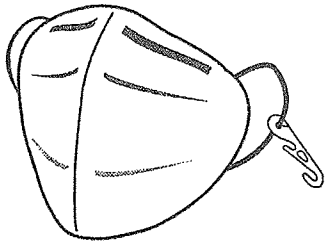


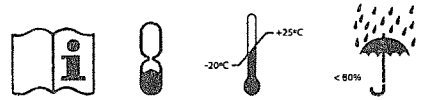
CE 2834

FACTORY REF. KZ888E
IMPORT. REF. 6712

OPEN

Particle Filtering Half Mask
Mascarilla Autofiltrante FFP2

EN149:2001+A1:2009 FFP2 NR
Regulation(EU)2016/425



See information supplied by the manufacturer/importer.	2022/08 End of shelf life	Temperature range of storage conditions	Maximum relative humidity of storage conditions
Véase la información suministrada por el fabricante/importador.	2022/08 Caducidad	Rango de temperatura de almacenamiento	Máxima humedad relativa para almacenamiento

Notified Body / Organismo Notificado:
CCQS Certification Services Limited, NB: 2834
Address: Block 1 Blanchardstown Corporate Park,
Ballycoolin Road, Blanchardstown, Dublin 15,
D15 AKK1, Ireland

Imported by / Importado por:
MKTO CATAL IMPORTACIONES S.L.
Ctra. De Huercal-Overa, s/n, 04640,
Pulpí, Almería, Spain.
B04267225

Manufactured by / Fabricado por:
Henan Aklly Filter Engineering Co., Ltd
Add: The South Section Of Hongli Road, Nanpu District,
Changyuan, City, Henan Province, China

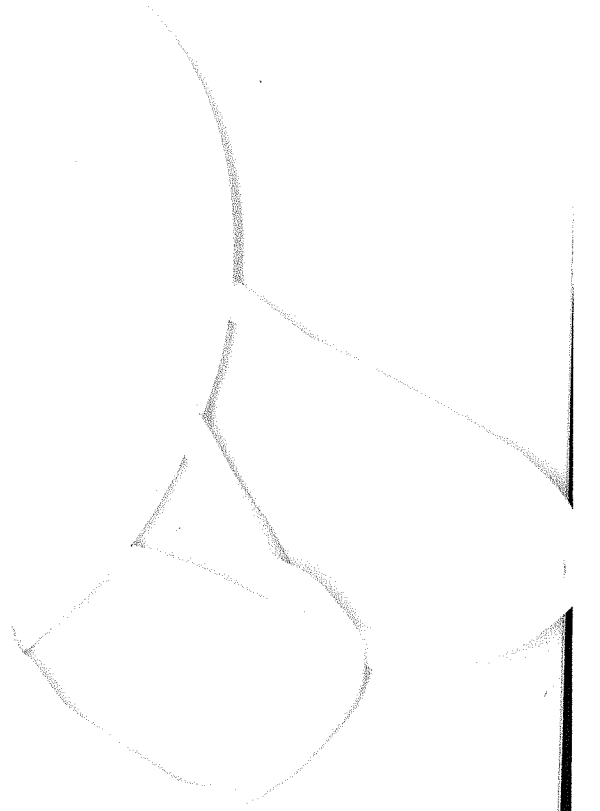
Non-Medical

An ke lin

KZ888E

EN149:2001+A1:2009 FFP2 NR

CE 2834



Module B EU Type-Examination Certificate

For the requirements of PPE Regulation 2016/425

Certificate No.: CE-PC-200508-351-01-9A

Certificate holder:	
Product:	**Particle Filtering Half Mask** Detailed product description listed in the Annex
Model(s):	KZ888E
Standard(s):	EN 149:2001+A1:2009 Respiratory protective devices - Filtering half masks to protect against particles - Requirements, testing, marking
Issue date:	2020-07-03
Revision date:	2020-07-03
Expiry date:	2021-07-02

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
If in any doubt about the integrity of this certificate, please contact CCQS by email to verify.

