pm 0.05)$ m for 5min c) filling a small basket (see Figure 1, approximate volume = 8 L) with chippings or other suitable material from a hopper which stands 1.5 m high and has an opening at the bottom to allow the contents to be shovelled out and a further opening at the top where the basket full of chippings is returned.	No imperfections	

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**Clause 7.8 Finish of Parts**

(EN 149:2001+A1:2009, Clause 8.2)

Test Requirement	Results	Comment
Parts of the device likely to come into contact with the wearer shall have no sharp edges or burns.	No sharp edges or burns	Pass

**Clause 7.9.1 Total Inward Leakage**

(EN 149:2001+A1:2009 Clause 8.5)

Test Requirement	Results	Comment
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	Detail refer to Appendix 1	Pass

**Appendix 1: Summarization of Test Data**

Subject	Sample	Condition	Normal Breathing (%)	Head Side/Side (%)	Head Up/Down (%)	Speak Loudly (%)	Normal Breathing (%)	Mean (%)
Huang	1#	A.R.	2.6	2.7	2.8	3.0	2.5	2.72
Zhou	2#	A.R.	2.5	2.6	2.7	2.9	2.4	2.62
Ma	3#	A.R.	2.2	2.3	2.4	2.6	2.3	2.36
Wu	4#	A.R.	3.1	3.2	3.3	3.4	3.0	3.20
Li	5#	A.R.	2.8	2.9	3.1	3.2	2.9	2.98
Wu	6#	T.C.	3.4	3.5	3.6	3.7	3.5	3.54
Zhai	7#	T.C.	3.7	3.9	4.1	4.2	3.6	3.90
Zhen	8#	T.C.	4.5	4.6	4.7	4.9	4.4	4.62
Huang	9#	T.C.	2.9	3.0	3.1	3.2	3.0	3.04
Wu	10#	T.C.	3.0	3.1	3.2	3.3	3.1	3.14

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Report No.: S20111202201E

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**Facial Dimension:**

Subject	Length of Face (mm)	Width of Face (mm)	Depth of Face (mm)	Width of Mouth (mm)
Huang	130	140	125	53
Zhou	100	148	125	55
Ma	120	158	110	50
Wu	110	148	121	44
Li	112	146	112	50
Wu	120	154	128	54
Zhai	135	165	125	53
Zhen	106	155	112	54
Huang	112	157	118	51
Wu	120	172	118	55

**Clause 7.9.2 Penetration of Filter Material**

(EN 149:2001+A1:2009, Clause 8.11 & EN 13274-7:2019)

Test Requirement	Results	Comment
The penetration of the filter of the particle filtering half mask shall meet the requirements of the following table.		
Classification	Maximum penetration of test aerosol(%)	
Sodium chloride test 95 L/min	20	20
FFP1	20	20
FFP2	6	6
FFP3	1	1
Paraffin oil test 95 L/min		
Detail refer to Appendix 2		Pass

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**Appendix 2: Summarization of Test Data**

Penetration of filter material

Aerosol	Condition	Sample No.	Penetration (%)		Assessment
			Average in 30s after 3 min	Max. during exposure	
Sodium chloride test	A.R.	13#	0.77	/	Pass
		14#	0.77	/	
		15#	0.77	/	
	S.W.	19#	0.76	/	
		20#	0.75	/	
		21#	0.78	/	
	M.S. + T.C.	25#	/	0.69	
		26#	/	0.72	
		27#	/	0.73	
Paraffin oil test	A.R.	16#	0.26	/	Pass
		17#	0.26	/	
		18#	0.27	/	
	S.W.	22#	0.25	/	
		23#	0.25	/	
		24#	0.28	/	
	M.S. + T.C.	28#	/	2.30	
		29#	/	2.08	
		30#	/	2.16	
Flow rate of test aerosol: 95.0 L/min					

**Clause 7.10 Compatibility with Skin**

(EN 149:2001+A1:2009, Clause 8.4 & 8.5)

Test Requirement	Results	Comment
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.	No irritation or any other adverse effect to health.	Pass

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Complaint Tel: +86-755-36995510 | Complaint E-mail: complaint@ntek.org.cn

**Clause 7.11 Flammability**

(EN 149:2001+A1:2009, Clause 8.6)

Test Requirement	Results	Comment
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 on burn for more than 5 s after removal from the flame.	Detail refer to Appendix 3	Pass

**Appendix 3: Summarization of Test Data**

Flammability

Condition	Sample No.	Result	Assessment
A.R.	31#	Flammable, burn for no more than 5 s	Pass
	32#	Flammable, burn for no more than 5 s	
T.C.	33#	Flammable, burn for no more than 5 s	Pass
	34#	Flammable, burn for no more than 5 s	

**Clause 7.12 Carbon Dioxide Content of The Inhalation Air**

(EN 149:2001+A1:2009, Clause 8.7)

