HATEX GROUP

ZHONGNAN

ZN9501

Artikelnummer: 50006

4 047125 500066

Black FFP2 Mask
CE2834
EN149:2001+A1:2009

HATEX GROUP

ZHONGNAN

ZN9501

Artikelnummer: 50007

4 047125 500073

Grey FFP2 Mask
CE2834
EN149:2001+A1:2009

HATEX GROUP

ZHONGNAN

ZN9501

Artikelnummer: 50008

4 047125 500080

Dark Blue FFP2 Mask
CE2834
EN149:2001+A1:2009

HATEX GROUP

ZHONGNAN

ZN9501

Artikelnummer: 50009

4 047125 500097

Pink FFP2 Mask
CE2834
EN149:2001+A1:2009

HATEX®
GROUP

Single Bag / Einzelverpackt

FFP2 NR - Maske
Filternde Halbmaske

Nicht medizinisch EN149:2001+ A1: 2009

- Hohe Filtrationseffizienz
- Geringer Atemwiderstand
- Bequem zu tragen

FFP2 NR Mask
Filtering Half Mask

NON MEDICAL EN149:2001+ A1:2009

- High filtration efficiency
- Low respiratory resistance
- More comfortable to wear

ZHONGNAN

5 lagig
5 layers

x 1
Mit Maskenhalter
Incl. Mask Mate - Belt Extension Kit

1 Stück
1 PC

CE 2834

Standard:EN149:2001+A1:2009

Model: ZN9501

Bedienungsanleitung / Fitting instructions

1. • Nehmen Sie die Maske heraus und öffnen Sie beide Seiten.
   • Take out the mask and open both sides.
2. • Drücken Sie die Atemschutzmaske mit dem Bügel auf dem Nasenrücken gegen Ihr Gesicht. Positionieren Sie die elastischen Bänder hinter den Ohren.
   • Press the mask against your face with the nose clip on the bridge of your nose. Position elastic belts to the back of ears.
3. • Formen Sie den Bügel mit beiden Händen in die Form Ihrer Nase.
   • Shape the nose clip into the shape of your nose with both hands.
4. • Testen Sie die Passform. Nehmen Sie beide Hände über die Atemschutzmaske und atmen Sie kräftig aus. Wenn Luft um Ihre Nase strömt, ziehen Sie den Bügelfester.
   • Test the correct fit. Put both hands over the respirator and exhale forcefully. When air flows out around your nose, press the nose clip tighter.
5. type I | type II | type III

For single use only | Do not use if package is damaged | Keep away from sunlight | See the information provided by the manufacturer | ≤80% Maximum relative humidity of storage conditions | -10°C +40°C The temperature range of storage conditions

HINWEIS ZUR VERWENDUNG:
- Bitte verwenden Sie dieses Produkt nicht in der Nähe einer Feuerquelle.
- Aufgrund persönlicher Unterschiede kann Nebel in den Augen auftreten. Achten Sie daher beim Fahren besser darauf.
- Da es sich bei diesem Produkt um eine Einweg maske handelt, kann es nicht durch Waschen wiederverwendet werden.
- Von hohen Temperaturen und Luftfeuchtigkeit fernhalten und an einem sauberen Ort aufbewahren.
- Verwenden Sie einzeln verpackte Produkte, sobald diese ausgepackt sind.

NOTICE FOR USE:
- Please do not use this product near Fire sources.
- Due to personal differences fog may appear in the eyes, so please pay more attention when driving.
- As this product is a disposable mask, it cannot be reused through washing.
- Keep it away from high temperature and humidity, and keep it in a clean place.
- Use individually packaged products as soon as they are unpacked.

FABRIK / MANUFACTORY:
Anhui Zhongnan Air Defence Works Protective Co. Ltd
Address: Qianshan Comprehensive Economic Development Zone, Anhui Province, China

IMPORTEUR:
HATEX AS GMBH & Co.KG
Jakob-Kaiser-Str. 12, 47877 Willich, Germany
info@hatex24.de

NOTIFIED BODY / BENANNTE STELLE
CCQS Certification Services Limited. NB: 2834
Address: Block 1 Blanchardstown Corporate Park, Ballycoolin Road, Blanchardstown, Dublin 15, D15 AKK1, Ireland

Production date / Produktionsdatum: **2021-02-02**
Expiration date / Verfallsdatum: **2024-02-01**

Artikelnummer: 50006

4 047125 500066

#BE0002736

20 PCS / 20 Stück - Box - black

20 PCS / 20 Stück - Box - anthracite

20 PCS / 20 Stück - Box - dark blue

20 PCS / 20 Stück - Box -pink

Übersetzung der EU Konformitätserklärung

ANNEX IX PPE Regulation (EU) 2016/425

Diese EU Konformitätserklärung gilt für folgend genannte Produkte:

1. Produkt Information

Name Partikelfilternde Halbmaske/ Gesichtsmaske

Modell: ZN 9501

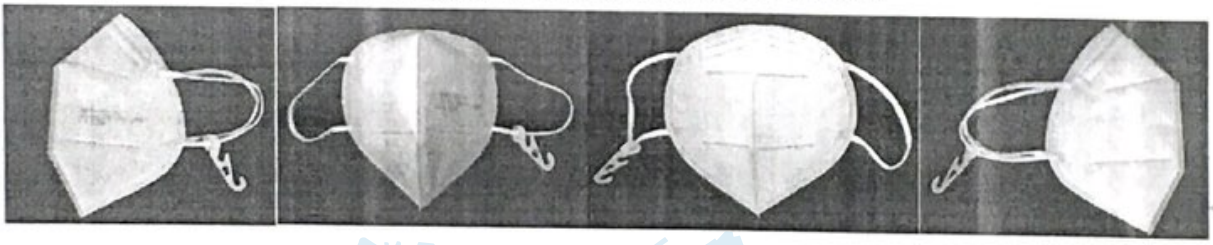
Klassifikation: FFP2

2. Adressdaten des Herstellers

Name: Anhui Zhongnan Air defence Works Protective Co., Ltd.

