certificate
no. **IFA 1601106**
dated 2016-10-28

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European notified body
Identification number: 0121

Translation In any case, the German original shall prevail.

EC Type-Examination Certificate

Product designation:	**TE YIN JTY A-11 FFP2 NR D EN 149:2001+A1:2009**
Type:	Particle filtering half mask
Testing based on:	DIN EN 149:2009
Test report:	201622069/2120 of 2016-10-24 - IFA, Sankt Augustin
Further details:	For protection against non highly volatile liquid and solid particles. Class of device: FFP2 NR D Maximum application time or maximum particle exposure one single shift. This document is valid in connection with the technical file and the instructions for use in German language, both provided with the IFA endorsement 1601106 of 2016-10-21.

The product tested complies with the essential requirements of Annex II of the directive 89/686/EEC **(Personal Protective Equipment)**,amended by the directives 93/68/EEC, 93/95/EEC and 96/58/EC.

The present certificate is valid until: **2021-10-27**

Further provisions concerning the validity, the extension of the validity and other conditions are laid down in the Rules of Procedure for Testing and Certification.

Dr. rer. nat. Peter Paszkiewicz
Head of testing and certification body

Dipl.-Chem. Christoph Thelen
Certification officer

Deutsche Gesetzliche Unfallversicherung (DGUV) e.V.
Spitzenverband der gewerblichen Berufsgenossenschaften
und der Unfallversicherungsträger der öffentlichen Hand
Vereinsregister-Nr. VR 751 B, Amtsgericht Charlottenburg

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Datum/*Date:* 2016-10-24 The/MS

Translation
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PRÜFBERICHT
TEST REPORT

Nr./*No.:* 201622069/2120

1	**Auftraggeber/** ***Customer***	
2	**Prüfmuster/** ***Test specimen***	Respiratory protective device
2.1	Hersteller/ *Manufacturer*	Suzhou Teyin Non-woven Fabrics Co., Ltd. No. 2163, Qiongling Road, Zangshu Street, Mudu Town, Wuzhong District Suzhou, Jiangsu People's Republic of China
2.2	Bauart, Bezeichnung/ *Type, designation*	Particle filtering half mask / TE YIN JTY A-11 FFP2 NR D
	Kennzeichnung/ *Marking*	TE YIN JTY A-11 FFP2 NR D EN 149:2001+A1:2009
2.3	Bestimmungsgemäße Verwendung/ *Intended use*	For protection against non highly volatile liquid and solid particles. Class of device: FFP2 NR D Maximum application time or maximum particle exposure one single shift.
2.4	Datum der Herstellung/ *Date of fabrication*	2016-04
2.5	Weitere Angaben/ *Further details*	-.-

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3 Prüfung/ *Testing*

3.1	Art der Prüfung/ *Type of test*	EC-type-test
3.2	Datum der Prüfung/ *Date of testing*	June - October 2016
3.3	Prüfverfahren, -grundlagen/ *Test method, requirements*	DIN EN 149:2009

4 Beurteilung, Eignung/ *Assessment, suitability* (Besondere Hinweise/ *Special remarks*)

The particle filtering half mask TE YIN JTY A-11 FFP2 NR D fulfils the requirements of DIN EN 149:2009 for particle filtering half masks of the device class FFP2 NR D.

Special Remarks:

According to a manufacturer's statement the particle filtering half mask TE YIN JTY A-11 FFP2 NR D is identical in design and material, apart from the marking, with the particle filtering half masks TE YIN JTY A-11 FFP2 and TE YIN JTY A-11 FFP2 NR mentioned under the test report 201420504/2120 of 2015-05-21.

In the test-protocol are listed test-results from the test report 201420504/2120 under the items 6-8 & 10-18 as well as for the particle filtering half mask TE YIN JTY A-11 FFP2 NR D are listed additional tests under the items 6-8.

Item 21 of the enclosed test protocol has to be regarded.

5 Gültigkeit des Prüfberichtes/ *Validity of Test Report*

Die ermittelten Ergebnisse gelten nur für die geprüften Objekte.
The test results apply to the tested objects only.

