NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Dongguan HuaGang Communication Technology Co., Ltd.

Model Tested: KN95-A Date Tested: June 1, 2020

These findings pertain to the Dongguan HuaGang Communication Technology Co., Ltd., model KN95-A. 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).

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.

A certificate of approval was provided with the samples received; however, the authenticity of the claims cannot be validated.

The maximum and minimum filter efficiency was 47.10% and 35.40%, 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 <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: June 1, 2020

Report Prepared: June 1, 2020

Manufacturer: Dongguan HuaGang Communication Technology Co., Ltd.

Item Tested: KN95-A

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

Filter	Flow Rate (Lpm)	Initial Filter Resistance (mmH₂O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency
1	85	6.7	58.2	58.9	41.10
2	85	6.6	55.5	56.3	43.70
3	85	6.6	57.5	57.5	42.50
4	85	6.2	56.4	57.0	43.00
5	85	6.2	52.9	52.9	47.10
6	85	7.8	60.1	60.1	39.90
7	85	7.0	62.0	62.0	38.00
8	85	6.6	63.8	64.3	35.70
9	85	6.9	62.5	62.5	37.50
10	85	6.7	64.5	64.6	35.40
Minimum Filter Efficiency: 35.40			Maximum Filter Efficiency: 47.10		

- 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.



rioduct Description

- Efficient filtration: Filtering rate above 99% with gases, dust, pollen, smog, germs and bacteria effectively.
- Multi Layer purification: Filament non-woven fabric, flexible moderate thickness, adsorption particles, double layer electrostatic filter, highly effective barrier
- Smooth breathing: Flexible metal fastening strip ensures optimal sealing between the bridge of the nose and the mask.
- Ergonomic design: Comfortable to wear, low impedance filter material and
- Secure seal: Soft metal fixation strip for best seal between nasal beam and

Usage Instruction

- 1. Properly holding your mask.
- 2. Press the mask against your face with the metallic strip uppermost.
- 3. Place the bands around both ears.
- 4. Mould the metallic strip over nose bridge and the mask shouldn't snugly over the face.









Warning

DO NOT use the mask for child.

DO NOT use the mask in medical and surgical environments.

DO NOT use in an environment with oxygen concentration below 19.5%.

DO NOT use the respirator with beards or other facial hair that interferes with direct contact between the face and the edge of the respirator.

DO NOT use the mask in toxic gas environment.

This respirator helps protect against certain contaminants but may not eliminate the risk of contracting disease or infection. If you cannot achieve satisfactory fit, do not enter the contaminated area. See your supervisor. Keep storage area dry at room temperature and do not wash the mask with water.



Dongguan HuaGang Communication Technology Co., Ltd.
No.78 jinheRoad, jinmel Village, Changping Town,
Dongguan City, Guangdong, China

MFD: 042020 EXP: 042022 LOT: 537576





NPPTL COVID-19 Response: International Respirator Assessment