Adresse: Qianshan Comprehensive Economic Development Zone, Anhui Province, China

3. Detaillierte Beschreibung der FFP2 Maske ohne Ventil (weitere Farben, weiß. Schwarz, grau, pink, blau), mit Nasenclip aus Metall. Folgende Bilder zeigen nur die weiße Maske.



Der oben abgebildete Artikel erfüllt in 4 Bildern aufgezeigt, die wichtigen Merkmale nach

Regulation (Norm) (EU) 2016/425 und ist dadurch identifizierbar.

Die Konformität mit europäischen Harmoniesierungsvorschriften ist erfüllt einschließlich aller weiteren technischen Spezifikationen und Daten, in Bezug auf die Konformität nach 149:2001+A1:2009

CCQS Certification Services Limited , führte alle den EU Vorschriften entsprechenden Untersuchungen durch(ModelB) und gab die EC Klassifizierung Model B aus und ordnete die CE Kennzeichnung NB2834 zu. Gültigkeits-Prüfung unter www.ccqs.com
EU Typ Untersuchung/Prüfung (Modul B) Zertifikatsnummer:

No.	EU Type Examination (Module B) Certificate Number
1	CE-PC-200530-449-01-9B

Produktkategorie: Dieses Produkt fällt in Kategorie III und ist Bestandteil des Moduls C2 der internationalen Produktkontrolle und wird beaufsichtigt mit Produktuntersuchungen, die regelmäßig und wiederholt von der Firma CCQS Certification Services Limited durchgeführt werden (NB2834)

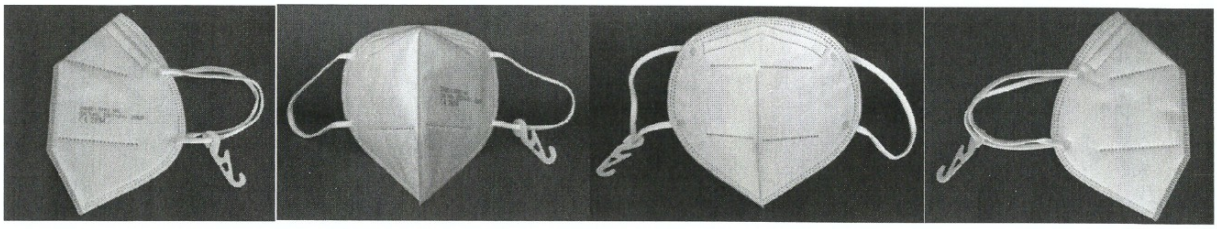
Unterschrift/ Firmenstempel mit Datum :

Bin Ge Sep 4th, 2020

EU Declaration of Conformity
Annex IX PPE Regulation (EU) 2016/425

This EU Declaration of conformity refers to the following products:

1. Product info
   Name: Particle filtering half mask
   Model: ZN9501
   Classification: FFP2
   Serial No.: ---
2. The Manufacturer's name and address is as follows:
   Name: Anhui Zhongnan Air Defence Works Protective Co., Ltd.
   Address: Qianshan Comprehensive Economic Development Zone, Anhui Province, China
3. This Declaration of Conformity is issued under the sole responsibility of the Manufacturer.
4. Detailed description of the PPE to allow traceability/identification of the PPE.
   ZN9501
   Folding particle filtering half mask without valve（Color：white,black,gray,pink,bule）, internal metal nose clip,the following shows only white samples



The article identified in (4) above is in conformance with the relevant Union Harmonization Legislation Regulation (EU) 2016/425.

References to the relevant harmonized standards used, including the date of the standard, or references to the other technical specifications, including the date of the specification, in relation to which conformity is declared:

EN 149:2001+A1:2009

CCQS Certification Services Limited. (NB 2834) performed the EU Type Examination (Module B) and issued the Type Examination Certificate Number: Module B

No.	EU Type Examination (Module B) Certificate Number
1	CE-PC-200530-449-01-9B

Product Category:

☒ This product is Category III and is subject to Module C2 internal production control plus supervised product checks at random intervals and is under the surveillance of CCQS Certification Services Limited. (NB 2834)

☐ This product is Category III and is subject to Module D Conformity to type based on quality assurance of the production process and is under the surveillance of CCQS Certification Services Limited. (NB 2834)

Signature: Zin Ge Date: 2020.9.4

Company stamp and/or legal signature:

Module B EU Type-Examination Certificate

For the requirements of PPE Regulation 2016/425

Certificate No.: CE-PC-200530-449-01-9B

Certificate holder:	**Anhui Zhongnan Air Defence Works Protective Co., Ltd.** Qianshan Comprehensive Economic Development Zone, Anhui Province, China
Product:	**Particle filtering half mask** Detailed product description listed in the Annex
Model(s):	ZN9501
Standard(s):	EN 149:2001+A1:2009 Respiratory protective devices - Filtering half masks to protect against particles - Requirements, testing, marking
Issue date:	2020-06-15
Revision date:	2020-09-14
Expiry date:	2021-06-14

The product(s) on this certificate and the Technical File have been assessed and found to be in conformance with the applicable Essential Health and Safety Requirements in Annex II of the PPE regulation 2016/425.
Any changes to the design, manufacturing location or manufacture of the PPE product certified here must be advised to CCQS Certification Services Limited for review.
CE marking shall not be applied until the requirements of all the PPE Regulation 2016/425 and relevant EN Harmonised standards and/or Technical specifications have been met.
If the certified product is Category III then this certificate is only valid if used in conjunction with Conformity Assessment against Module C2 or Module D.
This certificate remains the property of CCQS and maybe withdrawn at any time if it is considered that the equipment is no longer in conformity with the requirements of the PPE Regulation 2016/425.

