

CERTIFICADO DE CONFORMIDAD CON EL TIPO
CONFORMITY TO TYPE CERTIFICATE



Organismo Notificado N° 0370



No. **0370-4487-PPE/C2**

ORGANISMO NOTIFICADO N° <i>NOTIFIED BODY NUMBER</i>	0370 - LGAI TECHNOLOGICAL CENTER (APPLUS)
SOLICITANTE <i>APPLICANT</i>	Shenzhen HJR Electronics Technology Co., LTD. 5 / F Building A3 Xinjianxing Science and Technology Industrial Park, No. 3333, Guangqiao Avenue, Gongming Street, Guangming New District, Shenzhen City, Guangdong Province, China
FABRICANTE <i>MANUFACTURER</i>	Shenzhen HJR Electronics Technology Co., LTD. 5 / F Building A3 Xinjianxing Science and Technology Industrial Park, No. 3333, Guangqiao Avenue, Gongming Street, Guangming New District, Shenzhen City, Guangdong Province, China
REGLAMENTO DE APLICACIÓN PARA DAR LA CONFORMIDAD / APPLICABLE REGULATION TO GIVE CONFORMITY: REGLAMENTO (UE) 2016/425 SOBRE LOS EQUIPOS DE PROTECCIÓN INDIVIDUAL <i>REGULATION (EU) 2016/425 PERSONAL PROTECTIVE EQUIPMENT</i>	
PROCEDIMIENTO DE EVALUACIÓN DE LA CONFORMIDAD CON EL TIPO <i>CONFORMITY ASSESSMENT PROCEDURE TO TYPE</i>	Módulo // <i>Module:</i> C2 BASADA EN EL CONTROL INTERNO DE LA PRODUCCIÓN MÁS EL CONTROL SUPERVISADO DE LOS PRODUCTOS A INTERVALOS ALEATORIOS <i>BASED ON INTERNAL PRODUCTION CONTROL PLUS SUPERVISED CONTROL OF PRODUCTS AT ALEATORY INTERVALS</i>
IDENTIFICACIÓN DEL EPI (NÚMERO DE TIPO) <i>IDENTIFICATION OF THE PPE (TYPE NUMBER)</i>	Ref.: HJR-CN99-02 Partide filtering half mask
NIVEL O NIVELES DE RENDIMIENTO O LA CLASE DE PROTECCIÓN DEL EPI / PERFORMANCE LEVEL OR PROTECTION CLASS OF THE PPE	FFP2 NR
FECHA DE EMISIÓN / ISSUE DATE	28/09/2020
VALIDEZ HASTA / VALIDITY UNTIL:	28/09/2021
El presente certificado se mantendrá vigente durante 1 año siempre que no se modifiquen las condiciones establecidas en el Certificado de Examen UE de Tipo referenciado en el Anexo. <i>This certificate will remain in force for 1 year as long as the conditions established in the EU Type certificate referenced in the annex are not modified.</i>	


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 into our website at:*
www.appluslaboratories.com/certified_products

ANEXO TÉCNICO
TECHNICAL ANNEX

0370-4487-PPE/C2

I. MODELOS INCLUIDOS EN EL CERTIFICADO

REFERENCES INCLUDED IN THIS CERTIFICATE

Nº CERTIFICADO DE EXAMEN UE DE TIPO <i>NR. EU TYPE EXAMINATION CERTIFICATE</i>	0370-4369-PPE/B
EMITIDO POR <i>ISSUED BY</i>	LGAI TECHNOLOGICAL CENTER S.A. (APPLUS) (Organismo notificado nº 0370 / Notified Body nr. 0370).
FECHA EMISIÓN <i>ISSUE DATE</i>	09/09/2020
VALIDEZ HASTA <i>VALIDITY UNTIL</i>	09/09/2025
MARCA <i>BRAND</i>	HJR
IDENTIFICACIÓN DEL EPI (NÚMERO DE TIPO) <i>IDENTIFICATION OF THE PPE (TYPE NUMBER)</i>	Ref.: HJR-CN99-02 Particle filtering half mask
NIVEL O NIVELES DE RENDIMIENTO O LA CLASE DE PROTECCIÓN DEL EPI / <i>PERFORMANCE LEVEL OR PROTECTION CLASS OF THE PPE</i>	FFP3 NR
INFORME DE ENSAYO DE CONFORMIDAD CON EL TIPO <i>CONFORMITY TO TYPE TEST REPORT</i>	PTC20090706602C-EN01 issued by Precise Testing & Certification (Guangdong) Co., Ltd.(PTC).