Einschränkungen der Gültigkeit oder Verwendung dieses Prüfberichtes:
Limitation of validity or use of this Test Report:

-.-

6 Allgemeine Hinweise/ *General remarks*

Dieser Prüfbericht besteht aus **11** Seiten.
The present Test Report consists of *Pages.*

Die Seiten 1 bis 3 enthalten das Gesamtergebnis der Prüfung. Zum vollständigen Prüfbericht gehört das Prüfprotokoll, aus dem die Einzelangaben ersichtlich sind.
Pages 1 to 3 indicate the overall test result. The complete Test Report also includes the test protocol containing all pertinent details.

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Dieser Prüfbericht berechtigt n i c h t zur Verwendung des GS-Zeichens, BG-Zeichens oder CE-Zeichens.
The present Test Report does n o t warrant the use of the GS-label, BG-label or CE-mark.

Im Übrigen gilt die Prüf- und Zertifizierungsordnung der Prüf- und Zertifizierungsstellen im DGUV Test in Verbindung mit den Allgemeinen Geschäftsbedingungen der Deutschen Gesetzlichen Unfallversicherung e.V.
In all other respects the Rules of Procedure for Testing and Certification carried out by the Test and Certification Bodies in DGUV Test shall apply in conjunction with the General Business Conditions of the Deutsche Gesetzliche Unfallversicherung e.V.

Für die Beurteilung:
For the assessment:

Dipl.-Chem. Christoph Thelen
Fachzertifizierer (in)
Certification officer

Für die Prüfung:
For the testing:

Dipl.-Ing. Judith Krisinger
Leiter(in) des Prüflabors
Head of Testlaboratory

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Prüfprotokoll
Test protocol

1. Test Method: DIN EN 149:2009

2. Type of test: EC-type-test

3. Customer: Wuxi Sunli Industrial (PSP) Co., Ltd.

4. Test specimen

4.1 Type: Particle filtering half mask

4.2 Designation: TE YIN JTY A-11 FFP2 NR D

4.3 Marking: TE YIN JTY A-11 FFP2 NR D EN 149:2001+A1:2009

4.4 Class of device: FFP2 NR D

5. Conditioning

5.1 Simulated wearing

The in table 4 of DIN EN 149:2009 given number of particle filtering half masks has been subjected to simulated wearing treatment according to DIN EN 149:2009 clause 8.3.1 before carrying out the further in table 4 given tests.

After simulated wearing treatment none of the conditioned particle filtering half masks shall have suffered mechanical failure of the facepiece and the particle filtering half masks shall not collapse.

The requirements are fulfilled.

5.2 Temperature conditioning

The in table 4 of DIN EN 149:2009 given number of particle filtering half masks has been subjected to temperature conditioning according to DIN EN 149:2009 clause 8.3.2 before carrying out the further in table 4 given tests.

After temperature conditioning none of the conditioned particle filtering half masks shall collapse.

The requirement is fulfilled.

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5.3 Mechanical strength

The in table 4 of DIN EN 149:2009 given number of particle filtering half masks has been subjected to mechanical strength conditioning according to DIN EN 149:2009 clause 8.3.3 before carrying out the further in table 4 given tests.

6. Breathing resistance

6.1 Requirements

Max. inhalation resistance at a flow rate of 30 l/min:	70 Pa
Max. inhalation resistance at a flow rate of 95 l/min:	240 Pa
Max. exhalation resistance at a flow rate of 160 l/min:	300 Pa

6.2 Test specimen

T.-No 1- 8:	TE YIN JTY A-11 FFP2
T.-No 9:	TE YIN JTY A-11 FFP2 NR
T.-No 10:	TE YIN JTY A-11 FFP2 NR D

6.3 Test results

Test	Conditioning	Breathing resistance [Pa]		
		Inhalation at 30 l/min	Inhalation at 95 l/min	Exhalation at 160 l/min
1	as received	38	128	211
2	as received	40	135	220
3	as received	37	125	205
4	EN 149:2001, 8.3.1	37	124	203
5	EN 149:2001, 8.3.1	40	135	219
6	EN 149:2001, 8.3.1	39	130	212
7	EN 149:2001, 8.3.2	38	129	212
8	EN 149:2001, 8.3.2	41	139	222
9	EN 149:2001, 8.3.2	33	116	168
10	EN 149:2001, 8.3.2	32	104	166

The requirements are fulfilled.

