NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Zhejiang Jufeng Drilling Decoration Co., Ltd.
Model Tested: LSK2020-4
Date Tested: February 10, 2021

These findings pertain to the Zhejiang Jufeng Drilling Decoration Co., Ltd., model LSK2020-4. 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 97.81% and 88.70%, respectively. Eight respirators measured more than 95% filter efficiency. Two respirators measured less than 95% filter efficiency.

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).
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Evaluation of International Respirators

**Test:** Modified TEB-APR-STP-0059  
**Date Tested:** February 10, 2021  
**Report Prepared:** February 11, 2021  
**Manufacturer:** Zhejiang Jufeng Drilling Decoration Co., Ltd.  
**Item Tested:** LSK2020-4  
**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>7.3</td>
<td>2.37</td>
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<td>2</td>
<td>85</td>
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<td>3</td>
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<td>8.6</td>
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<td>97.36</td>
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<td>7.4</td>
<td>4.34</td>
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<td>5</td>
<td>85</td>
<td>8.1</td>
<td>11.1</td>
<td>11.3</td>
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<td>7.4</td>
<td>5.50</td>
<td>5.50</td>
<td>94.50</td>
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</table>

Minimum Filter Efficiency: 88.70%  
Maximum Filter Efficiency: 97.81%

- 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.
Attention

- Please use the one-use case within the validity period
- Check that the mask is in good condition before use
- Wear the mask in the correct way
- Only use once, and destroy after use
- It is forbidden to use if the package is damaged
- Pay attention to the production date

Warning: illegal high price trading is strictly prohibited.

How to use

1. Put on the mask
2. Adjust the nose wire
3. Tie the ear loops
4. Adjust the mask

PROTECTIVE MASK
KN95 (NON-MEDICAL)

[Product name] KN95 mask (NON-MEDICAL)
[Product size] 15.5x10.5cm
[Packing capacity] 10 pieces in a box
[Term of validity] 2 years
[Hygienic standard] GB2626-2006
[Date of production] On the Certification

[Name of manufacturer] Zhejiang Jufeng Drilling Decoration Co., Ltd.
[Address of manufacturer] 48 Longshan Road, Longyou Industrial Park, Zhejiang Province

MADE IN CHINA
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Wearing instructions:

1. Make sure the metal nose clip is facing up;
2. Put on a mask and clasps the ear straps behind your ears;
3. Adjust the mask to fit the face completely;
4. Press the nose clip against the bridge of the nose;
5. Cover the mask with your hands and exhale and inhale. Adjust the mask until no gas leaks out.

WARNING

This respirator helps protect against certain particles. Misuse can result in sickness or death.

[Product name] 3D protective mask
[Product Model] LSK2020-4
[Product material] KN95 filter
[Wearing method] ear-hook
[Executive Standard] GB2626-2006 KN95
### Product Certificate

<table>
<thead>
<tr>
<th>Product Name</th>
<th>KN95 Protective Mask (Disposable)</th>
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<tr>
<td>Product Specs</td>
<td>15.5cm x 10.5cm</td>
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<tr>
<td>Quantity</td>
<td>1 PC</td>
</tr>
<tr>
<td>Product Standard</td>
<td>GB2626-2006</td>
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<tr>
<td>Batch Number</td>
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<td>Expiry Date</td>
<td>2 years</td>
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<td>Inspector Code</td>
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</tr>
</tbody>
</table>

Main materials: First layer is non-woven fabric. Second layer is melt-blown fabric. Third layer is hot air cotton. Fourth layer is melt-blown fabric. Fifth layer is non-woven fabric.

Address: Longyou County, Longyou Industrial Park, Zhejiang Province, China
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