中国认可
国际互认
检测
TESTING
CNAS L5772

Test Report

Test Requirement:

According to the requirement of the Module C2 (SPC CE-062_EN M3 PPE) of Applus+, the test item(s) of the sample is according to the standard EN149:2001+A1:2009.

Product: particle filtering half mask

Report No.: PTC20090706602C-EN01

APPLUS +With ID number: 20/32301807

Client: Shenzhen HJR Electronics Technology Co.,LTD.

Client Address: 5 / F Building A3 Xinjianxing Science and Technology Industrial Park, No. 3333, Guangqiao Avenue, Gongming Street, Guangming New District, Shenzhen City, Guangdong Province, China

Manufacturer: Shenzhen HJR Electronics Technology Co.,LTD.

Manufacturer Address: 5 / F Building A3 Xinjianxing Science and Technology Industrial Park, No. 3333, Guangqiao Avenue, Gongming Street, Guangming New District, Shenzhen City, Guangdong Province, China

Contact: Hu Liang

Model(s): HJR-CN99-02

Classification: FFP2 NR

Date of Tests: 2020.09.14~2020.09.18

Signed for and on Behalf of PTC

Prepare by:

Checked by:

Approved by:

Arme

Jue

Jim Mo



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Test Report

Report No.:PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 2 of 14

Summary of assessment

Clause	Assessment
7.3 Visual inspection	PASS
7.5 Material	PASS
7.9.1 Total inward leakage	PASS
7.9.2 Penetration of filter material	PASS
7.12 Carbon dioxide content of the inhalation air	PASS
7.16 Breathing resistance	PASS

Remark:

PASS: comply with requirement of standard

N/A: not application

Not tested: the clause were not required

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Test Report

Report No.:PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 3 of 14

Test Result:

Requirement	Test Result	Conclusion												
<p>7.3 Visual inspection</p> <p>The visual inspection shall also include the marking and the information supplied by the manufacturer.</p>	Comply	Pass												
<p>7.5 Material</p> <p>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.</p> <p>Any material from the filter media released by the air flow through the filter shall not constitute a hazard or nuisance for the wearer.</p> <p>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.</p> <p>When conditioned in accordance with 8.3.1 and 8.3.2 the particle filtering half mask shall not collapse.</p>	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.	Pass												
<p>7.9.1 Total inward leakage</p> <p>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.</p>	FFP2, Test results are shown in Annex A Table 7.9.1-A&B	Pass												
<p>7.9.2 Penetration of filter material</p> <p>The penetration of the filter of the particle filtering half mask shall meet the requirements of Table 1.</p> <table border="1"> <thead> <tr> <th></th> <th>Sodium chloride test 95 l/min</th> <th>Paraffin oil test 95 l/min</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>		Sodium chloride test 95 l/min	Paraffin oil test 95 l/min	FFP1	≤ 20%	≤ 20%	FFP2	≤ 6%	≤ 6%	FFP3	≤ 1%	≤ 1%	FFP2 , Test results are shown in Annex A Table 7.9.2.	Pass
	Sodium chloride test 95 l/min	Paraffin oil test 95 l/min												
FFP1	≤ 20%	≤ 20%												
FFP2	≤ 6%	≤ 6%												
FFP3	≤ 1%	≤ 1%												

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Test Report

Report No.:PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 4 of 14

7.12 Carbon dioxide content of the inhalation air

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

Test results are shown in Annex A Table 7.12.

Pass

7.16 Breathing resistance

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

FFP2. Test results are shown in Annex A Table 7.16.

