

Seite 1 von 12 60377902 001 168264746 Prüfbericht-Nr.: Auftrags-Nr. Page 1 of 12 Test Report No.: Order No.: Kunden-Referenz-Nr.: Auftragsdatum: N/A May 13, 2020 Client Reference No.: Order date: Hunan EEXI Technology & Service Co., Ltd. Auftraggeber: No.6, North of Pingtou road, Liuyang Hi-tech industrial development zone, Hunan, Client: Prüfgegenstand: Surgical Face Mask (non-sterile) Test item: Bezeichnung / Typ-Nr.: YX011 Identification / Type No.: Auftrags-Inhalt: Type test Order content: EN 14683:2019+AC:2019 except for clause 5.2.6 Prüfgrundlage: Test specification: Wareneingangsdatum: May 14, 2020 Date of receipt: Prüfmuster-Nr.: 20200504 Test sample No.: Prüfzeitraum: May 14, 2020 to May 28, 2020

See Attachment: Photo documentation for details.

geprüft von / tested by:

Testing period:

Ort der Prüfung:

Prüflaboratorium:

Testing laboratory:

Place of testing:

Prüfergebnis*:

Test result*:

Joven ke Lucy Jiang

TÜV Rheinland (Shenzhen)

Javen Ke / Assistant Project Engineer

See page 3

Co., Ltd.

Pass

May 28, 2020 Lucy Jiang / Assistant Project Engineer

kontrolliert von I reviewed by:

May 28, 2020 Angela Chen / Department Manager

togelad

 Datum
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 Datum
 Name / Stellung
 Unterschrift

 Date
 Name / Position
 Signature
 Date
 Name / Position
 Signature

Sonstiges / Other:

- The test report consists of EN 14683 test report including this cover page (12 pages) and attachment: Photo documentation (6 pages).

- The Biocompatibility (clause 5.2.6) is not evaluated in this test report.

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt Condition of the test item at delivery: Test item complete and undamaged * Legende: 1 = sehr gut 3 = befriedigend 4 = ausreichend 2 = qut5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Leaend: 2 = good 3 = satisfactory 4 = sufficient 5 = poor 1 = verv good P(ass) = passed a.m. test specification(s)F(ail) = failed a.m. test specification(s) N/A = not applicableN/T = not tested

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.

This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.





EN 14683:2019+AC: 2019 Medical face masks — Requirements and test methods

Testing Laboratory: TÜV Rheinland (Shenzhen) Co., Ltd.

Address.....: 1F East & 2-4F, Cybio Technology Building No.1, No.16 Kejibei 2nd

Road, High-Tech Industrial Park North Nanshan District, 518057.

Shenzhen, China

Applicant's name: Hunan EEXI Technology & Service Co., Ltd.

zone, Hunan, China

Test specification:

Standard: EN 14683:2019+AC:2019

Test procedure: Type test

Non-standard test method.....: N/A

Test Report Form No.: EN 14683:2019+AC:2019_A

Test Report Form Originator: TÜV Rh (SZ)

Master TRF 2020-03

Test item description....:: Surgical Face Mask (non-sterile)

Trade Mark....:

Inherent

Manufacturer: Same as the applicant

Model/Type reference: YX011

Classification: Type IIR



List of Attachments (including a total number of pages in each attachment):		
Attachment – Photo Documentation (6 pages)		
Summary of testing:		
Tests performed (name of test and test clause):	Testing location:	
Construction check according to:	TÜV Rheinland (Shenzhen) Co., Ltd.	
Clause 5.1.1 Materials and construction	1F East & 2-4F, Cybio Technology Building	
Clause 5.1.2 Design	No.1, No.16 Kejibei 2nd Road, High-Tech Industrial Park North Nanshan District, 518057, Shenzhen, China	
Clause 5.2.2 Bacterial filtration efficiency (BFE)	Sichuan Testing Center of Medical Devices	
Clause 5.2.3 Breathability	No. 4-28, Xinye Road, High tech west Area,	
Clause 5.2.4 Splash resistance	Chengdu, Sichuan, 611731, P.R.China	
Clause 5.2.5 Microbial cleanliness (Bioburden)		