Module B EU Type-Examination Certificate

Annex

For the requirements of PPE Regulation 2016/425

Certificate No.: CE-PC-200508-351-01-9A

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
KZ888E	Folding filtering half mask fitted with ear loops with head harness clip, no valves, internal metal nose clip Classification: FFP2 NR Test report No.: 2020(D) - 0673

Certificate Revision	Revision date	Revision details
A	2020-07-03	Initial issue

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-200508-351-FPC-A

Certificate holder:	
Manufacturing Location:	
The scope of the certification for:	**The manufacture of respiratory protective device** See annex for articles covered by this certificate
Validity from:	2020-07-03
Revision date:	2020-07-03
To:	2021-07-02

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.6025

Approved by:

CCQS Ireland Certification

Owen Bian, Director

CCQS Certification Services Limited
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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-200508-351-FPC-A

Product reference and description		Reference standard
Particle Filtering Half Mask	Model: KZ888E	EN 149:2001+A1:2009

Certificate Revision	Revision date	Revision details
A	2020-07-03	Initial issue

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.

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.

中国认可
国际互认
检测
TESTING
CNAS L1499

National Quality Supervision and Testing Center for Personal Protective Equipment (Beijing)
(Testing Laboratory for Labour Protection Products of Beijing Municipal Institute for Labour Protection)
No.55 Taoranting Street, Xicheng District, Beijing, China.
Phone: +86 10 63519250 +86 10 63520770 +86 10 83530311
Fax: +86 10 63519250 +86 10 63520770

TEST REPORT

Particulate respirator-half facepiece

EN 149: 2001 +A1: 2009 Respiratory protective devices — Filtering half masks to protect against particles — Requirements, testing, marking

Product: Particle filtering half mask

Report No: 2020 (D) – 0673

Client:

Model (s): KZ888E

Date(s) of tests: 2020.05.11-2020.06.01

DESCRIPTION OF SAMPLES

General Information	Classification	Main Components
	FFP2 NR	White folding mask

Manufacturer
Manufacturer Address

Signed:

Issued: 2020.6.1

陈倬为 Chen Zhuowei
Authorized Signatory, Lab Director

Conditions:

The test results presented in this report relate to the samples tested only.

This report may be reproduced and distributed to your clients, provided that it is reproduced and distributed in full.

The authenticity of this test report and its contents can be verified by contacting the laboratory.

Test Results

7.3 Visual inspection **Not tested[1]**

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

Note1: As requested by the client, marking and information supplied by the manufacturer was not inspected.

7.4 Package **Pass[2]**

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.

Note2: In accordance with the requirement.

7.5 Material **Pass[3]**

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.

Any material from the filter media released by the air flow through the filter shall not constitute a hazard or nuisance for the wearer.

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.

Note3: No mechanical failure after undergoing the conditioning described in 8.3.1. No collapse when conditioned in accordance with 8.3.1 and 8.3.2.

7.6 Cleaning and disinfecting **N/A[4]**

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.

Note4: Single shift use only.

7.7 Practical performance **Pass[5]**

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

Note5: No imperfections.

7.8 Finish of parts **Pass[6]**

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

Note6: No sharp edges or burrs.

7.9.1 Total inward leakage **Pass[7]**

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

Note7: FFP2 respirator. Test results are shown in Annex A Table 7.9.1-A&B.

7.9.2 Penetration of filter material **Pass[8]**

The penetration of the filter of the particle filtering half mask shall meet the requirements of Table 1.

	Sodium chloride test 95 l/min	Paraffin oil test 95 l/min
FFP1	≤20%	≤20%

FFP2	≤6%	≤6%
FFP3	≤1%	≤1%

Note8: FFP2 respirator. Test results are shown in Annex A Table 7.9.2.

7.10 Compatibility with skin **Pass[9]**

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.

Note9: No irritation or any other adverse effect to health.

7.11 Flammability **Pass[10]**

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.

Note10: Test results are shown in Annex A Table 7.11.

7.12 Carbon dioxide content of the inhalation air **Pass[11]**

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

Note11: Test results are shown in Annex A Table 7.12.

7.13 Head harness **Pass[12]**

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.

Note12: Head harness can be donned and removed easily, adjustable or self-adjusting and have sufficiently robust to hold the particle filtering half mask firmly.

7.14 Field of vision **Pass[13]**

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

Note13: Pass the practical performance tests.

7.15 Exhalation valve **N/A[14]**

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.

