NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Ningbo Fenghua Sun Create Household Products Co., Ltd.
Model Tested: LMN2020-95
Date Tested: April 15, 2021

These findings pertain to the Ningbo Fenghua Sun Create Household Products Co., Ltd., model LMN2020-95. The packaging for this product indicates 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 samples were tested using the 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 99.05% and 92.86%, respectively. Twenty-eight respirators measured more than 95% filter efficiency. Two 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)](#).
NPPTL COVID-19 Response: International Respirator Assessment

Evaluation of International Respirators

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

**Date Tested:** April 15, 2021

**Report Prepared:** April 19, 2021

**Manufacturer:** Ningbo Fenghua Sun Create Household Products Co., Ltd.

**Item Tested:** LMN2020-95

**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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>85</td>
<td>11.4</td>
<td>1.22</td>
<td>1.22</td>
<td>98.78</td>
</tr>
<tr>
<td>2</td>
<td>85</td>
<td>15.7</td>
<td>1.11</td>
<td>1.11</td>
<td>98.89</td>
</tr>
<tr>
<td>3</td>
<td>85</td>
<td>10.6</td>
<td>1.01</td>
<td>1.01</td>
<td>98.99</td>
</tr>
<tr>
<td>4</td>
<td>85</td>
<td>13.7</td>
<td>1.34</td>
<td>1.34</td>
<td>98.66</td>
</tr>
<tr>
<td>5</td>
<td>85</td>
<td>13.0</td>
<td>1.32</td>
<td>1.32</td>
<td>98.68</td>
</tr>
<tr>
<td>6</td>
<td>85</td>
<td>10.1</td>
<td>1.83</td>
<td>1.83</td>
<td>98.17</td>
</tr>
<tr>
<td>7</td>
<td>85</td>
<td>9.6</td>
<td>1.77</td>
<td>1.77</td>
<td>98.23</td>
</tr>
<tr>
<td>8</td>
<td>85</td>
<td>10.0</td>
<td>1.05</td>
<td>1.05</td>
<td>98.95</td>
</tr>
<tr>
<td>9</td>
<td>85</td>
<td>11.6</td>
<td>1.31</td>
<td>1.31</td>
<td>98.69</td>
</tr>
<tr>
<td>10</td>
<td>85</td>
<td>9.1</td>
<td>3.38</td>
<td>3.38</td>
<td>96.62</td>
</tr>
</tbody>
</table>

**Minimum Filter Efficiency:** 96.62%

**Maximum Filter Efficiency:** 98.99%

- 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.
NPPTL COVID-19 Response: International Respirator Assessment

Evaluation of International Respirators

Test: Modified TEB-APR-STP-0059

Date Tested: April 15, 2021

Report Prepared: April 19, 2021

Manufacturer: Ningbo Fenghua Sun Create Household Products Co., Ltd.

Item Tested: LMN2020-95

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>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>85</td>
<td>10.1</td>
<td>1.53</td>
<td>1.53</td>
<td>98.47</td>
</tr>
<tr>
<td>12</td>
<td>85</td>
<td>10.7</td>
<td>1.07</td>
<td>1.07</td>
<td>98.93</td>
</tr>
<tr>
<td>13</td>
<td>85</td>
<td>9.3</td>
<td>1.57</td>
<td>1.57</td>
<td>98.43</td>
</tr>
<tr>
<td>14</td>
<td>85</td>
<td>11.1</td>
<td>1.88</td>
<td>1.88</td>
<td>98.12</td>
</tr>
<tr>
<td>15</td>
<td>85</td>
<td>10.5</td>
<td>4.55</td>
<td>4.55</td>
<td>95.45</td>
</tr>
<tr>
<td>16</td>
<td>85</td>
<td>10.0</td>
<td>6.13</td>
<td>6.13</td>
<td>93.87</td>
</tr>
<tr>
<td>17</td>
<td>85</td>
<td>7.4</td>
<td>2.56</td>
<td>2.61</td>
<td>97.39</td>
</tr>
<tr>
<td>18</td>
<td>85</td>
<td>8.5</td>
<td>2.21</td>
<td>2.21</td>
<td>97.79</td>
</tr>
<tr>
<td>19</td>
<td>85</td>
<td>8.8</td>
<td>1.88</td>
<td>1.90</td>
<td>98.10</td>
</tr>
<tr>
<td>20</td>
<td>85</td>
<td>8.7</td>
<td>1.52</td>
<td>1.52</td>
<td>98.48</td>
</tr>
</tbody>
</table>