Copy of marking plate

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

Instruction

Article No.: YX011

Date of preparation of the manual: April 15, 2020

Manual version number: A3 Please refer to the instructions before use

Product name: Surgical Face Mask(non-sterile)

Type: Type IIR

Type and Specification: Flat earloop, 17.5*9.5cm

Production license No.: Hunan Food&Drug Administration permission 20200023 Registration No.: Hunan medical device registration permission 20202140288

Main material: 30%Meltblown non-woven, 70%Non-woven fabric Standard Applied: EN 14683:2019+AC:2019 YY0469-2011

Intended Use:

The surgical face mask is single-use, disposable device, provided non-sterile, and intended to be used for patients and other persons to reduce the risk of spread of infections particularly in epidemic or pandemic situations.

Structure and Components:

This mask is made by blank mask, nose piece and ear loops. The blank mask is made by three layers. The inner and outer layer are non-woven fabric, the middle layer is Meltblown polypropylene.

Main performance:

- Bacterial filtration efficiency: ≥98%;
- Differential Pressure: < 60 Pa/cm²:
- Microbial cleanliness: ≤30 cfu/g;
- 4) Splash resistance pressure≥16kPa.

Introduction for use:

- 1) Open the package and remove a mask.
- 2) Hold the mask by the ear loops, confirm that the colored side is front and the nose piece is on the top of the mask. Hang the ear loops over your ears and mold the nose piece to the shape of your nose, pull the bottom of the mask over your mouth and chin.

Precautions:

- 1) Check the package is intact before use, conform the masks and date of manufacture on the external package, and use it before the expiry date.
- 2) If you are allergic to non-woven fabric, be cautious using this product.
- 3) After using the product, please dispose of it according to the requirements of the environments protection agency or related authorities.
- 4) This product is a disposable device. It is not recommended to the clean or reuse it. If you feel uncomfortable during use, please stop using it immediately or replace it with a new one.

Storage:

Store in a dry, well-ventilated, non-corrosive gas place, avoid high temperature.

Shelf life: 2 years. Meaning of package symbols:

symbol	Explanation	prof.	Means "Date of manufacture"
(2)	Means "Do not re-use"	52	Means Use by date"
② ◎	Means "Do not use if package is damaged"	LOT	Means "Batch code"
*	Means 'Keep away from surlight'	and .	Means 'Manufacturer'
+	Means "Keep dry"	NE MAY	Means 'Authorized representative in the European Community'

Batch code: refer to package

Date of manufacture: refer to package

Use by date: refer to package

Authorized representative in the European Community: Shanghai International Holding

Corp. GmbH (Europe)

Address: Eiffestrasse 80, 20537 Hamburg, Germany Manufacturer: Hunan EEXI Technology & Service Co., LTD.

Address: No. 6 North of Pingtou Road, Liuyang Hi-tech Industrial Development Zone,

Hunan, China.

TEL: +86-4000-333-088

See attachment for other information.



Testing	
Date of receipt of test item(s):	. •
Dates of tests performed:	See cover page
Possible test case verdicts:	
- test case does not apply to the test object:	N/A
- test object does meet the requirement:	P (Pass)
- test object was not evaluated for the requirement :	N/E (collateral standards only)
- test object does not meet the requirement:	F (Fail)
General remarks: "(See Attachment #)" refers to additional information ap "(See appended table)" refers to a table appended to the The tests results presented in this report relate only to This report shall not be reproduced except in full without List of test equipment must be kept on file and available Additional test data and/or information provided in the a Throughout this report a ☐ comma / ☒ point is us Name and address of factory (ies)	he report. the object tested. ut the written approval of the testing laboratory. le for review. attachments to this report. sed as the decimal separator.
Consul product information:	
General product information:	
1, The tested medical mask classified as type IIR. 2, The Biocompatibility (clause 5.2.6) is not evaluat 3, The test results are for reference only. Relevant intended to be sold in Europe.	



