NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Guangdong Kaper Protection Technology Co., Ltd.
Model Tested: KP-K02 W/T Valve
Date Tested: June 19, 2020

These findings pertain to the Guangdong Kaper Protection Technology Co., Ltd., model KP-K02 W/T Valve. The packaging and labeling for this product indicate 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).

Twenty-two respirators were submitted for evaluation. The respirators were sampled into two groups of ten and one group of two 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 92.04% and 86.30%, respectively. All Twenty-two 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

NPPTL
National Personal Protective Technology Laboratory

Test: Modified TEB-APR-STP-0059

Date Tested: June 19, 2020

Report Prepared: June 19, 2020

Manufacturer: Guangdong Kaper Protection Technology Co., Ltd.

Item Tested: KP-K02 W/T Valve (Sample Group 1 of 3)

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

Pictures have been added to the end of this report.

Filter	Flow Rate (Lpm)	Initial Filter Resistance (mmH_2O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency
1	85	7.3	9.48	9.48	90.52
2	85	10.5	13.50	13.50	86.50
3	85	10.3	8.13	8.13	91.87
4	85	8.8	11.80	11.80	88.20
5	85	10.9	13.70	13.70	86.30
6	85	10.9	11.00	11.00	89.00
7	85	11.7	8.69	8.69	91.31
8	85	10.8	9.96	9.96	90.04
9	85	10.4	11.03	11.03	88.97
10	85	8.3	11.40	11.40	88.60
Minimum Filter Efficiency: 86.30			**Maximum Filter Efficiency: 91.87**		

- 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: June 19, 2020

Report Prepared: June 19, 2020

Manufacturer: Guangdong Kaper Protection Technology Co., Ltd.

Item Tested: KP-K02 W/T Valve (Sample Group 2 of 3)

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

Filter	Flow Rate (Lpm)	Initial Filter Resistance (mmH_2O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency
11	85	8.5	11.30	11.30	88.70
12	85	8.8	13.37	13.37	86.63
13	85	8.4	10.60	10.60	89.40
14	85	8.3	10.40	10.40	89.60
15	85	9.1	10.25	10.25	89.75
16	85	8.0	10.20	10.20	89.80
17	85	7.3	10.40	10.40	89.60
18	85	8.8	10.56	10.56	89.44
19	85	8.6	12.30	12.30	87.70
20	85	8.0	13.70	13.70	86.30
Minimum Filter Efficiency: 86.63			**Maximum Filter Efficiency: 89.80**		

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NPPTL COVID-19 Response: International Respirator Assessment

Test: Modified TEB-APR-STP-0059

Date Tested: June 19, 2020

Report Prepared: June 19, 2020

Manufacturer: Guangdong Kaper Protection Technology Co., Ltd.

Item Tested: KP-K02 W/T Valve (Sample Group 3 of 3)

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

Filter	Flow Rate (Lpm)	Initial Filter Resistance (mmH_2O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency
21	85	8.4	9.80	9.80	90.20
22	85	10.8	7.96	7.96	92.04
Minimum Filter Efficiency: 90.20			**Maximum Filter Efficiency: 92.04**		

