El Laboratorio Nacional de Tecnología de Protección Personal (NPPTL)

Respiradores de máscara con filtro de partículas N95 aprobados por NIOSH



in

Actualizado el 19 de marzo de 2021

f

Fabricantes enumerados alfabéticamente: X, Y y Z

El respirador N95 es el más común de los siete tipos de respiradores de máscara con filtro de partículas. Este producto filtra al menos el 95% de las partículas en el aire, pero no es resistente al aceite.

Esta página web proporciona una tabla de respiradores N95 aprobados por NIOSH, enumerados alfabéticamente por fabricante. Puede seleccionar un fabricante en particular haciendo clic en la primera letra de su nombre en el índice a continuación.

Hay algunos productos que están aprobados por NIOSH como respirador N95 y también aprobados por la Administración de Alimentos y Medicamentos (FDA) como mascarilla quirúrgica. Estos productos se conocen como respiradores quirúrgicos N95 . Vea una definición de respiradores quirúrgicos N95 . Para su comodidad, los respiradores quirúrgicos N95 están indicados con el número de modelo / línea de productos en negrita seguido de (FDA) . Si tiene un producto que cree que está aprobado por NIOSH y aprobado por la FDA que no aparece en esta lista, deberá consultar con los CDC para determinar si está aprobado por NIOSH al 1-800-CDC-INFO (1-800-232 -4636) y el Centro de Dispositivos y Salud Radiológica de la FDA al 1-800-638-2041 para verificar la autorización. Vea una tabla completa de respiradores quirúrgicos N95.

Descargo de responsabilidad: Los enlaces en esta sección van a sitios web fuera de CDC / NIOSH y no deben considerarse como una aprobación de su contenido o como una declaración de la política de NIOSH. El procedimiento de colocación y / o las instrucciones para el usuario, ya sea en los sitios web o en la versión PDF, no deben considerarse un respaldo oficial de su contenido ni una declaración de la política de NIOSH.

Índice: 3M A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Notas

Proveedor / fabricante e información de contacto	Número de modelo / línea de productos	Número de aprobación	Válvula Sí / No	Instrucciones para el usuario del procedimiento de colocación del fabricante
Xiantao Zhongyi Safety Protection Products Company, Ltd. [2] 0086-728-3257535 / 3257635	ZYB-11	84A-7877	No	<u>ZYB-11</u>

National Institute for Occupational Safety and Health Respirator Branch





Task Number: TN-21384 Reference No.: CFR 84.180

Test: Exhalation Resistance Test **STP No.:** 3 **Manufacturer:** Xiantao Zhongyi Safety Protection Products Co., Ltd.

Filter Type: Filter Only

Item Tested: ZYB-11

Sample	Maximum Allowable Resistance (MM of H2O) Exhalation	Actual Resistance (MM of H2O) Exhalation	Result
1	25	8.2	PASS
2	25	8.6	PASS
3	25	9.2	PASS

Overall Result:	PASS	

Comments:

Samples were tested on manometer 000426.

Was all equipment verified to be in calibration throughout all testing?

(a) Yes (b) No

Signature: Date: 26/10/2017

National Institute for Occupational Safety and Health **Respirator Branch Test Data Sheet**



Task Number: TN-21384 Reference No.: CFR 84.182

Exhalation Valve Leakage Test Test: STP No.: 4 Manufacturer: Xiantao Zhongyi Safety Protection Products Co., Ltd.

Item Tested: ZYB-11

			LEA	AKAGE		
Sample	Trial #1 (mL/min.)	Trial #2 (mL/min.)	Trial #3 (mL/min.)	Average (mL/min.)	Maximum Allowable (mL/min.)	Result
Valve 1	0.00	0.00	0.00	0.00	30.00	PASS
Valve 2	0.00	0.00	0.00	0.00	30.00	PASS
Valve 3	0.00	0.00	0.00	0.00	30.00	PASS
Over	all Result: P	PASS				

Overall Result: PASS

Signature: Judiu Little

Date: <u>26/10/2017</u>

Task Number: TN-21384 **Reference No.:** CFR 84.182

Test: Exhalation Valve Leakage Test **STP No.:** 4 **Manufacturer:** Xiantao Zhongyi Safety Protection Products Co., Ltd.