	EN 14683:2019+AC:20	19		
Clause	Requirement + Test	Result - Remark	Verdict	
4	Classification		Р	
	Medical face masks specified in this European Standard are classified into two types (Type I and Type II) according to bacterial filtration efficiency whereby Type II is further divided according to whether or not the mask is splash resistant. The 'R' signifies splash resistance.	Type IIR	Р	
5	Requirements		Р	
5.1	General		Р	
5.1.1	Materials and construction			
	The medical face mask is a medical device, generally composed of a filter layer that is placed, bonded or moulded between layers of fabric.	The Surgical Face Masks are made of blank mask, nose clip and ear loops. The outer and inner layers of the mask are made of non-woven fabrics, and the middle layer is made of melt-blown polypropylene.	Р	
	The medical face mask shall not disintegrate, split or tear during intended use.		Р	
	In the selection of the filter and layer materials, attention shall be paid to cleanliness.		Р	
5.1.2	Design		Р	
	The medical face mask shall have a means by which it can be fitted closely over the nose, mouth and chin of the wearer and which ensures that the mask fits closely at the sides.		Р	
	Medical face masks may have different shapes and constructions as well as additional features such as a face shield (to protect the wearer against splashes and droplets) with or without anti-fog function, or a nose bridge (to enhance fit by conforming to the nose contours).	With nose clip	Р	
5.2	Performance requirements		Р	
5.2.1	General		Р	
	All tests shall be carried out on finished products or samples cut from finished products.		Р	
5.2.2	Bacterial filtration efficiency (BFE)		Р	
	When tested in accordance with Annex B, the BFE of the medical face mask shall conform to the minimum value given for the relevant type in Table 1.	See appended table 5.2.2	Р	



	EN 14683:2019+AC:20	19	
Clause	Requirement + Test	Result - Remark	Verdict
	For thick and rigid masks such as rigid duckbill or cup masks the test method may not be suitable as a proper seal cannot be maintained in the cascade impactor. In these cases, another valid equivalent method shall be used to determine the BFE.	Not such mask.	N/A
	When a mask consists of two or more areas with different characteristics or different layer-composition, each panel or area shall be tested individually.	Same characteristics and same layer-composition declared by manufacturer.	N/A
	The lowest performing panel or area shall determine the BFE value of the complete mask	See above	N/A
5.2.3	Breathability		Р
	When tested in accordance with Annex C, the differential pressure of the medical face mask shall conform to the value given for the relevant type in Table 1.	See appended table 5.2.3	P
	If the use of a respiratory protective device as face mask is required in an operating theatre and/or other medical settings, it might not fulfil the performance requirements with regard to differential pressure as defined in this European Standard. In such case, the device should fulfil the requirement as specified in the relevant Personal Protective Equipment (PPE) standard(s).		N/A
5.2.4	Splash resistance		Р
	When tested in accordance with ISO 22609:2004 the resistance of the medical face mask to penetration of splashes of liquid shall conform to the minimum value given for Type IIR in Table 1.	See appended table 5.2.4	Р
5.2.5	Microbial cleanliness (Bioburden)		Р
	When tested according to EN ISO 11737-1:2018 the bioburden of the medical mask shall be ≤ 30 CFU/g tested (see Table 1).	See appended table 5.2.5	Р
5.2.6	Biocompatibility		N/E
	According to the definition and classification in EN ISO 10993-1:2009, a medical face mask is a surface device with limited contact.	The biocompatibility is not evaluated in this test report.	N/E
	The manufacturer shall complete the evaluation of the medical face mask according to EN ISO 10993-1:2009 and determine the applicable toxicology testing regime.		N/E
	The results of testing should be documented according to the applicable parts of the EN ISO 10993 series.		N/E
	The test results shall be available upon request.		N/E
6	Marking, labelling and packaging		Р



	EN 14683:2019+AC:20	19	
Clause	Requirement + Test	Result - Remark	Verdict
	Annex I, §13, of the Medical Devices Directive (93/42/EEC) or Annex I, §23, of the Medical Device Regulation (EU) 2017/745 specifies the information that should be specified on the packaging in which the medical face mask is supplied.	See page 4 and attachment.	Р
	The following information shall be supplied:		Р
	a) number of this European Standard;		Р
	b) type of mask (as indicated in Table 1).		Р
	EN ISO 15223-1:2016 and EN 1041:2008+A1:2013 should be considered.		Р

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	EN 14683:2019+AC:2019		
Clause	Requirement + Test	Result - Remark	Verdict