CE

Approved by Ireland Government as a Notified Body for CE Marking No.2834

ISO 17065 INAB ACCREDITED PRODUCT CERTIFICATION DETAILED IN SCOPE REG NO.6028

Approved by:

CCQS Ireland Certification

Owen Bian, Director

CCQS Certification Services Limited
Block 1 Blanchardstown Corporate Park, Ballycoolin Road, Blanchardstown, Dublin15, D15 AKK1, Ireland
Tel: +00 353 1 588 6920 Website: www.ccqs.co.uk E-mail: verify@ccqs.ie

Module B EU Type-Examination Certificate

Annex

For the requirements of PPE Regulation 2016/425

Certificate No.: CE-PC-200530-449-01-9B

Applicable standards and specification:
EN 149:2001+A1:2009 Respiratory protective devices - Filtering half masks to protect against particles - Requirements, testing, marking

Model reference	Product description
ZN9501	Folding filtering half mask fitted with ear loops with head harness clip, no valves, internal metal nose clip Mask body color: White, Black, Gray, Blue, Pink Classification: FFP2 NR Test report No.: WLH0241-2020, WLH0515-2020

Certificate Revision	Revision date	Revision details
A	2020-06-15	Initial issue
B	2020-09-14	Certificate validity extended to one year

CCQS Ireland Certification

CE

CCQS Certification Services Limited
Block 1 Blanchardstown Corporate Park, Ballycoolin Road, Blanchardstown, Dublin15, D15 AKK1, Ireland
Tel: +00 353 1 588 6920 Website: www.ccqs.co.uk E-mail: verify@ccqs.ie

Certificate of Module C2 production monitoring for equipment within the scope of Personal Protective Equipment Regulation (EU) 2016/425 Category III

FPC Certificate No.: CE-PC-200530-449-FPC-B

Certificate holder:	**Anhui Zhongnan Air Defence Works Protective Co., Ltd.** Qianshan Comprehensive Economic Development Zone, Anhui Province, China
Manufacturing Location:	Qianshan Comprehensive Economic Development Zone, Anhui Province, China
The scope of the certification for:	**The manufacture of respiratory protective device** See annex for articles covered by this certificate
Validity from:	2020-06-15
Revision date:	2020-09-14
To:	2021-06-14

CCQS Certification Services Limited in its role as a Notified Body for PPE Regulation, is monitoring that the manufacturer is producing PPE in conformity with the type described in the EU type-examination certificate and associated technical file and which satisfies the Essential Health and Safety Requirements of the Regulation.
The equipment covered by this certificate is listed in the accompanying schedule. This certificate is not complete and has no validity without the accompanying schedule and revision index.
The manufacturer is hereby authorized to affix our Notified Body number, 2834, to each item of PPE mentioned in the schedule which accompanies this certificate whilst this certificate remains valid.
This certificate and the accompanying schedule remain the property of CCQS and maybe withdrawn or revised at any time if CCQS considers that the equipment is no longer in conformity with the requirements of the Regulation.

CE

Approved by Ireland Government as a Notified Body for CE Marking No.2834

ISO 17065 INAB ACCREDITED PRODUCT CERTIFICATION DETAILED IN SCOPE REG NO.6028

Approved by:

CCQS Ireland Certification

Owen Bian, Director

CCQS Certification Services Limited
Block 1 Blanchardstown Corporate Park, Ballycoolin Road, Blanchardstown, Dublin15, D15 AKK1, Ireland
Tel: +00 353 1 588 6920 Website: www.ccqs.co.uk E-mail: verify@ccqs.ie
If in any doubt about the integrity of this certificate, please contact CCQS by email to verify.

Schedule of Module C2 production monitoring for equipment within the scope of Personal Protective Equipment Regulation (EU) 2016/425 Category III

Schedule to CCQS FPC Certificate No.: CE-PC-200530-449-FPC-B

Product reference and description		Reference standard
Particle Filtering Half Mask	Model: ZN9501	EN 149:2001+A1:2009

Certificate Revision	Revision date	Revision details
A	2020-06-15	Initial issue
B	2020-09-14	Certificate validity extended to one year

This schedule has no validity without the accompanying certificate.
This schedule and the accompanying certificate remain the property of CCQS and maybe withdrawn or revised at any time if CCQS considers that the equipment is no longer in conformity with the requirements of the Regulation.

CCQS Ireland Certification

CE

CCQS Certification Services Limited
Block 1 Blanchardstown Corporate Park, Ballycoolin Road, Blanchardstown, Dublin15, D15 AKK1, Ireland
Tel: +00 353 1 588 6920 Website: www.ccqs.co.uk E-mail: verify@ccqs.ie
If in any doubt about the integrity of this certificate, please contact CCQS by email to verify.

China academy of safety science and technology (CASST) is accredited for compliance with ISO/IEC 17025.
The results of tests, calibrations and/or measurements included in this document are traceable to Chinese/national standards.
CNAS is a signatory to the ILAC mutual recognition arrangement for the mutual recognition of the equivalence of testing, calibration and inspection reports.

