NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Guangzhou Sunjoy Auto Supplies Co., Ltd.
Model Tested: SUNJOY K1
Date Tested: May 18, 2020

These findings pertain to the Guangzhou Sunjoy Auto Supplies Co., Ltd., model SUNJOY K1. 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-SP-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 34.20% and 24.30%, 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).
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**Evaluation of International Respirators**

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

**Date Tested:** May 18, 2020

**Report Prepared:** May 18, 2020

**Manufacturer:** Guangzhou Sunjoy Auto Supplies Co., Ltd.

**Item Tested:** SUNJOY K1

**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>
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<td>9.3</td>
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<td>31.00</td>
</tr>
</tbody>
</table>

Minimum Filter Efficiency: **24.30**  
Maximum Filter Efficiency: **34.20**

- 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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SUNJOY K1
PROFESSIONAL PROTECTIVE MASK AGAINST PM2.5
HAZE AND TINY PARTICLES

≥95% FILTRATION EFFICIENCY
SMOOTH BREATHING

Self suction filter particle respirator, disposable respirator without exhalation valve, new generation of filter cotton material, reducing respiratory resistance and improving comfort. For both men and women.
Smog and Particulate Matter 2.5 Protection
Self-priming Filtered Type Mask KN95 (Disposable)

Wearing instructions:
1. Open the package. Take out the mask and open it.
2. Place the nose clip on top of the mask. Hold the mask against your chin.
3. Tie the ear strap behind the ear. Adjust the position. Feel as comfortable as possible.
4. Press the clip from the nose to the sides and make the clip close to the nose and face.

Positive pressure test: Gently press the mask with both hands, and then deliberately exhale. The air should not leak from the edge of the mask.
Negative pressure test: Gently press the mask with both hands, and then deliberately inhale. The center of the mask should be slightly concave.
In case of air leakage, please adjust the position of the nose clip and ear band until there is no more leakage.

Notice:
1. This product is valid for five years, please use it within the duration.
2. This product is reusable, please dispose of it after use.
3. If the package of the product is damaged, please do not use it.
4. Please use it carefully if you are allergic to non-woven fabrics.
5. Please read the instructions carefully before using this product.

Product features, structure and composition:
This product is made up of the mask, nose clip, and masks band. The first four layers are PP non-woven fabrics. The second layer is PP meltblown woven fabric. The third layer is PP hot cotton.

Range of application and usage:
This product can be used for respiratory protection of some non-toxic particulates, such as dust, pollen, all kinds of industrial dust, and so on. It can be the basic protection of the PM 2.5 which is the environmental pollution particulate matter.

Contraindication: None
Special storage condition and method: Store it in the environment where the relative humidity is less than 80%, has no corrosive gases and has good ventilation. Please keep it away from sunlight.
Validity: This product is valid for five years with proper storage.
Manufacturing Date: See the certificate
Implementation standard: GB 2626-2006
Certificate Number: No. 26202002240270
Manufacturer: Guangzhou Sunjoy Auto Supplies Co., Ltd.
Address: Xixian Industrial Park, Kangfou Village, Nanhai Town, Panzhi District, Guangzhou
Civil use
Phone Number: 400 018 0699
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