

## NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: Anhui Zhongke Duling Commercial Appliance Co., Ltd.

Model Tested: M-9501

Date Tested: June 18, 2020

These findings pertain to the Anhui Zhongke Duling Commercial Appliance Co., Ltd., model M-9501. 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).

Thirty respirators were submitted for evaluation. The respirators were sampled into groups of ten 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 99.86% and 99.53%, respectively. All thirty respirators measured more 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

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

**Date Tested:** June 18, 2020

**Report Prepared:** June 18, 2020

**Manufacturer:** Anhui Zhongke Duling Commercial Appliance Co., Ltd.

**Item Tested:** M-9501 (Sample Group 1 of 3)

**Country of Certification:** China (GB2626-2006)

Pictures have been added to the end of this report.

Filter	Flow Rate (Lpm)	Initial Filter Resistance (mmH <sub>2</sub> O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency
1	85	13.0	0.15	0.24	99.76
2	85	12.1	0.11	0.17	99.83
3	85	14.0	0.20	0.26	99.74
4	85	14.1	0.08	0.18	99.82
5	85	15.1	0.11	0.19	99.81
6	85	13.0	0.16	0.20	99.80
7	85	13.3	0.11	0.18	99.82
8	85	12.1	0.10	0.17	99.83
9	85	15.3	0.16	0.16	99.84
10	85	13.1	0.10	0.18	99.82
<b>Minimum Filter Efficiency: 99.74</b>			<b>Maximum Filter Efficiency: 99.84</b>		

- 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 18, 2020

**Report Prepared:** June 18, 2020

**Manufacturer:** Anhui Zhongke Duling Commercial Appliance Co., Ltd.

**Item Tested:** M-9501 (Sample Group 2 of 3)

**Country of Certification:** China (GB2626-2006)

Filter	Flow Rate (Lpm)	Initial Filter Resistance (mmH <sub>2</sub> O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency
11	85	13.7	0.24	0.33	99.67
12	85	13.4	0.06	0.14	99.86
13	85	18.6	0.14	0.26	99.74
14	85	16.1	0.13	0.28	99.72
15	85	17.6	0.17	0.26	99.74
16	85	12.0	0.22	0.27	99.73
17	85	14.9	0.08	0.17	99.83
18	85	17.8	0.32	0.44	99.56
19	85	12.6	0.20	0.28	99.72
20	85	15.3	0.16	0.27	99.73
<b>Minimum Filter Efficiency: 99.56</b>			<b>Maximum Filter Efficiency: 99.86</b>		

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# NPPTL COVID-19 Response: International Respirator Assessment