- 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.
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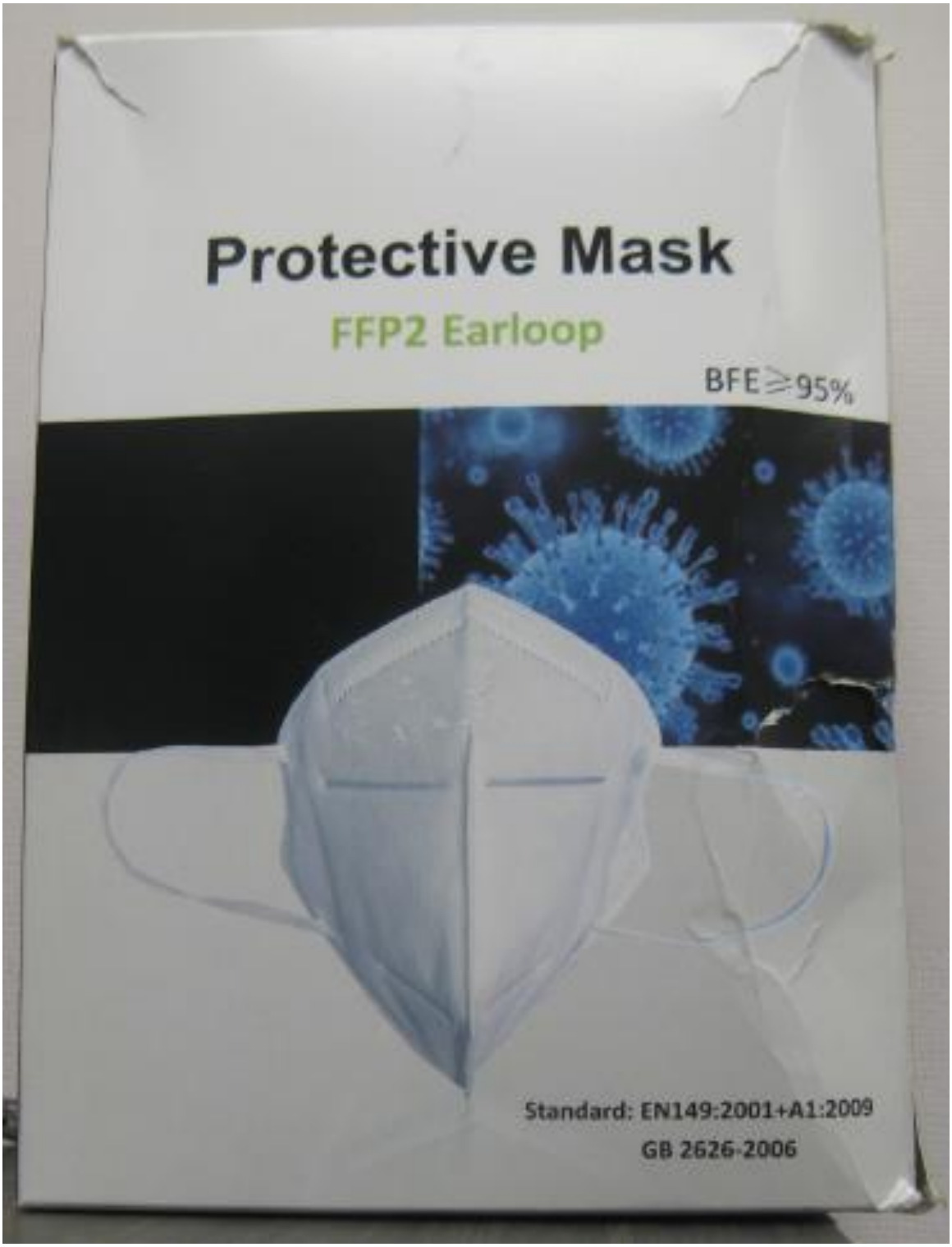
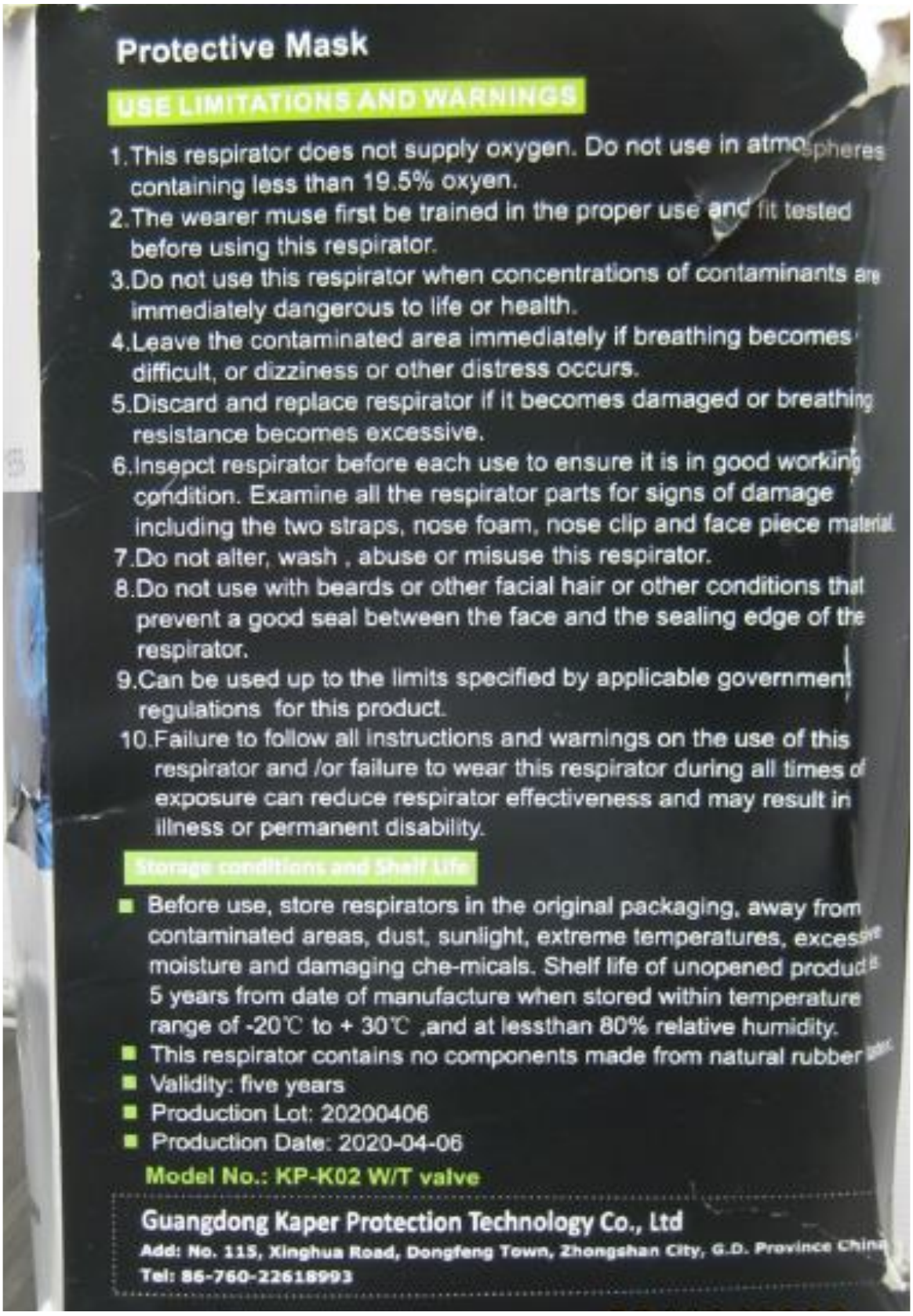

