NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Guangzhou Nan Qi Xing Nonwoven Co., Ltd.
Model Tested: KN-1 KN95 Mask
Date Tested: June 19, 2020

These findings pertain to the Guangzhou Nan Qi Xing Nonwoven Co., Ltd., model KN-1 KN95 Mask. The packaging and labeling for this product indicate that it meets GB2626-2006 (the Chinese standard for Respiratory Protective Equipment – Non-Powered Air-Purifying Particle Respirator).

Thirty respirators were submitted for evaluation. The respirators were sampled into groups of ten 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 99.91% and 99.32%, respectively. All thirty 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).
### Evaluation of International Respirators

**Test:** Modified TEB-APR-STP-0059  
**Date Tested:** June 19, 2020  
**Report Prepared:** June 19, 2020  
**Manufacturer:** Guangzhou Nan Qi Xing Nonwoven Co., Ltd.  
**Item Tested:** KN-1 KN95 Mask (Sample Group 1 of 3)  
**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>
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</table>

**Minimum Filter Efficiency:** 99.81  
**Maximum Filter Efficiency:** 99.90

- 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.

Pictures have been added to the end of this report.
NPPTL COVID-19 Response: International Respirator Assessment

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

**Date Tested:** June 19, 2020

**Report Prepared:** June 19, 2020

**Manufacturer:** Guangzhou Nan Qi Xing Nonwoven Co., Ltd.

**Item Tested:** KN-1 KN95 Mask (Sample Group 2 of 3)

**Country of Certification:** China (GB2626-2006)

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Minimum Filter Efficiency: **99.32**  Maximum Filter Efficiency: **99.89**

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NPPTL COVID-19 Response: International Respirator Assessment

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

**Date Tested:** June 19, 2020

**Report Prepared:** June 19, 2020

**Manufacturer:** Guangzhou Nan Qi Xing Nonwoven Co., Ltd.

**Item Tested:** KN-1 KN95 Mask (Sample Group 3 of 3)

**Country of Certification:** China (GB2626-2006)

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Minimum Filter Efficiency: 99.64

Maximum Filter Efficiency: 99.91

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NPPTL COVID-19 Response: International Respirator Assessment

**Mask**

- Adjustable nose clip
- Flat-fold style
- High-filtration

**KN95**

**Instructions**

1. Open the mask to make the nosepiece at the top, and pull the ear straps with both hands.
2. Position the mask under your chin and completely cover your nose and mouth. Pull the ear straps behind your ears and adjust them until it feels comfortable.
3. Use two hands to mold the nosepiece to the shape of your nose by pushing inward while moving your fingertips down both sides of the nosepiece.
4. Cover the mask with both hands and exhale. If air leaks out around nosepiece, pinch the nosepiece to the shape of your nose; if air leaks around the mask edges, readjust the position of ear straps to make certain mask edges fit closely against the face.

**WARNING:**

Mold the nosepiece with one hand may result less effective mask performance.

If mask becomes damaged or breathing becomes difficult, leave the contaminated area immediately and replace the mask.
[Product Name] KN95 Mask
[Main Materials] Nonwoven, meltblown nonwoven etc.
[Specification] 10 pcs
[Standard] GB2626-2006
[Coverage] Protect against non-oily particles including dust, pollen, droplet etc.
[Storage] Keep out of sunlight, contamination and high temperature. Store in environment not exceeding 80% RH.
[Shelf Life] 2 years

10PCS
1. Open the mask to make the nosepiece at the top, and pull the ear straps with both hands.
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WARNING:
Mold the nosepiece with one hand may result less effective mask performance.
If mask becomes damaged or breathing becomes difficult, leave the contaminated area immediately and replace the mask.

Do not use if package is damaged.
Please follow the instructions.
Batch Number: 20200405
Production Date: See inner certificate
Manufacturer: Guangzhou Nan Qi Xing Nonwoven Co., Ltd.
Address: Wenbian Village, Shiji Town, Panyu District, Guangzhou City, Guangdong Province, China
Tel: 0086 020-3551 3112 / 3551 3262
MADE IN CHINA.
NPPTL COVID-19 Response: International Respirator Assessment

Certificate of Conformity

Product Name: KN95 Mask (non-medical)
Model Number: KN-1
Quantity: 10pcs/bag
Materials: 42.5% PP nonwoven, 29% Meltblown nonwoven, 28.5% Thermal bonded nonwoven

GB2626-2006
Standard: GB2626-2006
Production Date: 20200501
Shelf Life: 2 years
Inspector: 05
Manufacturer: Guangzhou Nan Qi Xing Nonwoven Co., Ltd.
Address: Wenbian Village, Shiji Town, Panyu District, Guangzhou City, Guangdong Province, China
Telephone: 0086 20-35513112/35513262
Tel: 0086 20-35513112/35513262
NPPTL COVID-19 Response: International Respirator Assessment
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