5.2.2		TABLE: Bacterial filtration efficiency (BFE)						Р
Batch/ lot no.:	Test Specimen no.:	Dimension of the test specimen L x W (mm x mm)	test area (cm²)	Flow rate (I/min)	Mean of the total plate counts of the two positive controls	Mean plate count of the negative controls	BFE for each test specimen (%)	Remarks
2020050	1	162×150	63.6	28.3			99.72%	
4	2	161×150	63.6	28.3			99.66%	
	3	161×151	63.6	28.3	1763	0	99.78%	
	4	161×151	63.6	28.3			99.68%	
	5	161×151	63.6	28.3			99.66%	

Supplementary information:

^{1,} Each specimen was conditioned at $\underline{21}$ °C and $\underline{85}$ % relative humidity for $\underline{16}$ h to bring them into equilibrium with atmosphere prior to testing.

^{2,} The side of the test specimen was facing towards the challenge aerosol: the inside of the test specimen.



	EN 14683:2019+AC:2019		
Clause	Requirement + Test	Result - Remark	Verdict

		TABLE: Breathability (Different	ial pressure)			Р
Batch/ lot no.:	Test Specimen number- Test area number	Differential pressure for each test area (Pa/cm²)	The averaged differential pressure for each test specimen (Pa/cm²)	Flow rate (I/min)	Ren	narks
202005	1-1	23.7		8.0		
04	1-2	25.2		8.0		-
	1-3	28.3	24.9	8.0		-
	1-4	23.1		8.0		-
	1-5	24.4		8.0		
	2-1	17.7		8.0		-
	2-2	26.7	24.3	8.0		.
	2-3	26.3		8.0		.
	2-4	25.2		8.0		
	2-5	25.7		8.0		
	3-1	27.8		8.0		.
	3-2	26.4		8.0		.
	3-3	21.9	24.6	8.0		.
	3-4	22.8		8.0		
	3-5	24.3		8.0		·-
	4-1	22.6		8.0		
	4-2	29.2		8.0		-
	4-3	27.1	25.5	8.0		-
	4-4	24.3] [8.0		-
	4-5	24.2		8.0		-
	5-1	14.4		8.0		
	5-2	21.8]	8.0		-
	5-3	24.5	21.0	8.0		
	5-4	22.1		8.0		
	5-5	22.3		8.0		-

Supplementary information:

Each specimen was conditioned at 21 °C and 85 % relative humidity for 16 h to bring them into equilibrium with



	EN 14683:2019+AC:2019			
Clause	Requirement + Test		Result - Remark	Verdict

atmosphere prior to testing.

5.2.4	TABLE: Sp	plash resistance			Р
Batch/ lot no.:		Test mask no.:	The material of tested mask	Test result (Pass/fail)	Remarks
20200504		1		Pass	
		2		Pass	
		3] [Pass	
		4] [Pass	
		5		Pass	
		6		Pass	
		7] [Pass	
		8]	Pass	
		9] [Pass	
	10		Pass		
	11] [Pass		
	12] [Pass		
	13		Pass		
		14	See clause 5.1.1	Pass	
		15		Pass	
		16		Pass	
		17		Pass	
		18		Pass	
		19] [Pass	
		20] [Pass	
		21		Pass	
		22		Pass	
		23		Pass	
		24] [Pass	
		25] [Pass	
		26] [Pass	
		27]	Pass	
		28] [Pass	



EN 14683:2019+AC:2019									
Clause	Requirement + Test			Result - Remark		Verdict			
		29		Pass					
		30		Pass					
		31		Pass					
		32		Pass					

Supplementary information:

- 1, Each specimen was conditioned at $\underline{21}$ °C and $\underline{85}$ % relative humidity for $\underline{4}$ h to bring them into equilibrium with atmosphere prior to testing.
- 2, The description of target area tested: the centre of the specimen.
- 3, Any technique used to enhance visual detection of synthetic blood: cotton absorbent swab.
- 4, The temperature and relative humidity for testing: $\underline{21}$ °C and $\underline{80}$ %.
- 5, Description of any pre-treatment techniques used: N/A.