Protective Mask
FFP2 Earloop
BFE≥95%
Standard: EN149:2001+A1:2009
GB 2626-2006



Protective Mask

USE LIMITATIONS AND WARNINGS

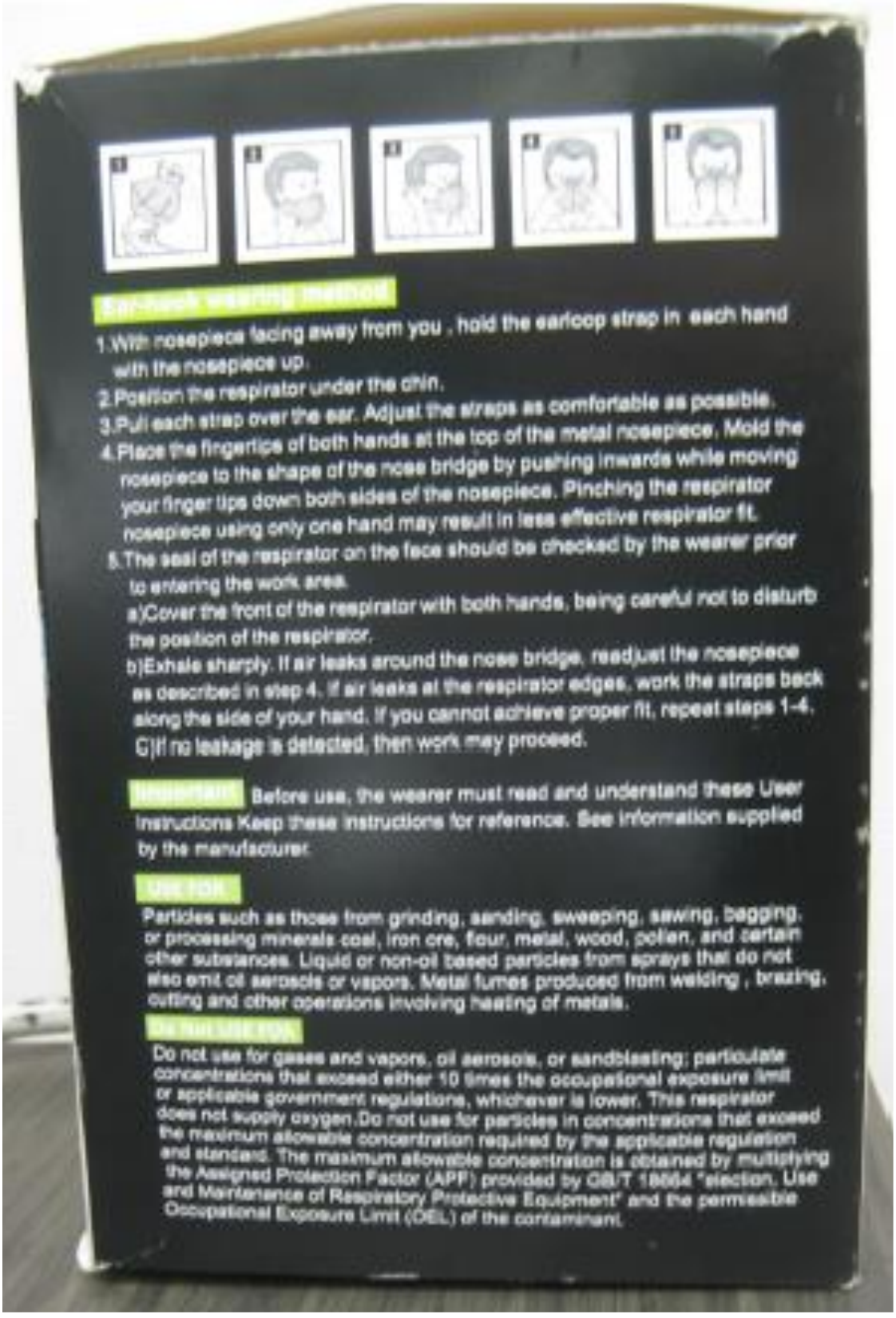
1. This respirator does not supply oxygen. Do not use in atmospheres containing less than 19.5% oxyen.
2. The wearer muse first be trained in the proper use and fit tested before using this respirator.
3. Do not use this respirator when concentrations of contaminants are immediately dangerous to life or health.
4. Leave the contaminated area immediately if breathing becomes difficult, or dizziness or other distress occurs.
5. Discard and replace respirator if it becomes damaged or breathing resistance becomes excessive.
6. Insepct respirator before each use to ensure it is in good working condition. Examine all the respirator parts for signs of damage including the two straps, nose foam, nose clip and face piece material.
7. Do not alter, wash , abuse or misuse this respirator.
8. Do not use with beards or other facial hair or other conditions that prevent a good seal between the face and the sealing edge of the respirator.
9. Can be used up to the limits specified by applicable government regulations for this product.
10. Failure to follow all instructions and warnings on the use of this respirator and /or failure to wear this respirator during all times of exposure can reduce respirator effectiveness and may result in illness or permanent disability.

