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 M5 PPE) of Applus+, the test item(s) of the sample is according to the standard EN149:2001+A1:2009.

Product Name:	Filtering half mask
Report No.:	PTC21022204706C-EN01
APPLUS +With ID number:	21/32302741
Client:	Anhui lekang sanitary materials co., LTD
Client Address:	Qingcaozhen Town Industrial Park, Tongcheng City, Anhui Province, China
Manufacturer:	Anhui lekang sanitary materials co., LTD
Manufacturer Address:	Qingcaozhen Town Industrial Park, Tongcheng City, Anhui Province, China
Contact:	Xinlong Li
Model(s):	LK-Z006
Classification:	FFP2 NR
Date of Tests:	2021.06.04~2021.06.10

Signed for and on Behalf of PTC

Prepare by: Checked by: Approved by:

Precise Testing & Certification (Guangdong) Co., Ltd. (PTC)
Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China.
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Test Report

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
7.18 Demountable parts	PASS

Remark:

PASS: comply with requirement of standard

Test Result:

Requirement	Test Result	Conclusion
7.3 Visual inspection The visual inspection shall also include the marking and the information supplied by the manufacturer.	Comply	**Pass**
7.5 Material 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.	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**
7.9.1 Total inward leakage 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.	FFP2, Test results are shown in Annex A Table 7.9.1-A&B	**Pass**
7.9.2 Penetration of filter material The penetration of the filter of the particle filtering half mask shall meet the requirements of Table 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%

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

7.18 Demountable parts

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

Comply

Pass

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	3.5	3.5	4.4	4.1	4.2	3.9
Li	2	A.R	3.7	4.0	4.3	3.9	3.8	3.9
Zhong	3	A.R	3.2	3.6	3.2	3.5	3.4	3.4
Xu	4	A.R	3.8	4.2	4.2	4.3	3.6	4.0
Ma	5	A.R	3.5	3.2	3.3	3.6	3.3	3.4
Chen	6	T.C	4.0	4.2	4.2	4.4	4.4	4.2
Chen	7	T.C	3.9	4.1	4.1	4.5	4.0	4.1
Zhuo	8	T.C	4.2	4.6	4.4	4.7	4.2	4.4
Chen	9	T.C	3.7	3.8	3.9	4.0	4.5	4.0
Zhang	10	T.C	3.4	3.5	3.7	3.7	3.5	3.6

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

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	0.3	Pass
		12	0.3	
		13	0.2	
	Simulated wearing treatment	14	0.5	
		15	0.4	
		16	0.4	
	Mechanical strength + Temperature conditioned	17	0.7	
		18	0.6	
		19	0.7	
Paraffin oil test	As received	20	0.2	
		21	0.3	
		22	0.2	
	Simulated wearing treatment	23	0.4	
		24	0.6	
		25	0.4	
	Mechanical strength + Temperature conditioned	26	0.7	
		27	0.3	
		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	0.05	Mean value: 0.04	Pass
	30	0.04		
	31	0.04		

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**	0.40					0.39					0.40				
		95 l/min	1.26					1.32					1.29				
	Exhalation	**160 l/min**	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
			1.92	1.92	1.87	1.88	1.89	1.84	1.83	1.84	1.84	1.81	1.93	1.88	1.88	1.87	1.87
Simulated wearing treatment	**Flow Rate**		**35**					**36**					**37**				
	Inhalation	**30 l/min**	0.36					0.39					0.38				
		95 l/min	1.32					1.28					1.26				
	Exhalation	**160 l/min**	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
			1.86	1.81	1.77	1.80	1.83	1.89	1.85	1.87	1.89	1.87	1.87	1.85	1.85	1.82	1.82
Temperature conditioned	**Flow Rate**		**38**					**39**					**40**				
	Inhalation	**30 l/min**	0.33					0.35					0.36				
		95 l/min	1.14					1.14					1.14				
	Exhalation	**160 l/min**	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
			1.67	1.63	1.63	1.66	1.62	1.65	1.61	1.63	1.59	1.62	1.66	1.66	1.66	1.65	1.64
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