Item Tested: ZYB-11

Comments:

Samples were tested on Gilibrator 000041.

Was all equipment verified to be in calibration throughout all testing?

Yes

○ No

Signature: Jicker L. Men

Date: <u>26/10/2017</u>

National Institute for Occupational Safety and Health Respirator Branch Test Data Sheet



Task Number: TN-21384 Reference No.: CFR 84.180

Test: Inhalation Resistance Test **STP No.:** 7 **Manufacturer:** Xiantao Zhongyi Safety Protection Products Co., Ltd.

Item Tested: ZYB-11

Filter Type: Filter Only

Sample 1	Maximum Allowable Resista (MM of H2O) Inhalation	nnce Actual Resistance (MM of H2O) Inhalation	Result
1	35	8.4	PASS
2	35	7.9	PASS
3	35	8.4	PASS

Overall Result: PASS

Signature: Jacker & 34ker

Date: 26/10/2017

Task Number: TN-21384 Reference No.: CFR 84.180

Test: Inhalation Resistance Test **STP No.:** 7 **Manufacturer:** Xiantao Zhongyi Safety Protection Products Co., Ltd.

Item Tested: ZYB-11

Comments:

Samples were tested on manometer 000034.

Was all equipment verified to be in calibration throughout all testing?

• Yes

No

Signature: Date: 26/10/2017

National Institute for Occupational Safety and Health Respirator Branch Test Data Sheet



Task Number: TN-21384 Reference No.: CFR 84.181

Test: Sodium Chloride (NaCl) - N95 **STP No.:** 59 **Manufacturer:** Xiantao Zhongyi Safety Protection Products Co., Ltd.

Item Tested: ZYB-11

Filter	Flow Rate	Initial Filter Resistance	Maximum Allowable Percent Leakage	Initial Percent Leakage	Maximum Percent Leakage	Result
1	85	10.4	5.00	0.293	0.362	PASS
2	85	10.7	5.00	0.299	0.342	PASS
3	85	11.2	5.00	0.196	0.251	PASS
4	85	10.4	5.00	0.527	0.632	PASS
5	85	11.4	5.00	0.380	0.403	PASS
6	85	11.8	5.00	1.090	1.120	PASS
7	85	11.5	5.00	1.590	1.670	PASS
8	85	11.6	5.00	0.209	0.283	PASS
9	85	10.9	5.00	0.344	0.372	PASS
10	85	10.6	5.00	0.334	0.334	PASS
11	85	10.2	5.00	0.281	0.327	PASS
12	85	10.5	5.00	0.322	0.371	PASS
13	85	10.4	5.00	0.277	0.321	PASS
14	85	11.3	5.00	0.516	0.573	PASS
15	85	10.0	5.00	0.332	0.370	PASS
16	85	11.0	5.00	0.322	0.363	PASS
17	85	10.0	5.00	0.293	0.318	PASS
18	85	10.5	5.00	0.393	0.419	PASS
19	85	10.2	5.00	0.226	0.299	PASS
20	85	10.2	5.00	0.337	0.376	PASS

Overall Result: PASS

Signature: Judiu Little

Date: <u>26/10/2017</u>

Task Number: TN-21384 Reference No.: CFR 84.181

Test: Sodium Chloride (NaCl) - N95 **STP No.:** 59 **Manufacturer:** Xiantao Zhongyi Safety Protection Products Co., Ltd.

Item Tested: ZYB-11a

Comments:

Sample 1 was tested on TSI 8130 machine 000334 using timer 000215. Samples 2-10 were tested on TSI 8130 machine 000333 using timer 000215. Samples 11-20 were tested on TSI 8130A machine 000388. Flow is measured in liters/min. Resistance is measured in mm-H2O.

