NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Dongguan Xkdun Electronics Co., Ltd.
Model Tested: KN95
Date Tested: November 5, 2020


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 41.50% and 17.60%, respectively. All ten 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).
Evaluation of International Respirators

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

**Date Tested:** November 5, 2020

**Report Prepared:** November 6, 2020

**Manufacturer:** Dongguan Xkdun Electronics Co., Ltd.

**Item Tested:** KN95

**Country of Certification:** China (GB2626-2006), European (EN149:2001+A1:2009)

<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>3.9</td>
<td>75.8</td>
<td>75.9</td>
<td>24.10</td>
</tr>
<tr>
<td>2</td>
<td>85</td>
<td>5.6</td>
<td>62.1</td>
<td>62.1</td>
<td>37.90</td>
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<tr>
<td>3</td>
<td>85</td>
<td>3.5</td>
<td>74.1</td>
<td>74.1</td>
<td>25.90</td>
</tr>
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<td>4</td>
<td>85</td>
<td>3.0</td>
<td>80.4</td>
<td>80.9</td>
<td>19.10</td>
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<td>5</td>
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<td>5.9</td>
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<td>41.50</td>
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<tr>
<td>6</td>
<td>85</td>
<td>2.9</td>
<td>80.9</td>
<td>80.9</td>
<td>19.10</td>
</tr>
<tr>
<td>7</td>
<td>85</td>
<td>6.1</td>
<td>62.3</td>
<td>62.3</td>
<td>37.70</td>
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<tr>
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<td>5.6</td>
<td>66.3</td>
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<td>33.70</td>
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<tr>
<td>9</td>
<td>85</td>
<td>5.8</td>
<td>64.5</td>
<td>64.5</td>
<td>35.50</td>
</tr>
<tr>
<td>10</td>
<td>85</td>
<td>2.4</td>
<td>82.4</td>
<td>82.4</td>
<td>17.60</td>
</tr>
</tbody>
</table>

**Minimum Filter Efficiency:** 17.60%  **Maximum Filter Efficiency:** 41.50%

- 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.
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### Uses
Masks cover the mouth and nose to prevent inhalation of dust and germs.

### Wearing steps
1. The side of the earband is facing outwards, and the bridge of the nose is facing upwards. Unfold the mask up and down to completely cover the mouth and nose.
2. Adjust the bridge of the nose to fit on your face.
3. Smooth the sides of the mask so that it fits the face.

### Product information

<table>
<thead>
<tr>
<th>Product name</th>
<th>KN95 EARHOOK MASK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>KN95</td>
</tr>
<tr>
<td>Shelf life</td>
<td>2 years</td>
</tr>
<tr>
<td>Audience</td>
<td>Adult</td>
</tr>
<tr>
<td>Packaging specifications</td>
<td>10 pcs / box</td>
</tr>
<tr>
<td>Grade</td>
<td>Filtering effect 205%</td>
</tr>
</tbody>
</table>

**Product composition**
The product is made of multiple layers of thin fabrics.

**Storage**
The product should be stored in a room with a relative humidity of not more than 80%, ventilated, dry, hygienic and non-corrosive gas.

**Precautions**
Please use with caution in patients with respiratory tract or congenital heart disease; this product cannot be used as a gas mask in a toxic environment.

Manufacturer: Dongguan Xkdun Electronics Co., Ltd
Address: no.29, Liefang Rd., Xiaoha Industrial District, Shipai, Guangdong, 523330, China
Phone: +86-0769-81806666
Made in China
NPPTL COVID-19 Response: International Respirator Assessment
PASS CERTIFICATE

产品名称：防护口罩（非医用）
产品型号：XKD-KN95
规格型号：耳挂式
执行标准：GB2626-2006/KN95
生产批号：XKD0007
生产日期：2020年04月
有效期：2年
检验员：QC PASSED
生产企业：东莞市西卡顿电子有限公司
For your health, we recommend that you perform a simple 2-step check before using:
1. The overall appearance of the mask is not damaged or seriously polluted.
2. The earband is not damaged and has good elasticity.

**Uses:**
Masks cover the mouth and nose to prevent inhalation of dust and germs.

**Wearing steps:**
1. The side of the earband is facing outwards, and the bridge of the nose is facing upwards. Unfold the mask up and down to completely cover the mouth and nose.
2. Adjust the bridge of the nose to fit on your face.
3. Smooth the sides of the mask so that it fits the face.

Production date: See packaging
Shelf life: 2 years
Storage conditions: The product should be stored in a room with a relative humidity of not more than 80%, ventilated, dry, hygienic and non-corrosive gas.

Dongguan Xkdun Electronics Co., Ltd
Address: no.29, Jiefang Rd., Xilasha Industrial District Shpiai, Guangdong, 523330, China
Phone: +86-0769-81806686
Executive standard: GB2626-2006/KN95
Made in China
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