Test Requirement	Results	Comment
The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1.0 % (by volume).	Detail refer to Appendix 4	Pass

**Appendix 4: Summarization of Test Data**

Carbon Dioxide Content of The Inhalation Air

Condition	Sample No.	Result	Assessment
A.R.	35#	0.38%	Mean value: 0.41% Pass
	36#	0.44%	
	37#	0.41%	

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## Clause 7.13 Head Harness

(EN 149:2001+A1:2009, Clause 8.4 & 8.5)

Test Requirement	Results	Comment
The head harness shall be designed so that the particle filtering half mask can be donned and removed easily.	Comply	
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.	Comply	Pass

## Clause 7.14 Field of Vision

(EN 149:2001+A1:2009, Clause 8.4)

Test Requirement	Results	Comment
The field of vision is acceptable if determined so in practical performance.	Comply	Pass

## Clause 7.15 Exhalation Valve(s)

(EN 149:2001+A1:2009, Clause 8.2 & 8.9.1 & 8.3.4 & 8.8)

Test Requirement	Results	Comment
a) A particle filtering half mask may have one or more exhalation valve(s), which shall function correctly in all orientations.	No valves.	
b) If an exhalation valve is provided it shall be protected against or be resistant to dirt and mechanical damage and may be shrouded or may include any other device that may be necessary for the particle filtering half mask to comply with 7.9.	No valves.	N.A.
c) Exhalation valve(s), if fitted, shall continue to operate correctly after a continuous exhalation flow of 300L/min over a period of 30 s.	No valves.	
(d) When the exhalation valve housing is attached to the faceblank, it shall withstand axially a tensile force of 10N applied for 10 s.	No valves.	

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## Clause 7.16 Breathing Resistance

EN 149:2001+A1:2009, Clause 8.9

Test Requirement	Results	Comment	
The breathing resistances apply to valved and valveless filtering half masks and shall meet the requirements as the following table.			
Classification	Maximum permitted resistance (mbar)		
	Inhalation	Exhalation	
	30 L/min	95 L/min	160 L/min
FFP1	0.6	2.1	3.0
FFP2	0.7	2.4	3.0
FFP3	1.0	3.0	3.0
Detail refer to Appendix 5		Pass	

## Appendix 5: Summarization of Test Data

Specimen	Condition	Inhalation(mbar)		Exhalation resistance(mbar)				
		At 30 L/min	At 95 L/min	At 160 L/min				
				A	B	C	D	E
38#		0.32	0.91	1.32	1.32	1.32	1.31	1.31
39#		0.32	0.93	1.34	1.33	1.34	1.33	1.33
40#		0.33	0.92	1.33	1.32	1.33	1.32	1.32
41#		0.34	0.93	1.33	1.32	1.31	1.31	1.32
42#		0.34	0.92	1.32	1.33	1.33	1.32	1.31
43#		0.35	0.94	1.33	1.34	1.34	1.35	1.34
44#		0.29	0.88	1.27	1.26	1.26	1.25	1.25
45#		0.28	0.88	1.26	1.25	1.26	1.25	1.25
46#		0.29	0.89	1.28	1.27	1.27	1.26	1.26
/		/	/	/	/	/	/	/
/		/	/	/	/	/	/	/
/		/	/	/	/	/	/	/

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

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**Clause 7.17 Clogging**

(EN 149:2001+A1:2009, Clause 8.9 & 8.10)

Test Requirement	Results	Comment
Clause 7.17.2 Breathing resistance Valved particle filtering half masks: After clogging the inhalation resistances shall not exceed: FFP1: 4 mbar, FFP2: 5 mbar, FFP3: 7 mbar at 95L/min continuous flow. The exhalation resistance shall not exceed 3 mbar at 160 L/min continuous flow. Valveless particle filtering half masks: After clogging the inhalation and exhalation resistances shall not exceed: FFP1: 3 mbar, FFP2: 4 mbar, FFP3: 5 mbar at 95L/min continuous flow.	Requirement not applicable.	N.A.
Test Requirement	Results	Comment
Clause 7.17.3 Penetration of filter material All types (valved and valveless) of particle filtering half masks claimed to meet the clogging requirement shall also meet the requirements.	Requirement not applicable.	N.A.
Classification	Maximum penetration of test aerosol Sodium chloride test 95 L/min % max.	Paraffin oil test 95 L/min % max.
FFP1	20	20
FFP2	6	6
FFP3	1	1

**Clause 7.18 Demountable Parts**

(EN 149:2001+A1:2009, Clause 8.2)

Test Requirement	Results	Comment
All demountable parts (if fitted) shall be readily connected and secured, where possible by hand.	No detachable part	N.A.

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Sample photo(s):



Fig.1



Fig.2

\*\*\*\*End of Report\*\*\*\*

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