Was all equipment verified to be in calibration throughout all testing?

• Yes

No

Signature: Date: 26/10/2017

NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Xiantao Zhong Yi Safety & Protection Products Co., Ltd.

Model Tested: ZYB II

Date Tested: May 28, 2020

These findings pertain to the Xiantao Zhong Yi Safety & Protection Products Co., Ltd., model ZYB II. The packaging and labeling for this product indicates that it is a NIOSH-approved product, under approval number TC-84A-7577.

Forty respirators were submitted for evaluation. However, since these are NIOSH-approved respirators, only ten samples were tested. Samples 1-5 were from the container labeled 1B42 and samples 6-10 were from the container labeled 1B40. The samples were tested using a modified version of NIOSH Standard Test Procedure (STP) TEB-APR-STP-0059. This modified assessment plan can be found here.

The maximum and minimum filter efficiency was 99.82% and 99.12%, respectively. All ten respirators measured more than 95%.

This product has head bands/straps. While filter efficiency shows how well the filter media performs, users must ensure a proper fit is achieved.

This assessment is not a part of the NIOSH respirator approval process and will in no way lead to or preclude NIOSH approval through the official approval process. This assessment was developed as an assessment of the filter efficiency for those respirator's represented as certified by an international certification authority, other than NIOSH, to support the availability of respiratory protection to US healthcare workers due to the respirator shortage associated with COVID-19. Only particulate filter efficiency was assessed.

The results provided in this letter are specific to the subset of samples that were provided to NPPTL for evaluation.

These results will be used to update the CDC guidance for <u>Crisis Capacity Strategies (during known shortages)</u>.

Evaluation of International Respirators



Pictures have been added to the

end of this report.

Test: Modified TEB-APR-STP-0059

Date Tested: May 28, 2020

Report Prepared: May 29, 2020

Manufacturer: Xiantao Zhong Yi Safety & Protection Products Co., Ltd.

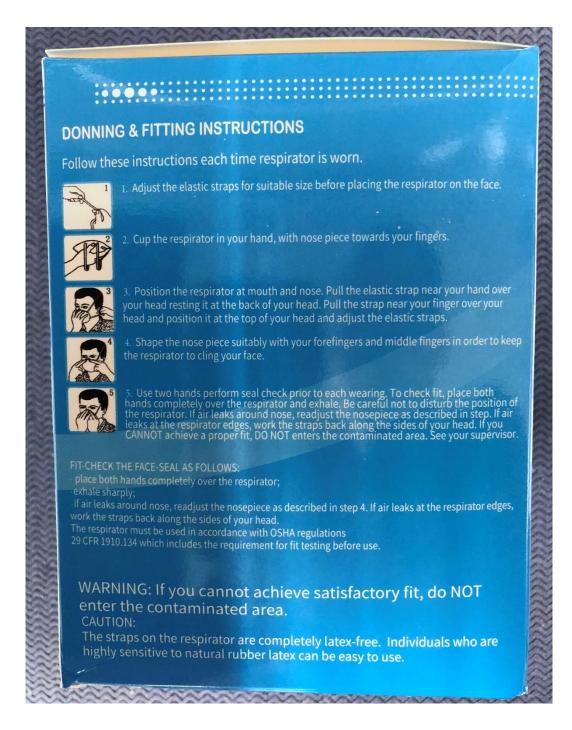
Item Tested: ZYB II

Country of Certification: USA (42 CFR 84)

Filter	Flow Rate (Lpm)	Initial Filter Resistance (mmH₂O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency
1	85	15.4	0.54	0.55	99.45
2	85	16.2	0.18	0.18	99.82
3	85	16.1	0.18	0.19	99.81
4	85	15.5	0.27	0.29	99.71
5	85	15.5	0.30	0.30	99.70
6	85	12.3	0.62	0.71	99.29
7	85	12.5	0.60	0.69	99.31
8	85	12.3	0.75	0.88	99.12
9	85	12.5	0.57	0.71	99.29
10	85	12.4	0.59	0.78	99.22
	Minimum Filter Eff	iciency: 99.12	Maxim	um Filter Efficiency	99.82