TEST REPORT

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

Report no:	**WLH0241-2020**
Product:	**KN95 Protective Mask (Non-Medical)**
Model (s):	**ZN9501**
Main components:	**Mask body, without exhalation valve**
Date(s) of tests:	**18th Apr～8th May 2020**

Client	**Manufacturer**
Anhui Zhongnan Air Dedence Works Protective Co., Ltd.	**Anhui Zhongnan Air Dedence Works Protective Co., Ltd.** Qianshan Comprehensive Economic Development Zone, Anhui Province, China Contact: Mr. Chu E-mail: / Phone: +8618956915566
Client order: / Order(s) received: Apr, 2020	

Conditions:

This report shall not be reproduced except in full, without the written approval of CASST.

The results described in this test report refer to the mentioned test samples, exclusively. A copy of the test report, complete or in extracts, is not allowed without any written permission of the CASST.

Any objection should be submitted within 2 weeks from the date of receipt of the report, and it will not be accepted after the deadline.

Specimens will be disposed of 4 weeks from the date of this report, unless otherwise instructed.

Signed: 张明明/Zhang Mingming, Authorized Signatory

Issued: 2020-05-09

中国安全生产科学研究院/China Academy of Safety Science and Technology
Address: No.17 Huixinxi Street, Chaoyang District, 100029, Beijing, China
Phone: +86 10 64941264, Fax: +86 10 64812561
E-mail: ldfh@chinasafety.ac.cn
Sino-Japanese Cooperative Respiratory Protection Laboratory
Designated Testing Laboratory of the Certification of LA Mark in China

Summary of assessment*

Clause		Assessment
	Model:	**ZN9501**
7.4	Packaging	Pass
7.5	Material	Pass
7.6	Cleaning and disinfecting	NAp
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: Sodium chloride	Pass
7.9.2	Penetration of filter material: Paraffin oil	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)	NAp
7.16	Breathing resistance	Pass
7.17	Clogging	NRq
7.18	Demountable parts	NAp
9	Marking	NRq
10	Information to be supplied by the manufacturer	NRq

Key

	Shading shows the clauses requested.
NRq	The clauses were not requested.
Pass	Requirement satisfied.
Ltd	Testing requested was insufficient completely to verify compliance with the clause. Refer to the "Result details" section for more information.
Fail	Requirement not satisfied. Refer to the "Result details" section for more information.
NAs	Assessment not carried out.
NAp	Requirement not applicable.
NT	Requested but not tested due to early termination following failure.

* Assessment relates only to those specimens which were tested and are the subject of this report.

Product characteristics

Property	Characteristic
Model	ZN9501
Classification claimed	FFP2 NR
Exhalation valve(s)	-

Submission details

Product	Quantity	Date received	Specimen No.
ZN9501 KN95 Protective Mask (Non-Medical)	86	18th April 2020	WLH0241-2020-01 to -86

Photographs of the products tested

Anhui Zhongnan Air Dedence Works Protective Co., Ltd.'s model ZN9501 KN95 Protective Mask (Non-Medical)

CASST specimen number WLH0241-2020-09

Procedures

Specimens were selected at random from the submission(s) detailed above.

Testing was performed in accordance with EN 149:2001 incorporating Corrigendum No. 1 (January 2003), and amendment A1 (2009) unless otherwise specified below. Reference should be made to the standard when reading this report.

Unless stated otherwise, specimens were tested in the condition as received.

Result details

7.4 Packaging — Pass[1]

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.

Note 1: In accordance with the requirement.

7.5 Material — Pass[2]

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 conditioning described in 8.3.1 none of the particle filtering half masks shall have suffered mechanical failure of the facepiece or straps.

When conditioned in accordance with 8.3.1 and 8.3.2 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.

Note 2: In accordance with the requirement.
Specimens -03, -04, -05 were conditioned in accordance with 8.3.1，None of the specimens conditioned suffered mechanical failure or collapse.
Specimens -06, -07, -08 were conditioned in accordance with 8.3.2，None of the specimens conditioned suffered collapse.

7.6 Cleaning and disinfecting — NAp[3]

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.

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.

Note 3: Single shift use only.

7.7 Practical performance — Pass[4]

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

Note 4: No imperfections.

Specimen and subject details:

Specimen	Subject
-01	TJ
-02	SM

7.8 Finish of parts — Pass[5]

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

Note 5: None of the specimens used in limited laboratory testing undertaken showed the evidence of sharp edges or burrs.

7.9.1 Total inward leakage (%) **Pass**[6]

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.

Note 6: 47 out of the 50 individual exercise results were not greater than 11%; 8 out of the 10 individual wearer arithmetic means were not greater than 8%. Detailed data are showed below..