Pass

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Test Report

Report No.: PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 5 of 14

Annex A: Summarization of Test Data

Table 7.9.1-A: Inward Leakage Test Data

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

Subject	Sample No.	Condition	Walk (%)	Head Side/side (%)	Head up/down (%)	Talk (%)	Walk (%)	Mean (%)
Lv	1	A.R	1.9	1.6	1.7	1.8	1.9	1.8
Li	2	A.R	1.2	1.6	1.5	1.5	1.1	1.4
Zhong	3	A.R	1.4	1.4	1.0	1.2	1.6	1.3
Xu	4	A.R	1.5	1.3	1.4	1.0	1.4	1.5
Ma	5	A.R	1.4	1.6	1.5	2.0	1.3	1.6
Chen	6	T.C	3.1	3.3	3.3	3.1	4.4	3.4
Chen	7	T.C	3.1	3.6	2.6	2.9	2.8	3.0
Zhuo	8	T.C	3.7	2.9	3.3	3.3	3.6	3.4
Chen	9	T.C	3.7	3.9	3.7	3.3	4.2	3.8
Zhang	10	T.C	3.0	3.0	2.8	2.8	2.9	2.9

Table 7.9.1-B: Facial dimension

Subject	Face Length	Face Width	Face Depth	Mouth Width
Lv	113	139	104	53
Li	120	135	112	55
Zhong	108	135	106	56
Xu	120	150	120	70
Ma	130	170	130	80
Chen	110	160	90	40
Chen	115	145	110	50
Zhuo	103	146	100	50
Chen	110	145	95	40
Zhang	144	141	101	54

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Test Report

Report No.:PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 6 of 14

Table 7.9.2: Penetration of filter material

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

Aerosol	Condition	Sample No.	Penetration (%)	Assessment
Sodium chloride test	As received	11	0.1	Pass
		12	0.1	
		13	0.1	
	Simulated wearing treatment	14	0.5	
		15	1.0	
		16	0.9	
	Mechanical strength + Temperature conditioned	17	0.2	
		18	0.2	
		19	0.1	
Paraffin oil test	As received	20	0.4	Pass
		21	0.7	
		22	0.2	
	Simulated wearing treatment	23	0.2	
		24	0.2	
		25	0.3	
	Mechanical strength + Temperature conditioned	26	0.2	
		27	0.2	
		28	0.3	

Table 7.12: Carbon dioxide content of the inhalation air

Test specification: EN 149:2001+A1:2009 Clause 8.7

Condition	Sample No.	Result (%)	Assessment
As received	29	0.02	Pass
	30	0.02	
	31	0.02	
		Mean value:0.02	

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Test Report

Report No.: PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 7 of 14

Table 7.16: Breathing resistance (mbar)

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

As received	Flow Rate		32					33					34				
	Inhalation	30 l/min	0.53					0.52					0.50				
		95 l/min	1.73					1.74					1.69				
	Exhalation	160 l/min	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1.76			1.71	1.72	1.78	1.76	1.74	1.76	1.78	1.77	1.75	1.69	1.70	1.70	1.67	1.67	
Simulated wearing treatment	Flow Rate		35					36					37				
	Inhalation	30 l/min	0.41					0.42					0.43				
		95 l/min	1.45					1.40					1.48				
	Exhalation	160 l/min	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1.54			1.58	1.57	1.54	1.54	1.58	1.52	1.52	1.52	1.51	1.54	1.52	1.52	1.56	1.57	
Temperature conditioned	Flow Rate		38					39					40				
	Inhalation	30 l/min	0.43					0.44					0.44				
		95 l/min	1.44					1.42					1.43				
	Exhalation	160 l/min	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
2.09			2.06	2.05	2.07	2.06	2.06	2.02	2.05	2.04	2.01	2.03	2.02	2.02	2.00	2.01	
Flow conditioned	Flow Rate		41					42					43				
	Inhalation	30 l/min	0.49					0.49					0.52				
		95 l/min	1.63					1.64					1.59				
	Exhalation	160 l/min	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
1.80			1.81	1.79	1.79	1.78	1.82	1.84	1.81	1.80	1.79	1.82	1.83	1.79	1.82	1.78	
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

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Test Report

Report No.:PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 8 of 14

Test	Uncertainty
Total inward leakage	3.8%
Penetration of filter material(NaCl)	3.5%
Penetration of filter material(Paraffin oil)	4.2%
Carbon dioxide content of the inhalation air	4.5%
Breathing resistance(30L/min)	5.2%
Breathing resistance(95L/min)	5.4%
Breathing resistance(160)L/min)	6.0%