- The test method utilized in this assessment is not the NIOSH standard test procedure that is used for certification of
 respirators. Respirators assessed to this modified test plan do not meet the requirements of STP-0059, and
 therefore cannot be considered equivalent to N95 respirators that were tested to STP-0059.
- Respirators tested may not be representative of all respirators with the same certification mark. NIOSH has no control over suppliers and distributors of respirators certified by other national or international parties.
- This assessment is not a confirmation that it conforms with any or all of its specifications in accordance with its certification mark.
- This assessment was not a part of the NIOSH approval program. These results do not imply nor preclude a future approval through the NIOSH respirator approval program.











NPPTL COVID-19 Response: International Respirator Assessment





NPPTL COVID-19 Response: International Respirator Assessment







NIOSH Reference:

TN-21384

Manufacturer Reference: XZSZYB-11b

Centers for Disease Control and Prevention (CDC)

National Institute for Occupational Safety and Health (NIOSH) National Personal Protective Technology Laboratory (NPPTL) 626 Cochrans Mill Road Pittsburgh, PA 15236-0070

Phone: 412-386-4000 Fax: 412-386-4051 October 26, 2017

Marry Xu Xiantao Zhongyi Safety Protection Products Co.,Ltd No. 101 Xianyuan Road Xiantao City, Hubei Province 433000 China

Dear Ms. Xu:

The National Institute for Occupational Safety and Health (NIOSH) has reviewed your request accepted January 27, 2017. This request was for approval of the model ZYB-11 air purifying filtering facepiece respirator for protections against particulates at N95 filter efficiency level. Refer to assembly matrix ZYB-11AMb.xls, revision B, dated: 12-20-2016.

This request is granted. Approval is granted only for documentation written in the English language. It is the manufacturer's responsibility to correctly translate materials desired to be produced in languages other than English. Approval number TC-84A-7877 has been assigned. This respirator is approved for protection against particulates at N95 filter efficiency level.

The final respirator approval label is included as an attachment to this letter. The abbreviated label has been accepted as submitted. The cautions and limitations which apply to this approval are on the approval label. Only those assemblies affected by this request, or where new approval numbers are assigned, apply to this approval action. Production approval labels cannot include information on unapproved configurations.

The approved assembly consists of the parts as listed on the approval label and the assembly matrix. Parts are to be marked with the numbers indicated on the approval label in a legible and permanent manner (marking cannot be removed without evidence of its previous presence).

This certificate of approval is not an endorsement of the respirator by NIOSH, and such endorsement shall not be stated or implied in advertisements or other publicity. However, you may publicize the fact that this respirator has met the requirements of Title 42, *Code of Federal Regulations*, Part 84 (42 CFR 84).

No changes may be made to any respirators and accompanying documentation without prior written approval of NIOSH. Requests for changes must be submitted to NIOSH and a modification of this approval must be granted before changes are made.

Sincerely,

Jeffrey Peterson

Acting Chief, Conformity Verification and

Standards Development Branch

Enclosures

Test Data Sheet

Task Number: TN-21384 Reference No.: CFR 84.180 Test: **Exhalation Resistance Test** STP No.: 3 Manufacturer: Xiantao Zhongyi Safety Protection Products Co.,

Filter Type: Filter Only

Sample	Maximum Allowable Resistance (MM of H2O) Exhalation	(MM of H2O) Exhalation	Result
1	25	10.6	PASS
2	25	11.0	PASS
3	25	11.4	PASS

Comments:

Samples were tested on manometer 000283. Was all equipment verified to be in calibration throughout all testing?