Subject	Specimen	Cond	Walk	Head side/ side	Head up/down	Talk	Walk	Mean
TS	-11	AR	4.9	12.1	8.3	7.5	5.9	7.7
ZMM	-12	AR	4.8	6.1	5.4	5.9	3.8	5.2
YZF	-13	AR	7.2	7.8	7.4	8.3	7.5	7.6
LCF	-14	AR	5.4	9.9	6.2	6.4	5.6	6.7
NXL	-15	AR	4.4	8.2	5.0	5.3	4.6	5.5
TJ	-40	TC	7.7	7.8	9.5	6.8	7.3	7.8
SM	-41	TC	6.5	10.9	10.3	6.8	7.5	8.4
WCS	-42	TC	4.3	5.5	4.8	5.3	3.4	4.6
YB	-43	TC	4.1	7.0	10.8	6.1	3.6	6.3
GJB	-44	TC	8.0	13.4	12.6	8.3	9.2	10.3
Maximum permitted			11					8

Subject facial dimensions:

Subject	Face Length (mm)	Face Width (mm)	Face Depth (mm)	Mouth Width (mm)
ZMM	114	157	119	50
WCS	109	136	105	56
YZF	113	151	106	48
TS	97	146	102	51
TJ	105	151	110	52
SM	116	144	109	49
LCF	119	165	121	56
YB	112	150	119	66
NXL	113	147	108	53
GJB	109	154	109	57

7.9.2 Penetration of filter material **Pass**

The penetration of the filter of the particle filtering half mask shall meet the requirements:

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

Sodium chloride test results:（Pass）

Specimen	Condition	Penetration (%)	
		After 3 minutes	Max. during exposure
-16	A.R.	0.59	
-17		0.17	
-18		1.62	
-66	S.W.	1.89	
-67		1.11	
-68		1.34	
-45	M.S. + T.C.	3.96	4.88
-46		2.99	3.16
-47		2.91	4.28
Maximum permitted		6	

Paraffin oil test results:（Pass）

Specimen	Condition	Penetration (%)	
		After 3 minutes	Max. during exposure
-19	A.R.	0.73	
-20		0.66	
-21		1.36	
-69	S.W.	0.79	
-70		0.71	
-71		0.91	
-48	M.S. + T.C.	3.87	5.82
-49		2.64	4.93
-50		1.66	4.01
Maximum permitted		6	

7.10 Compatibility with skin **Pass**[7]

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.

Note 7: Specimens from -22 to -26 (A.R.) and from -51 to -55 (T.C.) were tested. No irritation or any other adverse effect to health.

7.11 Flammability **Pass**

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.

Specimen	Condition	Results
-27	A.R.	burn for 0.5 s
-28		burn for 0.8 s
-56	T.C.	burn for 0.5 s
-57		burn for 0.4 s

7.12 Carbon dioxide content of the inhalation air **Pass**

The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1,0 % (by volume).

Specimen	CO_2 (%)
-29	0.37
-30	0.41
-31	0.36
Maximum permitted	1.0

7.13 Head harness **Pass**[8]

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.

Note 8: Specimens from -32 to -36 (A.R.) and from -58 to -62 (T.C.) were tested. Head harness can be donned and removed easily, adjustable or self-adjusting and have sufficiently robust to hold the face mask firmly. The product satisfied the total inward leakage requirements. See 7.9.1 for results.

7.14 Field of vision **Pass**[9]

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

Note 9: Specimens from -09 and -10 (A.R.) were tested. Pass the practical performance tests and no adverse comments.

7.15 Exhalation valve **NAp**

A particle filtering half mask may have one or more exhalation valve(s), which shall function correctly in all orientations.

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.

Exhalation valve(s), if fitted, shall continue to operate correctly after a continuous exhalation flow of 300 l/min over a period of 30 s.

When the exhalation valve housing is attached to the faceblank, it shall withstand axially a tensile force of 10 N applied for 10 s.

7.16 Breathing resistance **Pass**[10]

Classification	Maximum permitted resistance (mbar)		
	inhalation		exhalation
	30 l/min	95 l/min	160 l/min or (25 cycles/min×2.0 l/stroke)
FFP1	0.6	2.1	3.0
FFP2	**0.7**	**2.4**	**3.0**
FFP3	1.0	3.0	3.0

Note 10: FFP2 Filtering face mask. Test results are detailed below.

Specimen	Condition	Inhalation resistance (mbar)		Exhalation resistance (mbar)				
		At 30 l/min	At 95 l/min	Breathing machine (25 cycles/min×2.0 l/stroke)				
				A	B	C	D	E
-37	A.R.	0.23	0.84	1.99	1.91	1.98	1.90	1.94
-38		0.23	0.84	1.99	2.04	2.01	1.96	1.98
-39		0.24	0.86	1.94	1.90	1.91	1.87	1.89
-63	T.C.	0.22	0.85	1.85	1.84	1.81	1.76	1.79
-64		0.21	0.80	1.94	1.92	1.87	1.89	1.90
-65		0.23	0.86	1.91	2.00	1.96	1.91	1.99
-72	S.W.	0.21	0.82	2.07	2.01	1.98	1.96	1.98
-73		0.23	0.89	1.94	1.94	1.91	1.90	1.96
-74		0.21	0.86	1.95	1.98	1.91	1.91	1.96
	A.R. + F.C.							
	T.C. + F.C.							
Maximum permitted		0.7	2.4	3.0				

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

7.17 Clogging NRq[11]

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 95 l/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 95 l/min continuous flow.

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 given in 7.9.2, for the Penetration test according to EN 13274-7, after the clogging treatment.

Note 11: Single shift use only.

7.18 Demountable parts **NAp[12]**

All demountable parts (if fitted) shall be readily connected and secured, where possible by hand.

Note 12: No demountable parts were used.

9 Marking NRq

9.1 Packaging

The following information shall be clearly and durably marked on the smallest commercially available packaging or legible through it if the packaging is transparent.

9.1.1 The name, trademark or other means of identification of the manufacturer or supplier.

9.1.2 Type-identifying marking.

9.1.3 Classification

The appropriate class (FFP1, FFP2 or FFP3) followed by a single space and then:

"NR" if the particle filtering half mask is limited to single shift use only. Example: FFP3 NR, or

"R" if the particle filtering half mask is re-usable. Example: FFP2 R D."

