NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Dongguan XiongShun Technology Co., Ltd.
Model Tested: KN95 Particulate Respirator
Date Tested: May 22, 2020

These findings pertain to the Dongguan XiongShun Technology Co., Ltd., KN95 Particulate Respirator. The packaging 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-SP-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 98.49% and 96.92%, respectively. All ten respirators measured more 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 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 Crisis Capacity Strategies (during known shortages).
NPPTL COVID-19 Response: International Respirator Assessment

Evaluation of International Respirators

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

**Date Tested:** May 22, 2020

**Report Prepared:** May 22, 2020

**Manufacturer:** Dongguan XiongShun Technology Co., Ltd.

**Item Tested:** KN95 Particulate Respirator

**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>10.8</td>
<td>1.83</td>
<td>1.83</td>
<td>98.17</td>
</tr>
<tr>
<td>2</td>
<td>85</td>
<td>11.6</td>
<td>1.61</td>
<td>1.61</td>
<td>98.39</td>
</tr>
<tr>
<td>3</td>
<td>85</td>
<td>11.7</td>
<td>1.51</td>
<td>1.51</td>
<td>98.49</td>
</tr>
<tr>
<td>4</td>
<td>85</td>
<td>10.9</td>
<td>2.74</td>
<td>2.74</td>
<td>97.26</td>
</tr>
<tr>
<td>5</td>
<td>85</td>
<td>10.7</td>
<td>2.44</td>
<td>2.44</td>
<td>97.56</td>
</tr>
<tr>
<td>6</td>
<td>85</td>
<td>10.7</td>
<td>1.81</td>
<td>1.81</td>
<td>98.19</td>
</tr>
<tr>
<td>7</td>
<td>85</td>
<td>11.5</td>
<td>3.07</td>
<td>3.08</td>
<td>96.92</td>
</tr>
<tr>
<td>8</td>
<td>85</td>
<td>10.2</td>
<td>2.59</td>
<td>2.62</td>
<td>97.38</td>
</tr>
<tr>
<td>9</td>
<td>85</td>
<td>11.7</td>
<td>1.76</td>
<td>1.76</td>
<td>98.24</td>
</tr>
<tr>
<td>10</td>
<td>85</td>
<td>11.7</td>
<td>2.18</td>
<td>2.18</td>
<td>97.82</td>
</tr>
</tbody>
</table>

**Minimum Filter Efficiency:** 96.92  
**Maximum Filter Efficiency:** 98.49

- 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.
**KN95 PARTICULATE RESPIRATOR**

**USING INSTRUCTION**

1. Put on the mask with nose clip up on the nose.
2. Pull the earloops to the ears, and adjust the mask until the chin is properly covered.
3. Adjust and press the nose clip until it fits tightly on the bridge of nose.
4. Check again and make sure the mask covers tightly on the nose bridge and the chin. Adjust it until it fits you well.

**PRODUCT INFORMATION**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Model No.</th>
<th>Exp. Date</th>
<th>Standards</th>
</tr>
</thead>
</table>

**MANUFACTURER**

Dengguan Xiongsun Technology Co. LTD
E-mail: diggsx@cnxsun.xs.com
Telephone: 0793-63637006

"MADE IN CHINA"

**KN95 APPROVED**

**PRODUCT INTRODUCTIONS**

1. 95% filtration efficiency against solid particulates and non-oil particulates.
2. Specially-designed shape that contours with the natural shape of the face to minimize pressure points.
3. High Breathability and Ultra Comfort materials.

**CAUTIONS**

1. Before use, check the respirator and make sure it is not damaged and polluted.
2. Follow the using instructions and wear the mask properly before you enter the working area.
3. Please do not wash, waterwash may reduce the protective effect of the mask.
5. Store in a clean, dry, and cool place with good ventilation.
NPPTL COVID-19 Response: International Respirator Assessment
NPPTL COVID-19 Response: International Respirator Assessment
NPPTL COVID-19 Response: International Respirator Assessment