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

**Date Tested:** June 18, 2020

**Report Prepared:** June 18, 2020

**Manufacturer:** Anhui Zhongke Duling Commercial Appliance Co., Ltd.

**Item Tested:** M-9501 (Sample Group 3 of 3)

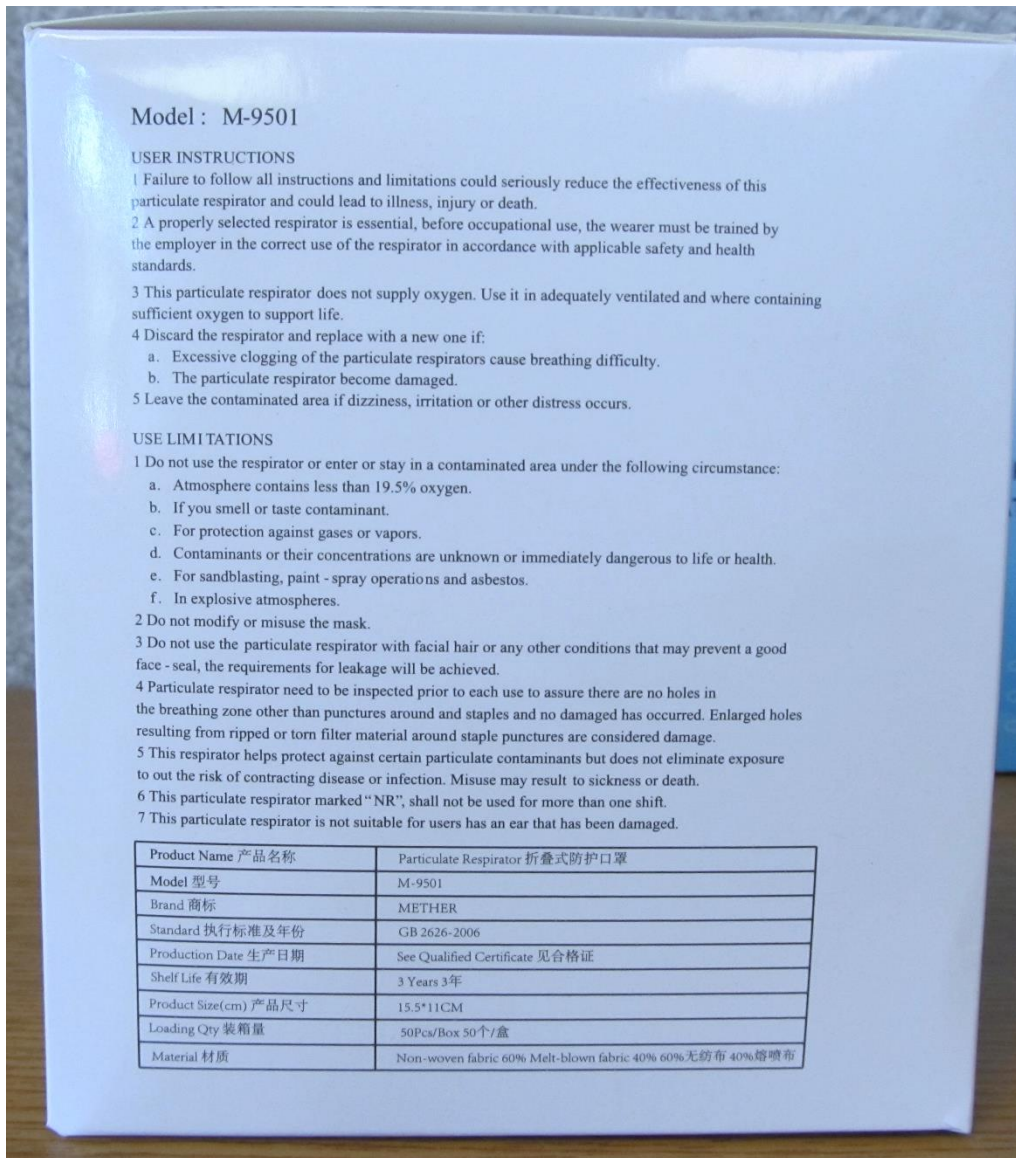
**Country of Certification:** China (GB2626-2006)

Filter	Flow Rate (Lpm)	Initial Filter Resistance (mmH <sub>2</sub> O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency
21	85	13.5	0.27	0.37	99.63
22	85	15.7	0.31	0.38	99.62
23	85	12.4	0.09	0.19	99.81
24	85	14.6	0.41	0.47	99.53
25	85	17.9	0.19	0.29	99.71
26	85	14.3	0.27	0.35	99.65
27	85	13.5	0.21	0.29	99.71
28	85	15.5	0.19	0.27	99.73
29	85	12.8	0.30	0.33	99.67
30	85	12.7	0.12	0.19	99.81
<b>Minimum Filter Efficiency: 99.53</b>			<b>Maximum Filter Efficiency: 99.81</b>		

- 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.
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Model : M-9501