9.1.4 The number and year of publication of this European Standard.

9.1.5 At least the year of end of shelf life. The end of shelf life may be informed by a pictogram as shown in Figure 12a, where yyyy/mm indicates the year and month.

9.1.6 The sentence 'see information supplied by the manufacturer', at least in the official language(s) of the country of destination, or by using the pictogram as shown in Figure 12b.

9.1.7 The manufacturer's recommended conditions of storage (at least the temperature and humidity) or equivalent pictogram, as shown in Figures 12c and 12d.

9.1.8 The packaging of those particle filtering half masks passing the dolomite clogging test shall be additionally marked with the letter "D". This letter shall follow the classification marking preceded by a single space.

9.2 Particle filtering half mask

Particle filtering half masks complying with this European Standard shall be clearly and durably marked with the following:

9.2.1 The name, trademark or other means of identification of the manufacturer or supplier.

9.2.2 Type-identifying marking.

9.2.3 The number and year of publication of this European Standard.

9.2.4 Classification

The appropriate class (FFP1, FFP2 or FFP3) followed by a single space and then:

"NR" if the particle filtering half mask is limited to single shift use only. Example: FFP3 NR, or

"R" if the particle filtering half mask is re-usable. Example: FFP2 R D."

9.2.5 If appropriate the letter D (dolomite) in accordance with clogging performance. This letter shall follow the classification marking preceded by a single space (see 9.2.4).

Examples FFP3 NR D, FFP2 R D"

9.2.6 Sub-assemblies and components with considerable bearing on safety shall be marked so that they can be identified

10 Information to be supplied by the manufacturer NRq

10.1 Information supplied by the manufacturer shall accompany every smallest commercial available package.

10.2 Information supplied by the manufacturer shall be at least in the official language(s) of the country of destination.

10.3 The information supplied by the manufacturer shall contain all information necessary for trained and qualified persons on:

application/limitations; the meaning of any colour coding; checks prior to use; donning, fitting; use; maintenance (e.g. cleaning, disinfecting), if applicable; storage; the meaning of any symbols/pictograms used of the equipment.

10.4 The information shall be clear and comprehensible. If helpful, illustrations, part numbers, marking shall be added.

10.5 Warning shall be given against problems likely to be encountered, for example:

- fit of particle filtering half mask (check prior to use);
- it is unlikely that the requirements for leakage will be achieved if facial hair passes under the face seal;
- air quality (contaminants, oxygen deficiency);
- use of equipment in explosive atmosphere.

10.6 The information shall provide recommendations as to when the particle filtering half mask shall be discarded.

10.7 For devices marked "NR", a warning shall be given that the particle filtering half mask shall not be used for more than one shift."

End of Test Report.

China academy of safety science and technology (CASST) is accredited for compliance with ISO/IEC 17025.
The results of tests, calibrations and/or measurements included in this document are traceable to Chinese/national standards.
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TEST REPORT

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

Report no:	**WLH0515-2020**
Product:	**KN95 Protective Mask (Non-Medical)**
Model (s):	**ZN9501**
Main components:	**Mask body, without exhalation valve**
Date(s) of tests:	**19th May～28th May 2020**

Client	**Manufacturer**
Anhui Zhongnan Air Dedence Works Protective Co., Ltd.	**Anhui Zhongnan Air Dedence Works Protective Co., Ltd.**
Contact: / Client order：/ Order(s) received: May, 2020	Qianshan Comprehensive Economic Development Zone, Anhui Province, China Contact: Mr. Chu E-mail: / Phone: +8618956915566

Conditions:

This report shall not be reproduced except in full, without the written approval of CASST.

The results described in this test report refer to the mentioned test samples, exclusively. A copy of the test report, complete or in extracts, is not allowed without any written permission of the CASST.

Any objection should be submitted within 2 weeks from the date of receipt of the report, and it will not be accepted after the deadline.

Specimens will be disposed of 4 weeks from the date of this report, unless otherwise instructed.

Signed: 张明明/Zhang Mingming, Authorized Signatory

Issued: 2020-05-28

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Sino-Japanese Cooperative Respiratory Protection Laboratory
Designated Testing Laboratory of the Certification of LA Mark in China

Summary of assessment*

Clause		Assessment
	Model:	**ZN9501**
7.4	Packaging	NRq
7.5	Material	NRq
7.6	Cleaning and disinfecting	NAp
7.7	Practical performance	NRq
7.8	Finish of parts	NRq
7.9.1	Total inward leakage	Pass
7.9.2	Penetration of filter material: Sodium chloride	NRq
7.9.2	Penetration of filter material: Paraffin oil	NRq
7.10	Compatibility with skin	NRq
7.11	Flammability	NRq
7.12	Carbon dioxide content of the inhalation air	NRq
7.13	Head harness	NRq
7.14	Field of vision	NRq
7.15	Exhalation valve(s)	NAp
7.16	Breathing resistance	NRq
7.17	Clogging	NRq
7.18	Demountable parts	Pass
9	Marking	NRq
10	Information to be supplied by the manufacturer	NRq

Key

	Shading shows the clauses requested.
NRq	The clauses were not requested.
Pass	Requirement satisfied.
Ltd	Testing requested was insufficient completely to verify compliance with the clause. Refer to the "Result details" section for more information.
Fail	Requirement not satisfied. Refer to the "Result details" section for more information.
NAs	Assessment not carried out.
NAp	Requirement not applicable.
NT	Requested but not tested due to early termination following failure.

* Assessment relates only to those specimens which were tested and are the subject of this report.