Photo(s) of Sample:



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Test Report

Report No.:PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 9 of 14



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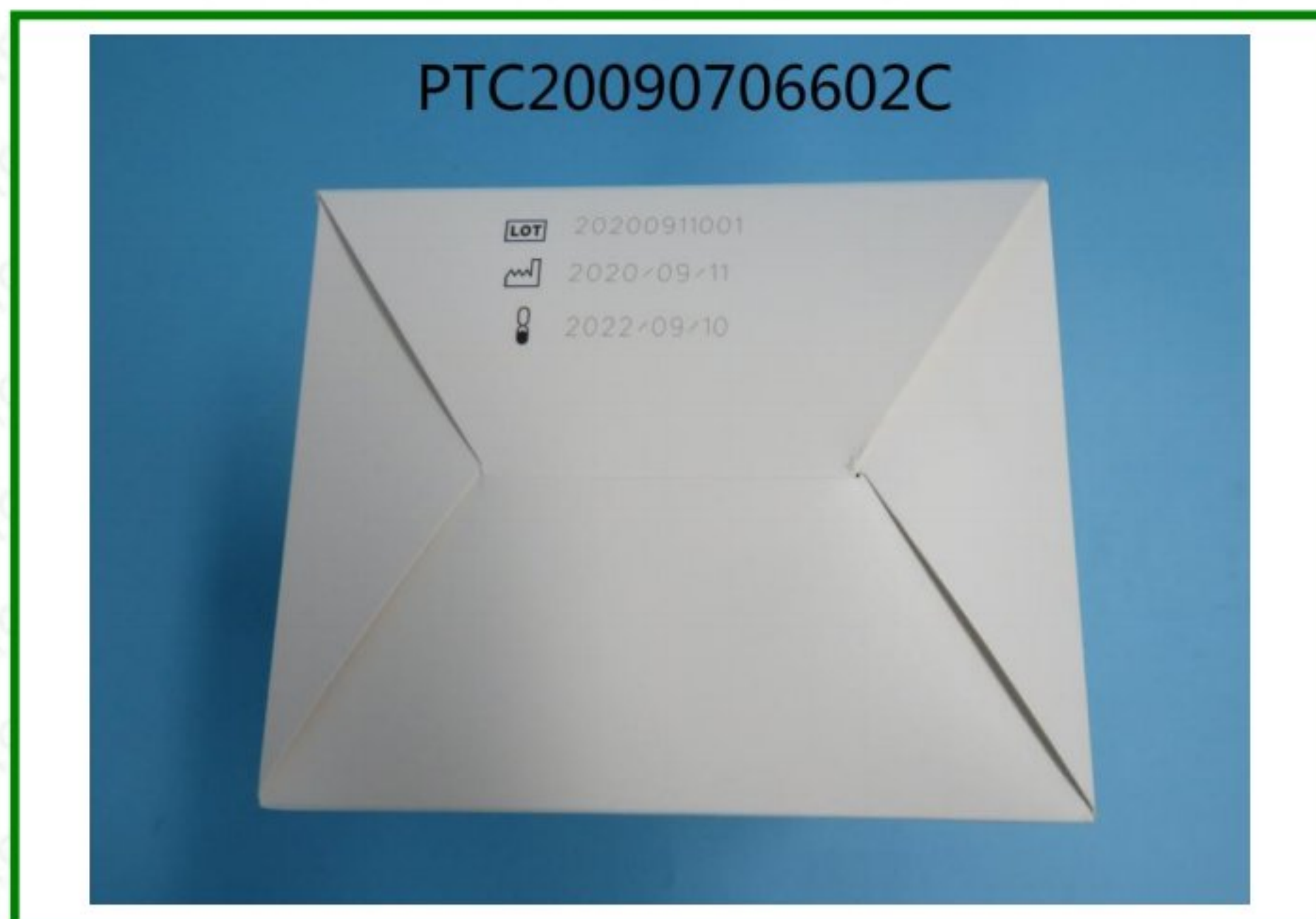