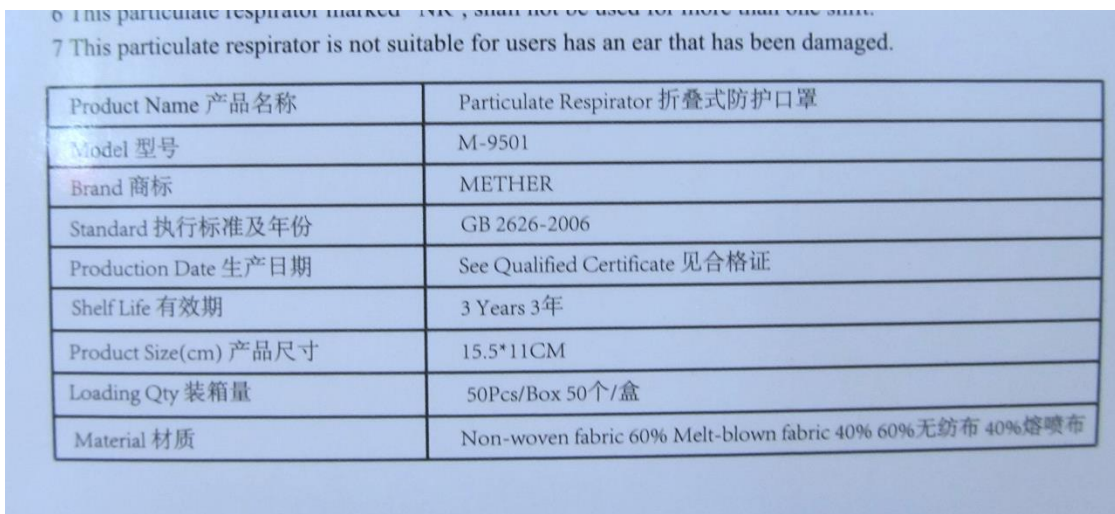
**USER INSTRUCTIONS**

- 1 Failure to follow all instructions and limitations could seriously reduce the effectiveness of this particulate respirator and could lead to illness, injury or death.
- 2 A properly selected respirator is essential, before occupational use, the wearer must be trained by the employer in the correct use of the respirator in accordance with applicable safety and health standards.
- 3 This particulate respirator does not supply oxygen. Use it in adequately ventilated and where containing sufficient oxygen to support life.
- 4 Discard the respirator and replace with a new one if:
  - a. Excessive clogging of the particulate respirators cause breathing difficulty.
  - b. The particulate respirator become damaged.
- 5 Leave the contaminated area if dizziness, irritation or other distress occurs.

**USE LIMITATIONS**

- 1 Do not use the respirator or enter or stay in a contaminated area under the following circumstance:
  - a. Atmosphere contains less than 19.5% oxygen.
  - b. If you smell or taste contaminant.
  - c. For protection against gases or vapors.
  - d. Contaminants or their concentrations are unknown or immediately dangerous to life or health.
  - e. For sandblasting, paint - spray operations and asbestos.
  - f. In explosive atmospheres.
- 2 Do not modify or misuse the mask.
- 3 Do not use the particulate respirator with facial hair or any other conditions that may prevent a good face - seal, the requirements for leakage will be achieved.
- 4 Particulate respirator need to be inspected prior to each use to assure there are no holes in the breathing zone other than punctures around and staples and no damaged has occurred. Enlarged holes resulting from ripped or torn filter material around staple punctures are considered damage.
- 5 This respirator helps protect against certain particulate contaminants but does not eliminate exposure to out the risk of contracting disease or infection. Misuse may result to sickness or death.
- 6 This particulate respirator marked "NR", shall not be used for more than one shift.
- 7 This particulate respirator is not suitable for users has an ear that has been damaged.

Product Name 产品名称	Particulate Respirator 折叠式防护口罩
Model 型号	M-9501
Brand 商标	METHER
Standard 执行标准及年份	GB 2626-2006
Production Date 生产日期	See Qualified Certificate 见合格证
Shelf Life 有效期	3 Years 3年
Product Size(cm) 产品尺寸	15.5*11CM
Loading Qty 装箱量	50Pcs/Box 50个/盒
Material 材质	Non-woven fabric 60% Melt-blown fabric 40% 60%无纺布 40%熔喷布



6 This particulate respirator marked "NR", shall not be used for more than one shift.

7 This particulate respirator is not suitable for users has an ear that has been damaged.

Product Name 产品名称	Particulate Respirator 折叠式防护口罩
Model 型号	M-9501
Brand 商标	METHER
Standard 执行标准及年份	GB 2626-2006
Production Date 生产日期	See Qualified Certificate 见合格证
Shelf Life 有效期	3 Years 3年
Product Size(cm) 产品尺寸	15.5*11CM
Loading Qty 装箱量	50Pcs/Box 50个/盒
Material 材质	Non-woven fabric 60% Melt-blown fabric 40% 60%无纺布 40%熔喷布

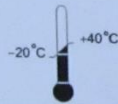


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## Non-Medical/非医用

### FITTING INSTRUCTION

- 1 Place fingers inside the particulate respirator. Bend the nose clip around fingers to form nose shape.
- 2 Hold the particulate respirator in position over the nose and mouth, pull the head harness behind the ears.
- 3 Use both hands, form the nose clip around the nose and shift the head harness to ensure a positive face seal.
- 4 Seal check
  - a. To test the fit of the particulate respirator without an exhalation valve, cup both hands over mask and inhale sharply.
  - b. If air flow is felt in the nose area, re-adjust and tighten the nose clip.
  - c. If air flow is felt around the edges of the respirator, adjust the particulate respirator/head harness to achieve a better fit.
- 5 Change the mask immediately if breathing becomes difficult or mask becomes damaged or distorted.
- 6 Change the mask if proper face seal can not be achieved.
- 7 Carefully observe these instructions is an important step in safe respirator use.



Temperature range of storage conditions



Maximum relative humidity of storage conditions



See information supplied by the manufacturer



yyyy/mm

Manufacturer: Anhui Zhongke Duling Commercial Appliance Co., Ltd.  
Add: 1# Hexianghu Rd, Changfeng, Hefei, Anhui Province, P. R. China.



MADE IN CHINA

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