Product characteristics

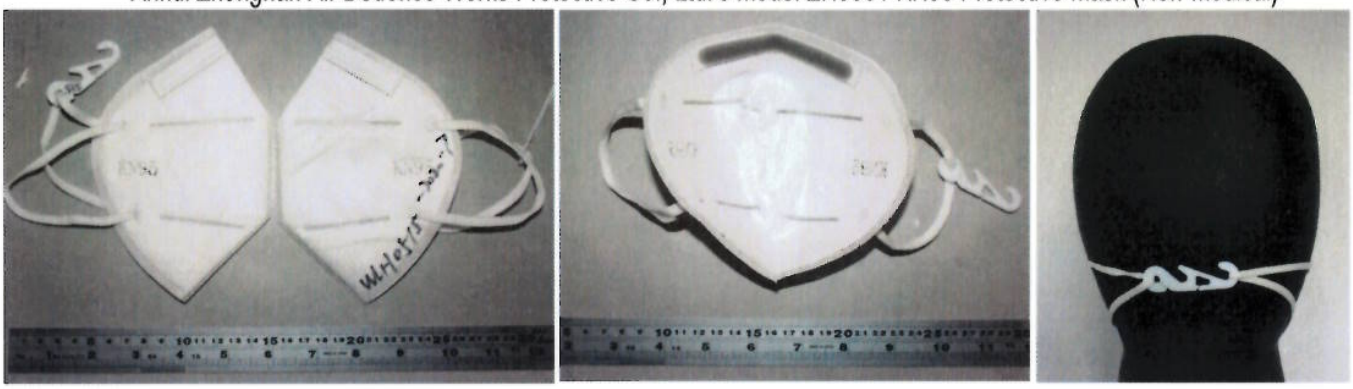
Property	Characteristic
Model	ZN9501
Classification claimed	FFP2 NR
Exhalation valve(s)	-

Submission details

Product	Quantity	Date received	Specimen No.
ZN9501 KN95 Protective Mask (Non-Medical)	20	19th May 2020	WLH0515-2020-01 to -20

Photographs of the products tested

Anhui Zhongnan Air Dedence Works Protective Co., Ltd.'s model ZN9501 KN95 Protective Mask (Non-Medical)



CASST specimen number WLH0515-2020-07

Procedures

Specimens were selected at random from the submission(s) detailed above.

Testing was performed in accordance with EN 149:2001 incorporating Corrigendum No. 1 (January 2003), and amendment A1 (2009) unless otherwise specified below. Reference should be made to the standard when reading this report.

Unless stated otherwise, specimens were tested in the condition as received.

Result details

7.4 Packaging NRq

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.

7.5 Material NRq

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 conditioning described in 8.3.1 none of the particle filtering half masks shall have suffered mechanical failure of the facepiece or straps.

When conditioned in accordance with 8.3.1 and 8.3.2 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.

7.6 Cleaning and disinfecting NAp[1]

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.

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.

Note 1: Single shift use only.

7.7 Practical performance NRq

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

Specimen and subject details:

Specimen	Subject
-	-
-	-

7.8 Finish of parts NRq

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

7.9.1 Total inward leakage (%) **Pass**[2]

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.

Note 2: All 50 individual exercise results were not greater than 11%; All 10 individual wearer arithmetic means were not greater than 8%. Detailed data are showed below.

Subject	Specimen	Cond	Walk	Head side/ side	Head up/down	Talk	Walk	Mean
LCF	-01	AR	10.7	9.2	5.5	3.6	5.1	6.8
SM	-02	AR	3.4	6.0	9.4	5.6	3.3	5.5
LZM	-03	AR	5.1	6.2	7.6	7.9	5.3	6.4
YZF	-04	AR	2.6	6.8	8.1	8.0	3.8	5.9
GJB	-05	AR	2.5	6.4	7.3	4.3	3.8	4.9
ZH	-06	TC	6.0	7.2	8.6	9.3	6.3	7.5
YB	-07	TC	6.8	8.2	9.8	10.5	4.1	7.9
JLX	-08	TC	4.4	5.4	9.3	6.9	4.7	6.1
TLX	-09	TC	2.9	5.2	8.3	4.9	4.4	5.1
TS	-10	TC	3.0	7.8	4.6	9.2	4.3	5.8
Maximum permitted			11					8

Subject facial dimensions:

Subject	Face Length (mm)	Face Width (mm)	Face Depth (mm)	Mouth Width (mm)
SM	116	144	109	49
TLX	104	153	112	40
YZF	113	151	106	48
TS	97	146	102	51
JLX	119	152	109	59
LCF	119	165	121	56
ZH	102	152	113	55
GJB	109	154	109	57
YB	112	150	119	66
LZM	118	157	124	44

7.9.2 Penetration of filter material NRq

The penetration of the filter of the particle filtering half mask shall meet the requirements:

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

Sodium chloride test results:（NRq）

Specimen	Condition	Penetration (%)	
		After 3 minutes	Max. during exposure
-	A.R.	-	
-		-	
-		-	
-	S.W.	-	
-		-	
-		-	
-	M.S. + T.C.	-	-
-		-	-
-		-	-
Maximum permitted		6	

Paraffin oil test results:（NRq）

Specimen	Condition	Penetration (%)	
		After 3 minutes	Max. during exposure
-	A.R.	-	
-		-	
-		-	
-	S.W.	-	
-		-	
-		-	
-	M.S. + T.C.	-	-
-		-	-
-		-	-
Maximum permitted		6	

7.10 Compatibility with skin NRq

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.

