NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Xiantao Xianghua Industry & Trade Co., LTD
Model Tested: KN95 Protective Mask
Date Tested: August 3, 2020

These findings pertain to the Xiantao Xianghua Industry & Trade Co., LTD, Model KN95 Protective Mask. The packaging and labeling for this product indicates that it meets GB2626-2006 (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 99.59% and 99.22%, respectively. No respirators measured less than 95%.

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)](https://www.cdc.gov/coronavirus/2019-ncov/community/crisis-capacity.html).
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Evaluation of International Respirators

**Test:** Modified TEB-APR-STP-0059

**Date Tested:** August 3, 2020

**Report Prepared:** August 3, 2020

**Manufacturer:** Xiantao Xianghua Industry & Trade Co., LTD

**Item Tested:** KN95 Protective Mask

**Country of Certification:** China (GB2626-2006)

<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>15.9</td>
<td>0.43</td>
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<td>3</td>
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<td>0.48</td>
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<tr>
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<td>9</td>
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</tr>
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<td>99.49</td>
</tr>
</tbody>
</table>

Minimum Filter Efficiency: 99.22%  
Maximum Filter Efficiency: 99.59%

- 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.
1. Face the nose without the nose clip, with the nose clip facing upwards. Pull an ear band on each hand and use the mask against the chin.

2. Pull the ear band behind your ears and adjust the ear band to feel comfortable.

3. Place the fingers of both hands in the middle of the noses clip and press inwardly according to the shape of the nose bridge so that the shape of the nose bridge fits.

PRECAUTIONS

- Stay away from fireworks.
- This mask is disposable, mainly used for the protection of non-oily particulate matter, and only for industrial or personal use.
- This product is prohibited to be used in special environment containing gas or harmful dust.
- Please note that pulling the ear hook too strongly may cause breaking.
- In case of itching, ear ache and other symptoms, please stop using this product.
- In case of injury to your mouth, nose, ears, or the skin that comes into contact this product when you are expected to use, treat it before using.

PRODUCT INFORMATION

[Product Name]: Protective Mask
[Model]: KN95
[Executive Standard]: GB2626–2006
[Material]: non-woven fabric, meltblown fabric, electrostatic filter cotton
[Period of Validity]: 2 years (unopened)
[packing specification]: 20 pieces per box (color packing)
[effective period]: storage temperature 20°C–30°C, storage humidity ≤80% under dry indoor environment, valid for 1 year
[production batch no.]: 202004
[production date]: April 21, 2020
[manufacturer]: xiantao xianghua industry & trade co., LTD
[production address]: group 5, shidun village, xiantao city, hubei province, this product has passed the inspection and is approved to leave the factory

MADE IN CHINA
HOW TO USE

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