NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Zhongshan Cassiey Biotechnology Co., Ltd.
Model Tested: N95 Masks + Particulate Protection Respirator
Date Tested: May 4, 2020


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 49.50% and 41.50%, respectively. All ten respirators measured less 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: May 4, 2020
Report Prepared: May 4, 2020
Manufacturer: Zhongshan Cassiey Biotechnology Co., Ltd.
Item Tested: N95 Masks + Particulate Protection Respirator

<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>9.7</td>
<td>55.5</td>
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<td>16.5</td>
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<td>49.50</td>
</tr>
</tbody>
</table>

Minimum Filter Efficiency: 41.50  Maximum Filter Efficiency: 49.50

- 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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YI HU KANG
HEALTHY

N95 MASKS +
PARTICULATE PROTECTION RESPIRATOR

- Built-in Earloop
- Skin friendly and comfortable
- High-grade environmentally friendly non-woven fabric

Dust Droplet Pollen Smog PM 2.5

Bacterial filtration efficiency ≥95%
N95/EN 149:2001 FFP2 NR D/GB 2626
Enhanced Four Layer of Protection

First: Non-woven surface - Block larger particles
Second: Auxiliary filter layer - Help block strange stuff and odor
Third: High-efficiency filter layer - Effective filtering of particles ≥0.075 microns
Fourth: Non-woven inner layer - Skin friendly, comfortable and breathable.

3D Shape Comfortable Breathing Experience

Product description: N95 MASKS Particulate Protection Respirator
Material composition: Non-woven, antibacterial sanitary hot air cotton, meltblown cloth
Features: 3D design according to the contour of the face, increase space for mouth and nose, reduce respiratory resistance.
Executive standards: N95/EN 149:2001 FFP2 NR D/GB 2626
Validity: 3 years

How to wear: 1. Take out the mask and unfold  2. Place the sharp corners of the mask on the outside, face inside face  3. Hang the ear loop tightly on both ears, covered both mouth and nose  4. Adjust the nose wire until the mask fit your face
Caution: 1. Please check the overall appearance for damage and serious pollution before use.
2. This product is a maintenance-free mask. Do not wash, do not steam, sterilize by microwave heating  3. Try to make the mask fit tightly to the face  4. For personal use only, damaged, deformed or wet and dirty, discarded if contaminated
Storage conditions: Recommended product storage at temperature 0°C ~ 25°C, Relative humidity below 50%
Production Date: As indicated details (date/month/year)
Manufacturer: Zhongshan Cassley Biotechnology Co., Ltd.
Registered address: Zone A of the 1st floor and the 4th floor, No.2 factory, South China Science and Technology Park of Modern Chinese Medicine, Nanlang Town Zhongshan, Guangdong Province, China
Production address: Zone A of the 1st floor and the 4th floor, No.2 factory, South China Science and Technology Park of Modern Chinese Medicine, Nanlang Town Zhongshan, Guangdong Province, China

www.yhkmask.com  MADE IN CHINA
EXP 05/04/2023
MFG 06/04/2020

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