Note14: No exhalation valve.

7.16 Breathing resistance **Pass[15]**

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

Note15: FFP2 respirator. Test results are shown in Annex A Table 7.16.

7.17 Clogging **N/A[16]**

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

7.17.3 Penetration of filter material

	Sodium chloride test 95 l/min	Paraffin oil test 95 l/min
FFP1	≤20%	≤20%
FFP2	≤6%	≤6%
FFP3	≤1%	≤1%

Note16: Single shift use only.

7.18 Demountable parts **Pass[17]**

All demountable parts (if fitted) shall be readily connected and secured, where possible by hand
Note17: In accordance with the requirement.

9 Marking **Not tested**

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

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

End of Test Results

Annex A: Summarization of Test Data

Table 7.9.1-A Inward leakage test data

Test specification: EN 149-2001 Clause 8.5

Subject	Sample No.	Condition	Walk(%)	Head Side/side(%)	Head up/down(%)	Talk(%)	Walk(%)	Mean(%)
Yi	1	A.R.	7.12	7.69	7.52	7.14	7.34	7.4
Gong	2	A.R.	7.22	7.71	7.66	7.24	7.41	7.4
Yu	3	A.R.	7.07	7.51	7.23	7.50	7.28	7.3
Hu	4	A.R.	8.84	8.97	9.23	8.84	9.22	9.0
Xu	5	A.R.	7.15	7.42	7.33	7.51	7.44	7.4
Deng	6	T.C.	7.27	7.42	7.65	7.28	7.43	7.4
Zhang	7	T.C.	6.39	6.79	6.81	6.60	6.55	6.6
Liu	8	T.C.	6.30	6.69	6.39	6.46	6.79	6.5
Zhi	9	T.C.	7.11	7.70	7.61	7.49	7.24	7.4
Fang	10	T.C.	8.04	8.51	8.36	8.32	8.49	8.3
All 50 individual exercise results were not greater than 11 % 8 out of 10 individual wearer arithmetic means were not greater than 8 %							Pass	

Table 7.9.1-B Facial dimension

Subject	Face length	Face Width	Face Depth	Mouth Width
Yi	120	130	109	59
Gong	122	140	115	65
Yu	119	160	139	55
Hu	112	122	119	63
Xu	110	130	118	60
Deng	115	119	110	59
Zhang	112	123	113	55
Liu	103	130	100	50
Zhi	118	139	130	63
Fang	115	129	120	50
Chen	116	150	132	56
Lv	110	121	110	53

Table -7.9.2 Penetration of filter material

Test specification: EN 149-2001 Clause 8.11

Aerosol	Condition	Sample No.	Penetration (%)	Assessment
Sodium chloride test	As received	11	0.211	Pass
		12	0.289	
		13	0.342	
	Simulated wearing treatment	14	0.511	
		15	0.638	
		16	0.572	
	Mechanical strength+ Temperature conditioned	17	0.894	
		18	0.962	
		19	1.04	
Paraffin oil test	As received	20	2.71	
		21	2.96	
		22	3.11	
	Simulated wearing treatment	23	3.09	
		24	3.48	
		25	3.51	
	Mechanical strength+ Temperature conditioned	26	4.04	
		27	3.92	
		28	4.61	
Flow conditioning: Single filter: 95.0 L/min				

Table 7.11 Flammability

Test specification: EN 149-2001 Clause 8.6

Condition	Sample No.	Result	Assessment
As received	29	Burn for 1 s	Pass
	30	Burn for 2 s	
Temperature conditioned	31	Burn for 2 s	
	32	Burn for 1 s	

Table 7.12 Carbon dioxide content of the inhalation air

Test specification: EN 149-2001 Clause 8.7

Condition	Sample No.	Result		Assessment
As received	33	0.44%	Mean value 0.4%	Pass
	34	0.47%		
	35	0.42%		

Table 7.16 Breathing resistance (mbar)