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7. Filter penetration at test against paraffin oil

7.1 Test flow rate: 95 l/min

7.2 Requirements

Maximum filter penetration: 6,0%

7.3 Test specimen

T.-No 1-8: TE YIN JTY A-11 FFP2

T.-No 9-11: TE YIN JTY A-11 FFP2 NR D

7.4 Test results

Test	Conditioning	Penetration [%]	
		measured value 1	measured value 2
1	as received	0,6	-,-
2	as received	0,5	-,-
3	as received	0,5	-,-
4	EN 149:2001, 8.3.1	0,5	-,-
5	EN 149:2001, 8.3.1	0,4	-,-
6	EN 149:2001, 8.3.1	0,5	-,-
7	EN 149:2001, 8.3.3 & 8.3.2	0,4	0,6
8	EN 149:2001, 8.3.3 & 8.3.2	0,4	0,6
9	EN 149:2001, 8.3.3 & 8.3.2	2,0	2,7
10	EN 149:2001, 8.10	1,2	-,-
11	EN 149:2001, 8.3.2 & 8.10	0,8	-,-

Measured value 1: Filter penetration after 3 minutes

Measured value 2: Maximum filter penetration during paraffin oil exposure until 120 mg

The requirements are fulfilled.

8. Filter penetration at test against sodium chloride

8.1 Test flow rate: 95 l/min

8.2 Requirements

Maximum filter penetration: 6,0 %

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8.3 Test specimen

T.-No 1-8: TE YIN JTY A-11 FFP2

T.-No 9-11: TE YIN JTY A-11 FFP2 NR D

8.4 Test results

Test	Conditioning	Penetration [%]	
		measured value 1	measured value 2
1	as received	0,1	-,-
2	as received	0,1	-,-
3	as received	0,1	-,-
4	EN 149:2001, 8.3.1	0,1	-,-
5	EN 149:2001, 8.3.1	0,1	-,-
6	EN 149:2001, 8.3.1	0,1	-,-
7	EN 149:2001, 8.3.3 & 8.3.2	0,1	0,1
8	EN 149:2001, 8.3.3 & 8.3.2	0,1	0,1
9	EN 149:2001, 8.3.3 & 8.3.2	0,9	0,9
10	EN 149:2001, 8.10	>0,1	-,-
11	EN 149:2001, 8.3.2 & 8.10	>0,1	-,-

Measured value 1: Penetration after 3 minutes

Measured value 2: Maximum penetration

The requirements are fulfilled.

9. Clogging

9.1 Test flow rate: 15 cycles/min and 2,0 l/stroke

9.2 Test conditions

According to DIN EN 149:2001 clause 8.10 clogging is performed at a Dolomite dust concentration of (400 ± 100) mg/m^3 until the product of dust concentration and test period is 833 mg·h/m^3 has been clogged.

9.3 Requirements

The breathing resistance after clogging of particle filtering half masks of the device class FFP2 NR D without exhalation valve shall not exceed 400 Pa for inhalation and exhalation measured at a continue flow rate of 95 l/min.

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9.4 Test results

Test	Conditioning	Inhalation resistance at 95 l/min [Pa]	Exhalation resistance at 95 l/min [Pa]
1	as received	256	194
2	EN 149:2001, 8.3.2	243	187

The test results refer to a dust concentration and test period product value of 833 mg·h/m^3.

The requirements are fulfilled.

10. Practical performance

After the practical performance test the respiratory protective device was assessed by two test subjects.