Test Report

Report No.:PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 10 of 14



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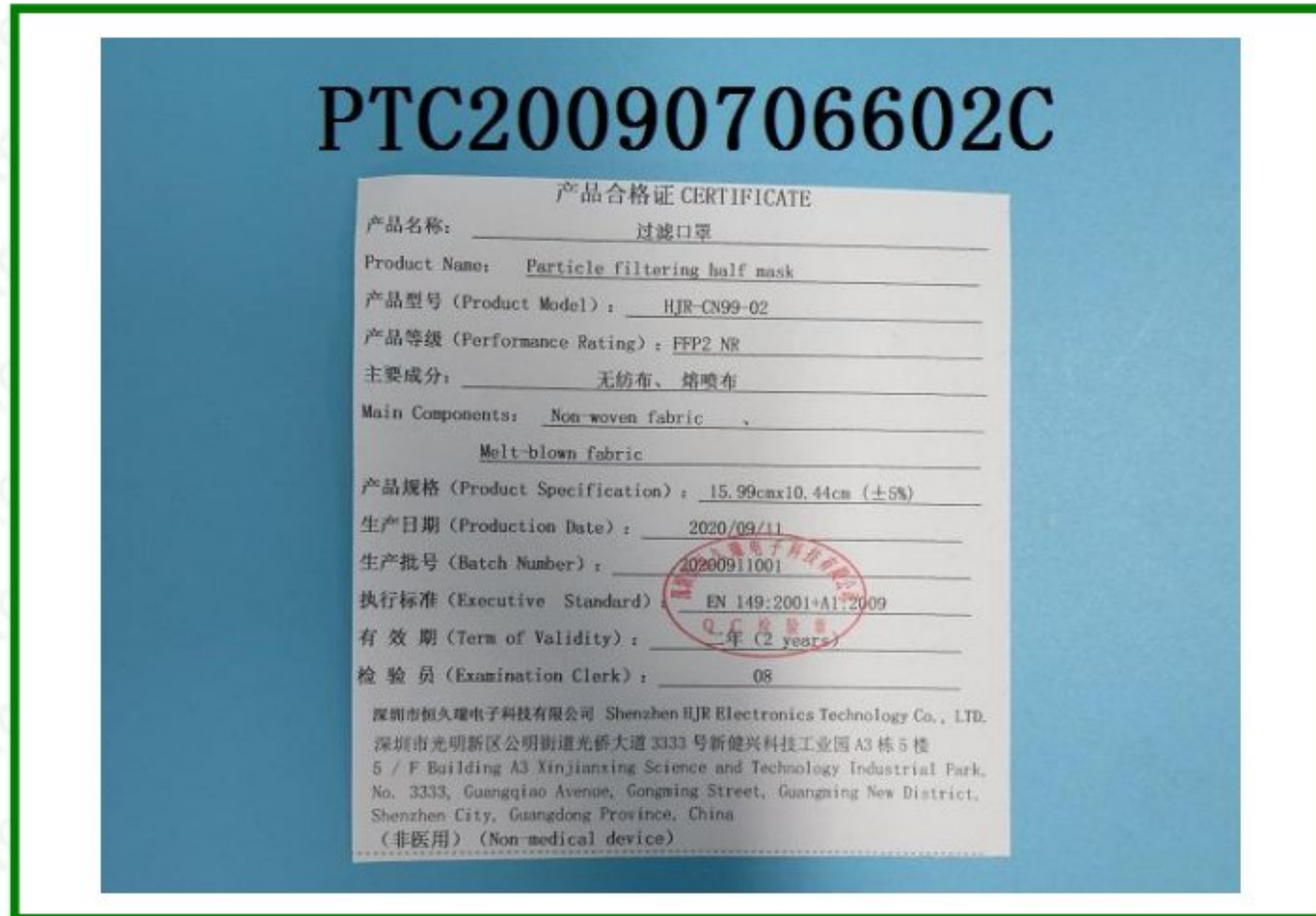


Test Report

Report No.:PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 11 of 14



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Test Report

Report No.:PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 12 of 14



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Test Report

Report No.:PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 13 of 14



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Test Report

Report No.:PTC20090706602C-EN01

Issue Date: Sep. 23, 2020

Page 14 of 14



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