NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Shenzhen ZR Alvarza Health Care Ltd.
Model Tested: OTB00045
Date Tested: April 8, 2021

These findings pertain to the Shenzhen ZR Alvarza Health Care Ltd., model OTB00045. The packaging for this product indicates that it meets GB2626-2019 (the Chinese standard for Respiratory Protective Equipment – Non-Powered Air-Purifying Particle Respirator).

Ten respirators were submitted for evaluation. 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.

No certificate of approval was provided with the samples received; therefore, the authenticity of the claims cannot be validated.

The maximum and minimum filter efficiency was 99.54% and 95.95%, respectively. All ten respirators measured more than 95% filter efficiency.

While the above-listed product classification has similar performance requirements to NIOSH-approved devices, NIOSH does not have knowledge about the sustained manufacturer quality system and product quality control for these products. NIOSH also does not have knowledge about the product’s handling and exposures after leaving its manufacturer’s control.

In addition, this product is an ear loop design. Currently, there are no NIOSH-approved products with ear loops; NIOSH-approved N95s have head bands. Furthermore, limited assessment of ear loop designs, indicate difficulty achieving a proper fit. 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 respirators 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 Crisis Capacity Strategies (during known shortages).
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**NPPTL National Personal Protective Technology Laboratory**

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**Evaluation of International Respirators**

**Test:** Modified TEB-APR-STP-0059  
**Date Tested:** April 8, 2021  
**Report Prepared:** April 12, 2021  
**Manufacturer:** Shenzhen ZR Alvarza Health Care Ltd.  
**Item Tested:** OTB00045  
**Country of Certification:** China (GB2626-2019)

<table>
<thead>
<tr>
<th>Filter</th>
<th>Flow Rate (LPM)</th>
<th>Initial Filter Resistance (mmH2O)</th>
<th>Initial Percent Leakage (%)</th>
<th>Maximum Percent Leakage (%)</th>
<th>Filter Efficiency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>85</td>
<td>18.8</td>
<td>0.46</td>
<td>0.46</td>
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<tr>
<td>2</td>
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<td>10</td>
<td>85</td>
<td>22.0</td>
<td>0.62</td>
<td>0.62</td>
<td>99.38</td>
</tr>
</tbody>
</table>

**Minimum Filter Efficiency:** 95.95%  
**Maximum Filter Efficiency:** 99.54%

- 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.

Pictures have been added to the end of this report.
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KN95 PROTECTIVE MASKS
Safety, Comfort, Protection

5 Layered Filter
Soft & Breathable
Protect Every Breath
Secure Fit Design

Execution Standard: GB2626-2019  (NOT FOR MEDICAL USE)

20 PCS

Wearing Instructions:
1. Wash your hands before operating and wearing the mask.
2. Unfold and expand the mask. Position the mask with metallic strip facing upwards.
3. Wrap the elastic bands around your ears to properly keep the mask on tightly.
4. Adjust the mask to cover your nose, mouth, and chin.
5. Press down on the metallic strip and form it across the bridge of your nose.

Specifications

<table>
<thead>
<tr>
<th>Execution Standard</th>
<th>GB2626-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer Layer Material</td>
<td>Nonwoven Fabric</td>
</tr>
<tr>
<td>Filter Layer Material</td>
<td>Nonwoven Melt Blown Fabric</td>
</tr>
</tbody>
</table>

Manufactured for and Distributed by
Endless Innovation Inc.
30773 Wiegmian Rd, Hayward, CA 94544, United States
www.endlesscare.com

Produced by:
Shenzhen ZR Alvarza Health Care Ltd.
201, 2nd Floor, No.8 Building Xiifangcun Industrial Zone
Songgang, Baoan Area, Shenzhen, Guangdong, China

Batch Number: 20210110
Production Date: 2021/01/10
Product Lifespan: 2 Years
Made in China

Model Number: OTB00045
ZR Part Number: KN20035

SUNCOO Protective KN95 Mask - 20 Pack - Black
New
OTB00045_V1
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KN 95 PROTECTIVE MASKS
Safety, Comfort, & Protection
20 PCS

KN95 PROTECTIVE MASKS
Protect Every Breath Secure Fit Design
5 Layered Filter Soft & Breathable
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