Minimum Filter Efficiency: 93.87%  Maximum Filter Efficiency: 98.93%

- 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.
NPPTL COVID-19 Response: International Respirator Assessment

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

**Date Tested:** April 15, 2021

**Report Prepared:** April 19, 2021

**Manufacturer:** Ningbo Fenghua Sun Create Household Products Co., Ltd.

**Item Tested:** LMN2020-95

**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>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>85</td>
<td>8.4</td>
<td>3.17</td>
<td>3.17</td>
<td>96.83</td>
</tr>
<tr>
<td>22</td>
<td>85</td>
<td>9.7</td>
<td>1.92</td>
<td>1.92</td>
<td>98.08</td>
</tr>
<tr>
<td>23</td>
<td>85</td>
<td>9.4</td>
<td>1.28</td>
<td>1.33</td>
<td>98.67</td>
</tr>
<tr>
<td>24</td>
<td>85</td>
<td>10.3</td>
<td>1.42</td>
<td>1.42</td>
<td>98.58</td>
</tr>
<tr>
<td>25</td>
<td>85</td>
<td>10.1</td>
<td>7.14</td>
<td>7.14</td>
<td>92.86</td>
</tr>
<tr>
<td>26</td>
<td>85</td>
<td>11.6</td>
<td>0.95</td>
<td>0.95</td>
<td>99.05</td>
</tr>
<tr>
<td>27</td>
<td>85</td>
<td>13.8</td>
<td>1.20</td>
<td>1.20</td>
<td>98.80</td>
</tr>
<tr>
<td>28</td>
<td>85</td>
<td>9.6</td>
<td>1.15</td>
<td>1.15</td>
<td>98.85</td>
</tr>
<tr>
<td>29</td>
<td>85</td>
<td>11.6</td>
<td>1.53</td>
<td>1.53</td>
<td>98.47</td>
</tr>
<tr>
<td>30</td>
<td>85</td>
<td>11.9</td>
<td>1.75</td>
<td>1.75</td>
<td>98.25</td>
</tr>
</tbody>
</table>

**Minimum Filter Efficiency:** 92.86%  
**Maximum Filter Efficiency:** 99.05%

- 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.
NPPTL COVID-19 Response: International Respirator Assessment

KN95 FACE MASK

20 MASKS

HYPOALLERGENIC

EASY TO BREATHE THROUGH

FLEXIBLE NOSE BAR

HIGH FILTRATION CAPACITY

PERFECT FOR NON-MEDICAL USE

GREHOME
KN95
FACE MASK

PRODUCT INFORMATION
- Product name: KN95 Protective Mask (Not for Medical Use)
- Brand: SUN CREATE
- Model: LMN2020-95
- Packing specification: 20 pcs/box
- Main material: Polypropylene (PP) non-woven fabric and melt-blown fabric
- Executive standard: GB 2626-2006
- Storage condition: It shall be stored in a ventilated and dry place and shall not be mixed with objects that are hazardous, toxic or corrosive.

MATTERS NEED ATTENTION
- The product is a disposable mask that cannot be washed.
- Replace the mask with a new one immediately after the mask is broken or dirty, or you feel it hard to take a breath.
- It is not recommended to wear the mask when there is no circulating air or you feel it hard to take a breath or blink your eyes.
- The mask shall be stored as flat as possible after use. Do not frequently fold the nose bridge strip so as to prolong service time.
- The mask is not recommended for kids under three, because they have low vital capacity.
- It is recommended to replace the mask with a new one every eight hours.
NPPTL COVID-19 Response: International Respirator Assessment

KN95 FACE MASK

USER INSTRUCTION

Please wash your hands before wearing the mask. Pinch both ends to unfold the mask, the side that swells is the external face.

Wear the mask on your face and tie the bands on your ears.

Pull the mask downward until your lower jaw is fully covered.

Manufacturer: Ningbo Fenghua Sun Create Household Products Co., Ltd.
Address: No.7 Shangling Road, Shangtian Town, Fenghua District, Ningbo, China
Tel: 488-1367 7772371
NPPTL COVID-19 Response: International Respirator Assessment
NPPTL COVID-19 Response: International Respirator Assessment
NPPTL COVID-19 Response: International Respirator Assessment