5.2.5	TABLE: Microbial cleanliness (Bioburden)					
Batch/ lot no.:		Mask(under test) no.:	Weight of each mask (g)	Total bioburden per individual mask (CFU/g)	Remarks	
20200504		1	2.9	<1		
		2	2.8	<1		
		3	3.0	<1		
		4	3.0	<1		
		5	2.9	<1		

End of EN 14683 test report

Photo Documentation

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Product: Surgical Face Mask (non-sterile)



Figure 1 Front / Back view of packaging box (The marking shown above will be replaced by the marking in Figure 4 in final packaging bag)



Figure 2 Top view of packaging box (The marking shown above will be replaced by the marking in Figure 5 in final packaging bag)

Photo Documentation



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<u>Product:</u> Surgical Face Mask (non-sterile)



Figure 3 Side view of packaging box (The marking shown above will be replaced by the marking in Figure 6 in final packaging bag)

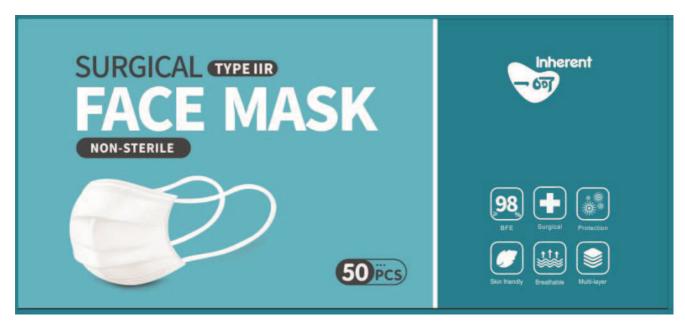


Figure 4 Front / Back view of packaging box

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Product: Surgical Face Mask (non-sterile)



Figure 5 Top view of packaging box



Figure 6 Side view of packaging box

Photo Documentation



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<u>Product:</u> Surgical Face Mask (non-sterile)



Figure 7 Side view of packaging box

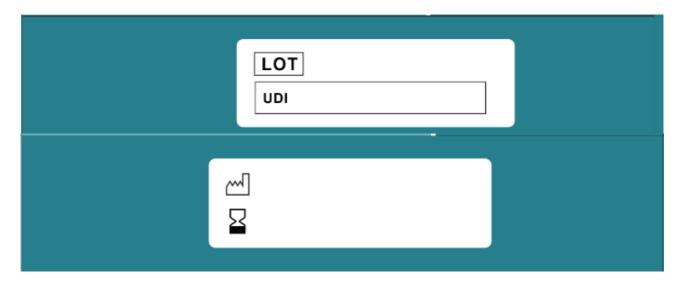


Figure 8 Bottom view of packaging box

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Product: Surgical Face Mask (non-sterile)



Figure 9 View of packaging bag

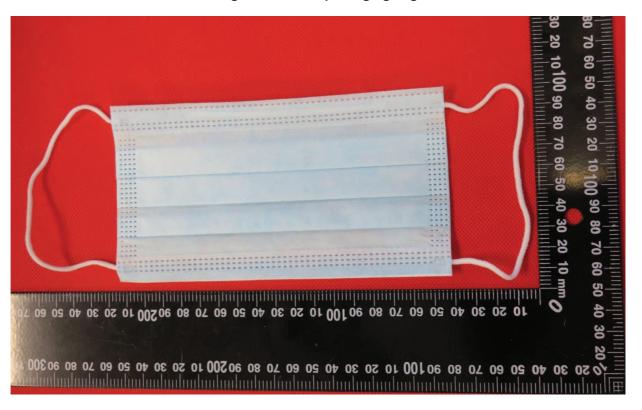


Figure 10 View of face mask

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Product: Surgical Face Mask (non-sterile)

Type Designation: YX011

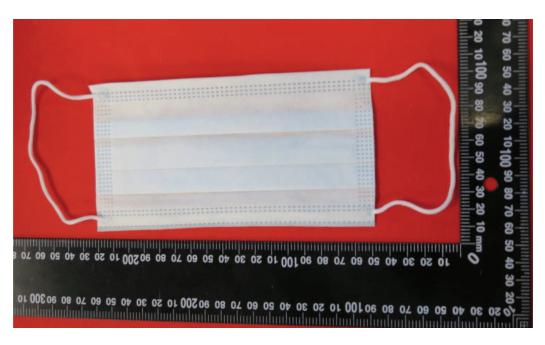


Figure 11 View of face mask



Figure 12 View of face mask (3-ply)

END OF THE PHOTO DOCUMENTATION