### NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Guangzhou Yun Rui Shengshi Protection Technology Co. Ltd.

Model Tested: KN95

Date Tested: January 12, 2021

These findings pertain to the Guangzhou Yun Rui Shengshi Protection Technology Co. Ltd., model KN95. The packaging for this product indicates that it meets GB2626-2006 (the Chinese standard for Respiratory Protective Equipment – Non-Powered Air-Purifying Particle Respirator) and EN149:2001+A1:2009 (the European standard for Respiratory Protective Devices – Filtering Half Masks to Protect Against Particles – Requirements, Testing, Marking).

Nine 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 <a href="https://hee.com/hee/hee/">hee/hee/hee/</a>.

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 98.10% and 82.20%, respectively. Five respirators measured more than 95% filter efficiency. Four 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 <u>Crisis Capacity Strategies</u> (during known <u>shortages</u>).

# **Evaluation of International Respirators**



Pictures have been added to the

end of this report.

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

Date Tested: January 12, 2021

Report Prepared: January 12, 2021

Manufacturer: Guangzhou Yun Rui Shengshi Protection Technology Co., Ltd.

Item Tested: KN95

Country of Certification: China (GB2626-2006), European (EN149:2001+A1:2009)

Filter	Flow Rate (LPM)	Initial Filter Resistance (mmH₂O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency (%)
1	85	12.1	1.99	1.99	98.01
2	85	6.5	17.0	17.8	82.20
3	85	6.3	12.4	12.5	87.50
4	85	6.7	8.43	8.43	91.57
5	85	11.6	3.68	3.68	96.32
6	85	12.2	2.75	2.75	97.25
7	85	7.6	10.7	10.8	89.20
8	85	12.1	1.90	1.90	98.10
9	85	11.4	4.13	4.13	95.87
Minimum Filter Efficiency: 82.20%			Maximum Filter Efficiency: 98.10%		

- 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.





## METHOD OF USE

Open the mask, make sure that the front and back sides of the nose bar is in place, and press the nose bridge after putting on to maximize its protection effect.











### WARNING SIGN

- To keep the mask clean, avoid touching the inside of the mask with your hands
- 2. A "tightness" wearing check should be immediately done everytime after putting on a mask to ensure the correct mask wearing position.
- 3. Always wash your hands before wearing a mask. Always wear a mask if you are exposed to dust or pollution.
- 4. When the sensory suction resistance significantly increases, or when the mask becomes dirty, damaged, the mask should be replaced as soon as possible.
- 5. mask cannot be washed which will destroy the filter structure and result in penetration. It will damage the filtering performance of electrostatic filter as well.
- 6. Unused masks should be stored in a cleanenvironment, to prevent the mask from damage, dirt, sticky dust, direct sunlight, temperature or harmful chemicals pollution, etc. avoid deformation
- 7. Masks can't be microwaved.

Made in China

# KN95 PROTECTIVE MASKS NON- MEDICAL USE

EAR-WEARING

Brand: LANGNI

Brand name: KN95 PROTECTIVE MASKS

Model number: KN95

Specifications: 30PCS

Material Quality: Electrostatically meltblown superfine fiber cloth

Composite ES hot air cotton

PP spunbonded nonwovens fabric

Implementation Standard: GB2626-2006 KN95

EN 149:2001+A1:2009

Production date:See Packing (certificate of conformity)

Shelf Life: Two years

Manufacturer: Guangzhou Yun Rui Shengshi Protection

Technology Co., Ltd.

Address: Room 602, Building 6, No. 17, Dongsheng Road,

Xinya Street, Huadu District, Guangzhou City, Guangdong Province, China













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