NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Shenzhen Dingwei Optical Technology Co., Ltd.
Model Tested: NH-KN95
Date Tested: June 23, 2020

These findings pertain to the Shenzhen Dingwei Optical Technology Co., Ltd., model NH-KN95. 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-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 98.85% and 98.34%, 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).
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Evaluation of International Respirators

Test: Modified TEB-APR-STP-0059

Date Tested: June 23, 2020

Report Prepared: June 23, 2020

Manufacturer: Shenzhen Dingwei Optical Technology Co., Ltd.

Item Tested: NH-KN95

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>
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<tbody>
<tr>
<td>1</td>
<td>85</td>
<td>13.3</td>
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<td>98.67</td>
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<td>12.6</td>
<td>1.66</td>
<td>1.66</td>
<td>98.34</td>
</tr>
</tbody>
</table>

Minimum Filter Efficiency: 98.34  Maximum Filter Efficiency: 98.85

- 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.
Face code®
Filtration Efficiency ≥ 95%

Model: NH-KN95
Standard: GB2626-2006

SAFETY INSTRUCTIONS
- Single use
- Before using the mask, please check if it is not damaged.
- Do not use this mask more than 8 hours in a row. In case of intensive physical work, several masks might be needed for a shift work.
- The mask should be disposed of and replaced if damaged, presents signs of wear, or breathing resistance becomes excessive or at the end of the shift.

CORRECT USE
- Hold the mask with hands, fix it on the face, and put the mask against the face.
- Adjust the bridge line to fix it on the bridge, and hang the ear belt on both ears.
- Smooth the upper and lower parts of the mask to fit the face shape.
- Press the adjusting strap with both hands and fingers, and press it according to the shape of the bridge of the nose on both sides until it will be pressed into the shape of the bridge of the nose.

10 PCS
MADE IN CHINA

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CERTIFICATE OF QUALITY

Name: Unpowered Air Purifying Particulate Respirator (Non-medical)
名称: 一次性防护口罩 (非医用)
Model: NH-KN95
样式: NH-KN95
Specification: 15.5cm X 10.5cm 10pcs/Bag
规格: 15.5cm X 10.5cm 10pcs/Bag
Standard: GB2626-2006
标准: GB2626-2006
Composition: non-woven fabrics 72.2%, meltblown fabrics 27.8%
成分: 无纺布 72.2%, 熔喷布 27.8%
Inspector: QC2-03
检查员: QC2-03

Shenzhen Dingwei Optical Technology Co., Ltd
深圳市鼎为光学技术有限公司
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