

# Nordiwell™ FFP2 NR Masken

## Filternde Halbmaske



Produkt: FFP2 NR Masken  
Model: 951322  
CE-Norm: EN 149:2001+A1:2009  
Lagerstandort EU  
Einzel 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



**CERTIFICADO DE EXAMEN UE DE TIPO**  
**EU-TYPE EXAMINATION CERTIFICATE**

Notified Body No. 0370



No. **0370-4900-PPE/B**

|  |   |
|--|---|
| <b>ORGANISMO NOTIFICADO Nº</b><br><i>NOTIFIED BODY NUMBER</i>  | <b>0370 - LGAI TECHNOLOGICAL CENTER (APPLUS)</b>  |
| <b>SOLICITANTE / FABRICANTE</b><br><i>APPLICANT / MANUFACTURER</i>   | <b>Changzhou Combat Protective Equipment Co.,Ltd</b><br>Qingsitang, Henglin, Changzhou, Jiangsu, 213101 China   |
| <b>PLANTA DE PRODUCCIÓN</b><br><i>PRODUCTION SITE</i>  | <b>Changzhou Combat Protective Equipment Co.,Ltd</b><br>Qingsitang, Henglin, Changzhou, Jiangsu, 213101 China   |
| <b>REGLAMENTO DE APLICACIÓN PARA DAR LA CONFORMIDAD / APPLICABLE REGULATION TO GIVE CONFORMITY:</b><br><b>REGLAMENTO (UE) 2016/425 SOBRE LOS EQUIPOS DE PROTECCIÓN INDIVIDUAL</b><br><i>REGULATION (EU) 2016/425 PERSONAL PROTECTIVE EQUIPMENT</i>   |   |
| <b>PROCEDIMIENTO DE EVALUACIÓN DE LA CONFORMIDAD</b><br><i>CONFORMITY ASSESSMENT PROCEDURE</i>   | Módulo // <b>Module B</b><br><b>EXAMEN UE DE TIPO / EU TYPE EXAMINATION</b>   |
| <b>IDENTIFICACIÓN DEL EPI (NÚMERO DE TIPO)</b><br><i>IDENTIFICATION OF THE PPE (TYPE NUMBER)</i>   | Ref.: 951322<br>Particulate Respirator  |
| <b>NIVEL O NIVELES DE RENDIMIENTO O LA CLASE DE PROTECCIÓN DEL EPI / PERFORMANCE LEVEL OR PROTECTION CLASS OF THE PPE</b>  | FFP2 NR   |
| <b>NORMAS ARMONIZADAS / HARMONISED STANDARDS</b>   | EN 149:2001 + A1:2009 Dispositivos de protección respiratoria. Mascaras filtrantes de protección contra partículas. Requisitos, ensayos, marcado.<br><i>EN 149:2001 + A1:2009 Respiratory protective devices. Filtering half masks to protect against particles. Requirements, testing, marking</i> |
| <b>FECHA DE EMISIÓN / ISSUE DATE</b>   | <b>09/12/2020</b>   |
| <b>VALIDEZ HASTA / VALIDITY UNTIL</b>  | <b>09/12/2025</b>   |
| 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).<br><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> |   |

Applus<sup>+</sup>  
 Xavier Ruiz Peris, S.A.  
 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](http://www.appluslaboratories.com/certified_products)