10.1 Assessment wearer 1

Head harness comfort : no complaint
Security of fastenings: no complaint
Field of vision: no complaint
Additional remarks: none

10.2 Assessment wearer 2

Head harness comfort: no complaint
Security of fastenings: no complaint
Field of vision: no complaint
Additional remarks: none

11. Total inward leakage

11.1 Test conditions

Treadmill speed: 6 km/h
Duration of exercise: 2 min per exercise
Type of exercises: Ex. No. 1 = Walking
Ex. No. 2 = Walking and turning the head
Ex. No. 3 = Walking and head up and down
Ex. No. 4 = Walking and speaking
Ex. No. 5 = Walking

11.2 Requirements

The total inward leakage shall not exceed 11 % in 46 of the 50 individual results (10 persons x 5 exercises).
The total inward leakage shall not exceed 8 % in 8 of the 10 arithmetic means (10 persons).

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11.3 Test results (total inward leakage in %)

Subject	Conditioning	Exercises					mean
		1	2	3	4	5	
1	as received	0,2	0,3	0,6	0,9	0,2	0,4
2	as received	0,5	0,8	1,3	3,3	0,3	1,2
3	as received	0,2	0,2	0,2	0,2	0,2	0,2
4	as received	0,3	0,3	0,3	0,3	0,3	0,3
5	as received	0,2	0,5	0,1	0,3	0,2	0,3
6	EN 149:2001, 8.3.2	2,5	1,9	1,7	0,6	1,3	1,6
7	EN 149:2001, 8.3.2	1,3	1,6	2,3	2,3	0,4	1,6
8	EN 149:2001, 8.3.2	0,1	0,1	0,1	0,6	0,1	0,2
9	EN 149:2001, 8.3.2	0,1	1,8	4,4	0,3	0,3	1,4
10	EN 149:2001, 8.3.2	0,6	0,5	0,5	0,6	0,8	0,6

The requirements are fulfilled.

12. Carbon dioxide content of the inhalation air

12.1 Test procedure

The carbon dioxide content of the inhalation air (dead space) shall be measured at the mouth of the dummy head with a breathing machine adjusted to 25 cycles/min and 2.0 l/stroke.

12.2 Requirement

The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1.0 % (by volume), measured at an ahead wind-speed of 0.5 m/s.

12.3 Test results

Concentration [Vol.-%]	Test 1	Test 2	Test 3
CO_2 content of the inhalation air	0,95	0,82	0,87,

The requirement is fulfilled.

13. Package

Particle filtering half masks shall be offered for sale and packaged in such a way that they are protected against mechanical damage and contamination before use.

The requirements are fulfilled.

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14. Flammability

Four particle filtering half masks were tested, two in the state as received and two after temperature conditioning (DIN EN 149:2009, clause 8.3.2).

The four tested samples shall not burn with their own flame.

The requirement is fulfilled.

15. Finish of parts

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

The requirements are fulfilled.

16. Head harness

16.1 Head harness after simulated wearing

After the simulated wearing treatment (DIN EN 149:2009 clause 8.3.1) of three particle filtering half masks, no mechanical defection of the head harness shall occur.

The requirement is fulfilled.

16.2 Adjustability and hold of the head harness

The assessment was executed during the leakage tests and practical performance tests.

The requirements are fulfilled.

17. Compatibility with skin

The materials coming into contact with the wearers' skin during the leakage tests and practical performance tests shall not cause any irritation or any other negative health effect for wearers.

The requirements are fulfilled.

18. Field of vision

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

The requirements are fulfilled.

19. Mass of the respiratory device: 13 g

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20. Marking

20.1 Marking of mask

The requirements are fulfilled.

20.2 Marking of packaging

The requirements are fulfilled.

21. Information supplied by the manufacturer

Only the instructions for use in German language were revised.

The performed test results apply to the tested objects only.

A statement about the uniformity of production cannot be derived.

Institute for Occupational Safety and Health – IFA –
In charge

Dipl.-Ing. Judith Krisinger

Person responsible

Benedikt Brenner