NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Guangdong Qian Jing Testing Co., LTD.
Model Tested: DNW Protective Mask
Date Tested: April 13, 2020


Ten respirators were submitted for evaluation. The samples were tested using a modified version of NIOSH Standard Test Procedure (STP) TEB-APR-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 of the products evaluated was 76.50% and 69.20%, respectively. All ten respirators measured less than 95%.

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.

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.

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).
Evaluation of International Respirators

Test: Modified TEB-APR-STP-0059

Date Tested: April 13, 2020

Report Prepared: April 15, 2020

Manufacturer: Guangdong Qian Jing Testing Co., LTD.

Item Tested: DNW Protective Mask

Country of Certification: China (Chinese Standard GB2626 and European Standard EN149)

<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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</thead>
<tbody>
<tr>
<td>1</td>
<td>85</td>
<td>10.2</td>
<td>30.80</td>
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<td>69.20</td>
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<td>11.3</td>
<td>26.80</td>
<td>26.80</td>
<td>73.20</td>
</tr>
</tbody>
</table>

Minimum Filter Efficiency: 69.20  Maximum Filter Efficiency: 76.50

- 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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1. Open the mask to make the nose clip at the top, and pull the ear straps with both your hands.

2. Hold the mask against your chin to completely cover your nose and mouth.

3. Pull the ear straps behind your ears and adjust them to make the mask comfortable.

4. Use both your hands to adjust the shape of the nose clip. Place your fingers in the middle of the nose clip and press it inward. Gently pinch the sides of the nose clip until it is pressed tightly against the sides of your nose. (Making the nose clip get a seal with only one hand may affect the tightness of the mask).

5. Cover the mask with your hand and exhale vigorously. If you feel the air escaping from the nose clip, it is required to tighten the nose clip.

6. If the air escapes from the edge of the mask, readjust the headband to ensure tightness.

**Inspection Method**

Before use, check whether the package of the mask is damaged and the components are intact. In case of any stain or damage, discontinue use immediately. Before entering the work area, it is required to check the air tightness of the mask. If you feel a leak, please wear it again according to the instructions for how to wear a mask. You can enter the work area only after feeling no leak. (If you feel the respiratory resistance is obviously increased or the mask falls short of the standard for use, it is recommended to replace the mask immediately.)

- **KN95**
- **FFP2**
- **N95**

This mask is used to prevent non-volatile suspended particles. Filtration efficiency 95%.

- **Note:** Never use if package is damaged. Please refer to the manual before use and use a mask correctly.
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