**ANEXO TÉCNICO**  
**TECHNICAL ANNEX**

**0370-4900-PPE/B**

**I. MODELOS INCLUIDOS EN EL CERTIFICADO**

*REFERENCES INCLUDED IN THIS CERTIFICATE*

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



Organismo Notificado nº 0370

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

No. **0370-6133-PPE/D**

|   |  |
|---|--|
| <b>ORGANISMO NOTIFICADO Nº</b><br><i>NOTIFIED BODY NUMBER</i>   | <b>0370 - LGAI TECHNOLOGICAL CENTER (APPLUS)</b>   |
| <b>SOLICITANTE/FABRICANTE</b><br><i>APPLICANT/MANUFACTURER</i>  | <b>Changzhou Combat Protective Equipment Co., Ltd.</b><br>QingSiTang, Henglin, Changzhou, Jiangsu, 213101 China  |
| <b>PLANTA DE PRODUCCIÓN</b><br><i>PRODUCTION PLANT</i>  | <b>Changzhou Combat Protective Equipment Co., Ltd.</b><br>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</b><br><i>REGULATION (EU) 2016/425 PERSONAL PROTECTIVE EQUIPMENT</i> |  |
| <b>PROCEDIMIENTO DE EVALUACIÓN DE LA CONFORMIDAD CON EL TIPO</b><br><i>CONFORMITY ASSESSMENT PROCEDURE TO TYPE</i>                          | Módulo // Module: <b>D</b><br><b>BASADA EN EL ASEGURAMIENTO DE LA CALIDAD DEL PROCESO DE PRODUCCIÓN</b><br><i>BASED ON QUALITY ASSURANCE OF THE PRODUCTION PROCESS</i> |
| <b>IDENTIFICACIÓN DEL EPI (NÚMERO DE TIPO)</b><br><i>IDENTIFICATION OF THE PPE (TYPE NUMBER)</i>  | VER ANEXO / SEE ANNEX  |
| <b>FECHA DE EMISIÓN   ISSUE DATE</b>  | <b>10/11/2021</b>  |
| <b>FECHA DE MODIFICACIÓN   MODIFICATION DATE</b>  | <b>16/02/2022</b>  |
| <b>VALIDEZ HASTA   VALIDITY UNTIL:</b>  | <b>10/11/2022</b>  |

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.*



LGAI Technological Center, S.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:  
[www.appluslaboratories.com/certified\\_products](http://www.appluslaboratories.com/certified_products)



**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*

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

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

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

**ANEXO TÉCNICO**  
TECHNICAL ANNEX

**0370-6133-PPE/D**

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

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

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

Approved by:  Date: 2020-11-29

Shenzhen NTEK Testing Technology Co., Ltd. | Address: 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R.China. | Tel: +86-755-36995508 | Fax: +86-755-36995505 http://www.ntek.org.cn  
 Complaint Tel: +86-755-36995510 | Complaint E-mail: complaint@ntek.org.cn

|   |      |
|---|------|
| 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.

Shenzhen NTEK Testing Technology Co., Ltd. | Address: 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R.China. | Tel: +86-755-36995508 | Fax: +86-755-36995505 http://www.ntek.org.cn  
 Complaint Tel: +86-755-36995510 | Complaint E-mail: complaint@ntek.org.cn



**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    |

**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 agents and procedures to be specified by the manufacturer.<br>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 |
|---|------------------|---------|
|   | Sample 11#~12#:  |         |
| General:<br>a) head harness comfort<br>b) security of fastenings<br>c) field of vision<br>d) any other comments reported by the wearer on request.  | No imperfections | Pass    |
| Walking Test:<br>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 |         |
| Work Simulation Test:<br>a) walking on the level with headroom of (1.3±0.2)m for 5min<br>b) crawling on the level with headroom of (0.7±0.05)m for 5min<br>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 |         |



**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 burrs. | No sharp edges or burrs | 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:<br>25% for FFP1<br>11% for FFP2<br>5% for FFP3<br>and, in addition, at least 8 out of the 10 individual wearer arithmetic means for the total inward leakage shall be not greater than:<br>22% for FFP1<br>8% for FFP2<br>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     |

**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. |  |                            | Detail refer to Appendix 2 | Pass    |
| Classification  | Maximum penetration of test aerosol(%) |                            |                            |         |
|   | Sodium chloride test 95 L/min          | Paraffin oil test 95 L/min |                            |         |
| FFP1  | 20                                     | 20                         |                            |         |
| FFP2  | 6                                      | 6                          |                            |         |
| FFP3  | 1                                      | 1                          |                            |         |