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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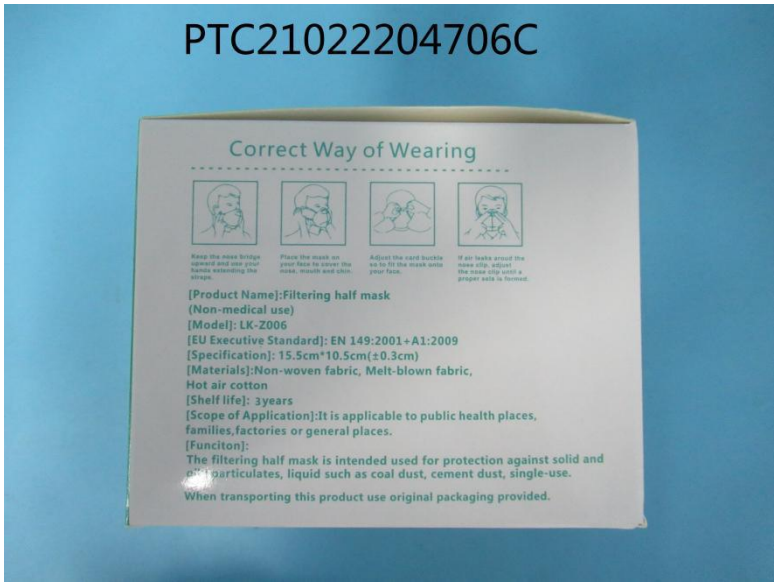

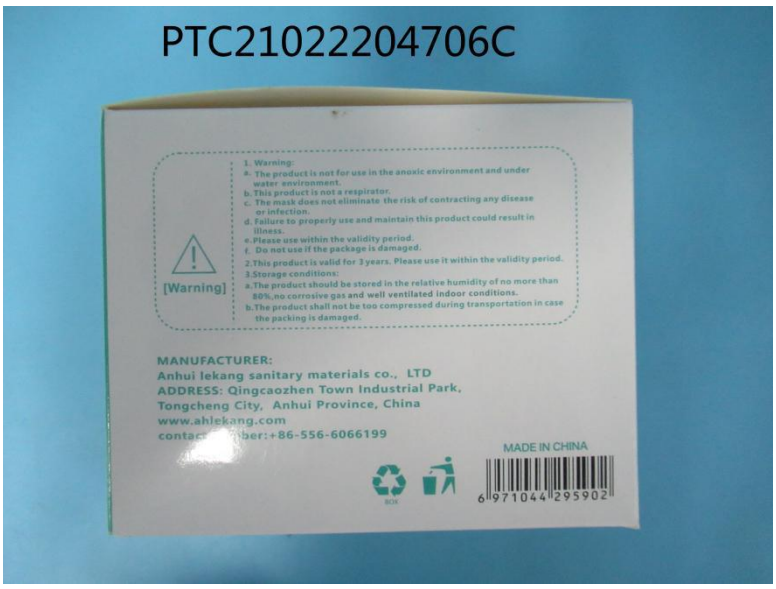

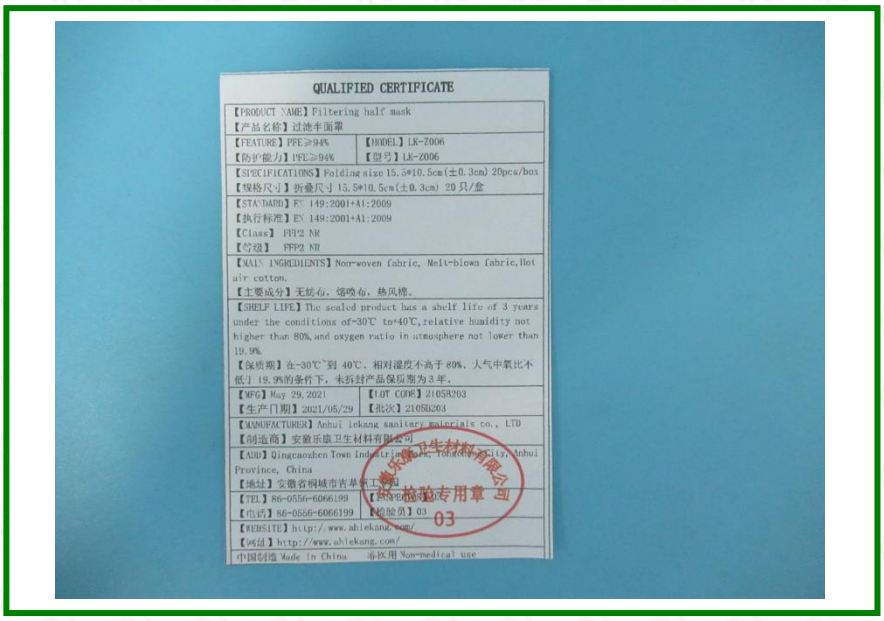

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End of Report

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