Storage conditions and Shelf Life

- Before use, store respirators in the original packaging, away from contaminated areas, dust, sunlight, extreme temperatures, excessive moisture and damaging che-micals. Shelf life of unopened product is 5 years from date of manufacture when stored within temperature range of -20℃ to + 30℃ ,and at lessthan 80% relative humidity.
- This respirator contains no components made from natural rubber latex.
- Validity: five years
- Production Lot: 20200406
- Production Date: 2020-04-06

Model No.: KP-K02 W/T valve

Guangdong Kaper Protection Technology Co., Ltd
Add: No. 115, Xinghua Road, Dongfeng Town, Zhongshan City, G.D. Province China
Tel: 86-760-22618993


1.With nosepiece facing away from you , hold the earloop strap in each hand with the nosepiece up.
2.Position the respirator under the chin.
3.Pull each strap over the ear. Adjust the straps as comfortable as possible.
4.Place the fingertips of both hands at the top of the metal nosepiece. Mold the nosepiece to the shape of the nose bridge by pushing inwards while moving your finger tips down both sides of the nosepiece. Pinching the respirator nosepiece using only one hand may result in less effective respirator fit.
5.The seal of the respirator on the face should be checked by the wearer prior to entering the work area.
a)Cover the front of the respirator with both hands, being careful not to disturb the position of the respirator.
b)Exhale sharply. If air leaks around the nose bridge, readjust the nosepiece as described in step 4. If air leaks at the respirator edges, work the straps back along the side of your hand. If you cannot achieve proper fit, repeat steps 1-4.
C)If no leakage is detected, then work may proceed.
Before use, the wearer must read and understand these User Instructions Keep these instructions for reference. See information supplied by the manufacturer.
Particles such as those from grinding, sanding, sweeping, sawing, bagging, or processing minerals coal, iron ore, flour, metal, wood, pollen, and certain other substances. Liquid or non-oil based particles from sprays that do not also emit oil aerosols or vapors. Metal fumes produced from welding , brazing, cutting and other operations involving heating of metals.
Do not use for gases and vapors, oil aerosols, or sandblasting; particulate concentrations that exceed either 10 times the occupational exposure limit or applicable government regulations, whichever is lower. This respirator does not supply oxygen.Do not use for particles in concentrations that exceed the maximum allowable concentration required by the applicable regulation and standard. The maximum allowable concentration is obtained by multiplying the Assigned Protection Factor (APF) provided by GB/T 18664 "section, Use and Maintenance of Respiratory Protective Equipment" and the permissible Occupational Exposure Limit (OEL) of the contaminant.


N95
FFP2
KN95
EN 149
GB 2626


N95

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