7.11 Flammability NRq

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.

Specimen	Condition	Results
-	A.R.	-
-		-
-	T.C.	-
-		-

7.12 Carbon dioxide content of the inhalation air NRq

The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1,0 % (by volume).

Specimen	CO_2 (%)
-	-
-	-
-	-
Maximum permitted	**1.0**

7.13 Head harness NRq

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.

7.14 Field of vision NRq

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

7.15 Exhalation valve NAp

A particle filtering half mask may have one or more exhalation valve(s), which shall function correctly in all orientations.

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.

Exhalation valve(s), if fitted, shall continue to operate correctly after a continuous exhalation flow of 300 l/min over a period of 30 s.

When the exhalation valve housing is attached to the faceblank, it shall withstand axially a tensile force of 10 N applied for 10 s.

7.16 Breathing resistance NRq

Classification	Maximum permitted resistance (mbar)		
	inhalation		exhalation
	30 l/min	95 l/min	160 l/min or (25 cycles/min×2.0 l/stroke)
FFP1	0.6	2.1	3.0
FFP2	**0.7**	**2.4**	**3.0**
FFP3	1.0	3.0	3.0

Specimen	Condition	Inhalation resistance (mbar)		Exhalation resistance (mbar)				
		At 30 l/min	At 95 l/min	Breathing machine (25 cycles/min × 2.0 l/stroke)				
				A	B	C	D	E
-	A.R.	-	-	-	-	-	-	-
-		-	-	-	-	-	-	-
-		-	-	-	-	-	-	-
-	T.C.	-	-	-	-	-	-	-
-		-	-	-	-	-	-	-
-		-	-	-	-	-	-	-
-	S.W.	-	-	-	-	-	-	-
-		-	-	-	-	-	-	-
-		-	-	-	-	-	-	-
	A.R. + F.C.							
	T.C. + F.C.							
Maximum permitted		0.7	2.4	3.0				

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

7.17 Clogging NAp[3]

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 95 l/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 95 l/min continuous flow.

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 given in 7.9.2, for the Penetration test according to EN 13274-7, after the clogging treatment.

Note 3: Single shift use only.

7.18 Demountable parts **Pass**[4]

All demountable parts (if fitted) shall be readily connected and secured, where possible by hand.

Note 4: Head harness auxiliary hook were used, and in accordance with the requirement.

9 Marking **NRq**

9.1 Packaging

The following information shall be clearly and durably marked on the smallest commercially available packaging or legible through it if the packaging is transparent.

9.1.1 The name, trademark or other means of identification of the manufacturer or supplier.

9.1.2 Type-identifying marking.

9.1.3 Classification

The appropriate class (FFP1, FFP2 or FFP3) followed by a single space and then:

"NR" if the particle filtering half mask is limited to single shift use only. Example: FFP3 NR, or

"R" if the particle filtering half mask is re-usable. Example: FFP2 R D."

9.1.4 The number and year of publication of this European Standard.

9.1.5 At least the year of end of shelf life. The end of shelf life may be informed by a pictogram as shown in Figure 12a, where yyyy/mm indicates the year and month.

9.1.6 The sentence 'see information supplied by the manufacturer', at least in the official language(s) of the country of destination, or by using the pictogram as shown in Figure 12b.

9.1.7 The manufacturer's recommended conditions of storage (at least the temperature and humidity) or equivalent pictogram, as shown in Figures 12c and 12d.

9.1.8 The packaging of those particle filtering half masks passing the dolomite clogging test shall be additionally marked with the letter "D". This letter shall follow the classification marking preceded by a single space.

9.2 Particle filtering half mask

Particle filtering half masks complying with this European Standard shall be clearly and durably marked with the following:

9.2.1 The name, trademark or other means of identification of the manufacturer or supplier.

9.2.2 Type-identifying marking.

9.2.3 The number and year of publication of this European Standard.

9.2.4 Classification

The appropriate class (FFP1, FFP2 or FFP3) followed by a single space and then:

"NR" if the particle filtering half mask is limited to single shift use only. Example: FFP3 NR, or

"R" if the particle filtering half mask is re-usable. Example: FFP2 R D."

9.2.5 If appropriate the letter D (dolomite) in accordance with clogging performance. This letter shall follow the classification marking preceded by a single space (see 9.2.4).

Examples FFP3 NR D, FFP2 R D"

9.2.6 Sub-assemblies and components with considerable bearing on safety shall be marked so that they can be identified

10 Information to be supplied by the manufacturer NRq

10.1 Information supplied by the manufacturer shall accompany every smallest commercial available package.

10.2 Information supplied by the manufacturer shall be at least in the official language(s) of the country of destination.

10.3 The information supplied by the manufacturer shall contain all information necessary for trained and qualified persons on:

application/limitations; the meaning of any colour coding; checks prior to use; donning, fitting; use; maintenance (e.g. cleaning, disinfecting), if applicable; storage; the meaning of any symbols/pictograms used of the equipment.

10.4 The information shall be clear and comprehensible. If helpful, illustrations, part numbers, marking shall be added.

10.5 Warning shall be given against problems likely to be encountered, for example:

- fit of particle filtering half mask (check prior to use);

- it is unlikely that the requirements for leakage will be achieved if facial hair passes under the face seal;

- air quality (contaminants, oxygen deficiency);

- use of equipment in explosive atmosphere.

10.6 The information shall provide recommendations as to when the particle filtering half mask shall be discarded.

10.7 For devices marked "NR", a warning shall be given that the particle filtering half mask shall not be used for more than one shift."

End of Test Report.