**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                       | /                    |            |
|                      |             | 25#        | /                          | 0.69                 |            |
|                      | M.S. + T.C. | 26#        | /                          | 0.72                 |            |
|                      |             | 27#        | /                          | 0.73                 |            |
|                      |             | 16#        | 0.26                       | /                    |            |
| Paraffin oil test    | A.R.        | 17#        | 0.26                       | /                    |            |
|                      |             | 18#        | 0.27                       | /                    |            |
|                      |             | 22#        | 0.25                       | /                    |            |
|                      |             | 23#        | 0.25                       | /                    |            |
|                      | S.W.        | 24#        | 0.28                       | /                    |            |
|                      |             | 28#        | /                          | 2.30                 |            |
|                      |             | 29#        | /                          | 2.08                 |            |
|                      | M.S. + T.C. | 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    |

**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 |            |
|           | 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%             | Pass       |
|           | 36#        | 0.44%             |            |
|           | 37#        | 0.41%             |            |
|           |            | Mean value: 0.41% |            |





**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  | Pass    |
| 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  |         |

**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. | N.A.    |
| 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. |         |
| 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. |         |

**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. | Detail refer to Appendix 5 | Pass    |                                     |          |            |
| 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                                 |          |            |

**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#      | A.R.      | 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#      | S.W.      | 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#      | T.C.      | 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 |
| /        | F.C.      | /                | /           | /                           | /    | /    | /    | /    |
| /        |           | /                | /           | /                           | /    | /    | /    | /    |
| /        |           | /                | /           | /                           | /    | /    | /    | /    |

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



**Clause 7.17 Clogging**  
(EN 149:2001+A1:2009, Clause 8.9 & 8.10)

| Test Requirement   | Results                     | Comment                             |                            |                               |                            |        |        |      |    |    |      |   |   |      |   |   |                             |      |
|--|-----------------------------|-------------------------------------|----------------------------|-------------------------------|----------------------------|--------|--------|------|----|----|------|---|---|------|---|---|-----------------------------|------|
| <p>Clause 7.17.2 Breathing resistance<br/>Valved particle filtering half masks:<br/>After clogging the inhalation resistances shall not exceed:<br/>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.<br/>Valveless particle filtering half masks:<br/>After clogging the inhalation and exhalation resistances shall not exceed: FFP1: 3 mbar, FFP2: 4 mbar, FFP3: 5 mbar at 95L/min continuous flow.</p>  | Requirement not applicable. | N.A.                                |                            |                               |                            |        |        |      |    |    |      |   |   |      |   |   |                             |      |
| <p>Clause 7.17.3 Penetration of filter material<br/>All types (valved and valveless) of particle filtering half masks claimed to meet the clogging requirement shall also meet the requirements.</p> <table border="1"> <thead> <tr> <th rowspan="3">Classification</th> <th colspan="2">Maximum penetration of test aerosol</th> </tr> <tr> <th>Sodium chloride test 95 L/min</th> <th>Paraffin oil test 95 L/min</th> </tr> <tr> <th>% max.</th> <th>% max.</th> </tr> </thead> <tbody> <tr> <td>FFP1</td> <td>20</td> <td>20</td> </tr> <tr> <td>FFP2</td> <td>6</td> <td>6</td> </tr> <tr> <td>FFP3</td> <td>1</td> <td>1</td> </tr> </tbody> </table> | Classification              | Maximum penetration of test aerosol |                            | Sodium chloride test 95 L/min | Paraffin oil test 95 L/min | % max. | % max. | FFP1 | 20 | 20 | FFP2 | 6 | 6 | FFP3 | 1 | 1 | Requirement not applicable. | N.A. |
| Classification   |                             | Maximum penetration of test aerosol |                            |                               |                            |        |        |      |    |    |      |   |   |      |   |   |                             |      |
|  |                             | Sodium chloride test 95 L/min       | Paraffin oil test 95 L/min |                               |                            |        |        |      |    |    |      |   |   |      |   |   |                             |      |
|  | % max.                      | % 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.    |

Sample photo(s):



Fig.1



Fig.2

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

The test report is effective only with both signature and specialized stamp, the result(s) shown in this report refer only to the sample(s) tested. Without written approval of NTEK, this report can't be reproduced except in full; The laboratory is not responsible for the authenticity of the sample information provided by the customer; The laboratory is not responsible for any deviation of results due to methods/standards provided by the customer.