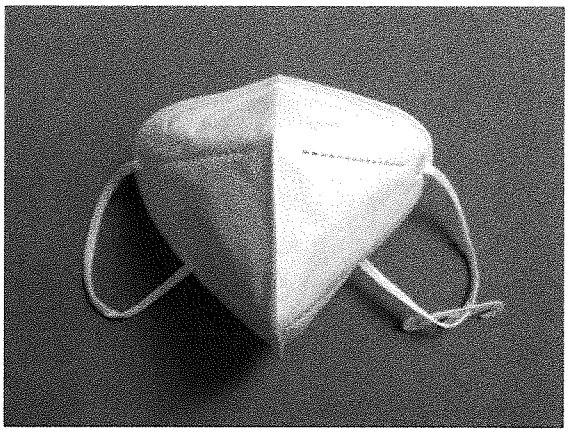
Test specification: EN 149-2001 Clause 8.9

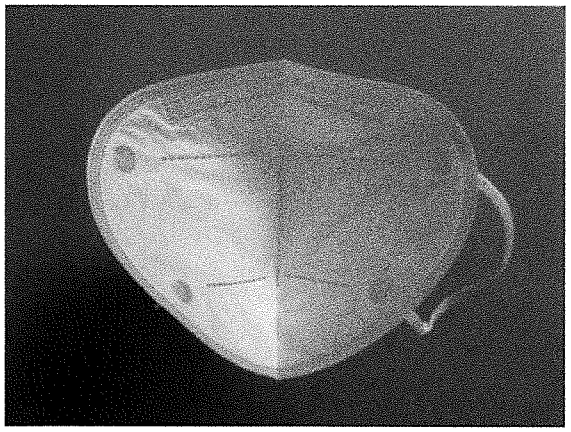
			36					37					38				
As received	Flow rate		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
	Inhalation	30 l/min	0.4	0.5	0.6	0.5	0.5	0.4	0.6	0.6	0.5	0.4	0.4	0.5	0.5	0 5	0.4
		95 l/min	1.6	1.6	1.8	1.8	1.6	1.6	1.7	1.9	1.8	1.8	1.7	1.8	2.0	1.7	1.6
	Exhalation	160 l/min	1.9	2.0	2.0	1.9	2.0	1.8	1.9	2.1	2.0	1.9	1.9	2.0	2.0	2.0	1.9
			39					40					41				
Simulated wearing treatment	Flow rate		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
	Inhalation	30 l/min	0.4	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.4	0.5	0.6	0 5	0.4
		95 l/min	1.7	1.8	2.0	1.8	1.7	1.6	1.9	2.0	1.8	1.8	1.7	1.9	1.9	1.8	1.8
	Exhalation	160 l/min	1.9	1.9	2 1	2.2	1.9	1.8	2.2	2.3	2.1	2.0	1.9	2.1	2.2	2.0	2.0
			42					43					44				
Temperature conditioned	Flow rate		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
	Inhalation	30 l/min	0.4	0.5	0.6	0.5	0.4	0.4	0.5	0.6	0.5	0.4	0.5	0.5	0.6	0 5	0.4
		95 l/min	1.7	1.8	2.0	1.9	1.8	1.6	1.8	1.9	1.9	1.8	1.7	1.8	2.0	1.8	1.7
	Exhalation	160 l/min	1.9	2.0	2 2	2.2	2.0	1.8	1.9	2.2	2.1	1.9	2.0	2.1	2.2	2.0	2.0
Assessment	Pass																

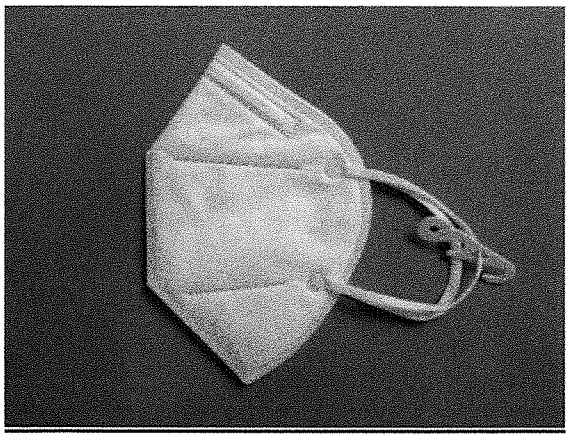
A: facing directly ahead; B: facing vertically upwards; C: facing vertically downwards; D: lying on the left side; E: lying on the right side

End of Annex A

ANNEX B PHOTOS OF SAMPLES







End of Annex B