OPY ONLY FOR REVIEW

Signature:

Vichole L. Petitla **Engineering Technician**

Date: <u>3/20/2017</u>

Yes

No

Task Number: TN-21384 Reference No.: CFR 84.180 Inhalation Resistance Test Test:

National Institute for Occupational Safety and Health

Respirator Branch

Test Data Sheet

STP No.: 7

Manufacturer: Xiantao Zhongyi Safety Protection Products Co., REVIEW

Item Tested: ZYB-11 NOT FOR OTHER BUSINESS Filter Type: Filter Only

> (MM of H2O) (MM of H2O) Sample Inhalation Inhalation Result 35 10.6 PASS 1 2 35 10.9 **PASS** 35 11.5 PASS 3 Overall Result: PASS COPY ONLY FOR REVIEW

NOT FOR OTHER BUSINESS

Maximum Allowable Resistance Actual Resistance

Test:

Signature:

Engineering Technician

Vichole L. Petitla

Date: <u>3/20/2017</u>

Task Number: TN-21384

Item Tested: ZXB-11

NOT FOR OTHER BUSINESS Samples were tested on manometer 000285. Was all equipment verified to be in calibration throughout all testing?

Manufacturer: Xiantao Zhongyi Safety Protection Products Co., PEVIEW

Item Tested: (ZXB-11)

Inhalation Resistance Test

Yes

Reference No.: CFR 84.180

STP No.: 7

NOT FOR OTHER BUSINESS

COPY ONLY FOR REVIEW

National Institute for Occupational Safety and Health **Respirator Branch**

Test:

Item Tested:

Filter

1

2

3

4

5

6

12

13

Signature:

Test:

ZYB-11

Flow Rate

85

85

85

85

85

85

85

85

Signature:

Test Data Sheet Task Number: TN-21384 Reference No.: CFR 84.181 Sodium Chloride (NaCl) - N95

Initial

Filter

Resistance

10.6

10.6

10.8

10.7

10.6

11.4

Manufacturer: Xiantao Zhongyi Safety Protection Products Co.,

Nichole L. Petitta

Engineering Technician

Initial Maximum Percent Percent Leakage Leakage

0.437

0.532

0.455

0.450

0.510

0.331

0.383

0.455

0.370

0.479

0.400

0.403

0.489

Result

0.437

0.532

0.455

0.453

0.570

0.331

0.411

0.455

0.372

0.479

0.471

0.426

0.503

PASS

STP No.: 59

Maximum

Allowable

Percent Leakage

5.00

5.00

5.00

5.00

5.00

5.00

5.00

Date: 3/20/2017

5.00 7 85 12.3 5.00 85 8 12.1 5.00 85 10.7 5.00 9 10 85 10.9 5.00 11 85 10/3 5.00

11.5

10,7

ichole L. Petitla

14 0.461 PASS 85 10.8 5.00 0.461 15 PASS 11.4 0.398 85 5.00 0.439 16 85 5.00 0.668 PASS 10.4 0.677 17 85 11.6 5.00 0.636 0.661 PASS 18 85 PASS 10.8 0.458 5.00 0.593 19 85 0.435 PASS 11.0 5.00 0.467 20 85 5.00 0.436 PASS 10.4 0.481 Overall Result: PASS

Task Number: TN-21384

Sodium Chloride (NaCl) - N95

Engineering Technician

STP No.: 59 Manufacturer: Xiantao Zhongyi Safety Protection Products Co.,

Reference No.: CFR 84.181

Date: 3/21/2017

Samples 1-10 were tested on TSI 8130 machine 000332 using timer 000213. Samples 11-15 were tested on TSI 8130 machine 000333. Samples 16-20 were tested on TSI 8130 machine 000334.

Item Tested: ZYB-11

Was all equipment verified to be in calibration throughout all testing? Yes

COPY ONLY FOR REVIEW

Signature:

Engineering Technician

Nichole L. Petitla

Date: 3/21/2017

O No