

# KN95 Nano Fiber Membrane Mask

## World Advanced Nanotechnology

### Advantage I

- 0.3  $\mu\text{m}$  Filtration Efficiency  $\geq 95\%$
- Aerosol Filtration Efficiency  $\geq 95\%$
- PM2.5 Filtration Efficiency  $\geq 99.99\%$

### Advantage II

- 6 Layers (from Outside to Inside):
- 1st Layer: Non-woven Fabric
  - 2nd Layer: Non-woven Fabric
  - 3rd Layer: Nanofiber Membrane
  - 4th Layer: Non-woven Fabric
  - 5th Layer: Hydrophilic Hot Air Cotton
  - 6th Layer: Skin Friendly Non-woven Fabric

### Advantage III

- Smooth Breathing
- Size 14x15cm

### Advantage IV

- Longer Service Life
- 3 Times More than Common Mask



### Main Functions

- anti haze, PM2.5 ✓
- prevent pollen and dust ✓
- prevent fog and smoke ✓
- anti bacteria and virus ✓
- ventilation and moisture removal ✓
- without fluorescent agent ✓

### Sole Distributed by

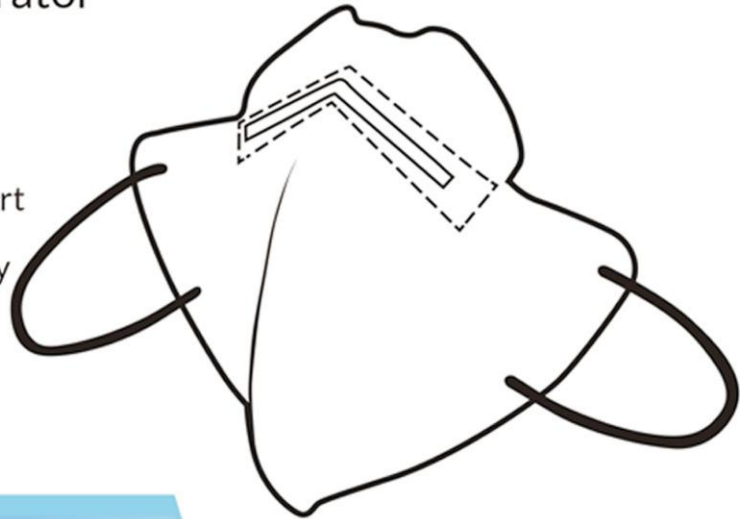
Zhenjiang Ideal CO.,LTD  
 Zhenjiang Star Group  
[www.zhenjiangstargroup.com](http://www.zhenjiangstargroup.com)

# IDEAL

3D design Effective filtration  
Made using MAXAIR™ nanofiber technology

## 3D MAXAIR™ Particulate Respirator

- Maximum protection
- Face and head comfort
- Nanofiber technology



3 pieces



Three-dimensional MAXAIR™  
nanofiber technology



Product of National Special Separation Membrane Science & Engineering Research Institute of China

EN149:2001+A1:2009



FFP2 NR D

• GB2626-2006



KN95

Introduction to product packaging

# Product instructions

## HOW TO USE



Step 1. Unfold and hold the FFP2 respirator with nose clip on top.



Step 2. Place the FFP2 respirator over nose and mouth and pinch the nose clip to conform to your nose.



Step 3. Hang the ear straps behind the ears.



Step 4. Mould the nose clip tightly to secure facial fit. Check seal in each use.

## REMINDER

- When the AQI is below Level 3, please change the respirator every 3 days.
- When the AQI is Level 4, please change the respirator every 2 days.
- When the AQI is Level 5, please change the respirator every day.
- For better protection, please wear the mask as directed.

## WARNING

- Store in a cool dry place.
- This product is not suitable for people with low vital capacity.
- It is not recommended to use this product in poor air circulation environment or during sleep.
- If there is breathing difficulty discontinue use immediately.

Batch number:20200401

Expiry date:

Made in China

Jiangsu Jiulang High-tech Co., Ltd.

29 Buyue Rd. Pukou, Nanjing, China

[www.jiulang-tech.com/en/](http://www.jiulang-tech.com/en/)

Sole Distributed by

Zhen Jiang Ideal Co.,Ltd.

Zhen Jiang Star Group

[www.zhenjiangstargroup.com](http://www.zhenjiangstargroup.com)



# **KN95 Respirator PPE Test Report**

(File No.:BTS-23485P)



# PPE Test Report

**Report Number: BTS-23485P**

**Date: Mar.29, 2020**

Applicant Name: JIANGSU JIULANG HIGH-TECH CO., LTD

Applicant Address : NO.29, Bu yue Road, Qiaolin Sub-district, Pukou District, Nanjing City, Jiangsu Province, China




Product : KN95 respirator

Brand name/Trade mark : \

Model(s): MF-01(class of device: FFP2 NR D)

According to : EN 149:2001+A1:2009



|                             |  |   |
|-----------------------------|--|---|
| <b>Manufacturer</b>         | JIANGSU JIULANG HIGH-TECH CO., LTD   |   |
| <b>Applicant Address</b>    | NO.29, Bu yue Road, Qiaolin Sub-district, Pukou District, Nanjing City, Jiangsu Province, China                        |   |
| <b>Trade mark :</b>         | \  |   |
| <b>Machinery</b>            |  |   |
| <b>Product Name</b>         | KN95 respirator  |   |
| <b>Main Model</b>           | KN95 respirator  |   |
| <b>Series Model(s)</b>      | MF-01(class of device: FFP2 NR D)  |   |
| <b>File No.</b>             | BTS-23485P   |   |
| <b>Standards Compliance</b> | EN 149:2001+A1:2009  |   |
| <b>Date of Testing</b>      | Mar.29, 2020   |   |
| <b>Testing Laboratory</b>   | Shanghai Biaotong Testing Technology Service Co., Ltd<br>No.11Lane 225, Jinxiang Road, Jinqiao Pudong, Shanghai,China. |   |
| <b>Tested by</b>            | Apollo   |    |
| <b>Approved by</b>          | Jack Yang  | <br> |

**Note:**

1. The test results only respond to the tested sample, and are invalidated as separately used.
2. Reproduction of this report without a written approval or permission is strictly prohibited.

|          |  |                                       |   |
|----------|--|---------------------------------------|---|
| <b>5</b> | <b>Classification</b>  |                                       | P |
|          | Particle filtering half masks are classified according to their filtering efficiency and their maximum total inward leakage. There are three classes of devices: | Complied with standard, see appended. | P |
|          | - FFP1   | FFP1                                  | N |
|          | - FFP2   | FFP2                                  | P |
|          | - FFP3   | FFP3                                  | N |

|          |   |  |   |
|----------|---|--|---|
| <b>6</b> | <b>Designation</b>  |  | P |
|          | Particle filtering half masks meeting the requirements of this European Standard. Year of publication, classification |  | P |

|          |  |  |   |
|----------|--|--|---|
| <b>7</b> | <b>Requirements</b>  |  | P |
| 7.1      | In all tests all test samples shall meet the requirements  | Complied see bellow  | P |
| 7.2      | Nomial values and tolerances   |  | P |
|          | Unless otherwise specified, the values stated in this European Standard are expressed as normal values.  | Actual using value is clear  | P |
| 7.3      | Visual inspection  |  | P |
|          | The visual inspection shall also include the marking and the information supplied by the manufacturer.   | Clear marking is provided, see sample body                         | P |
| 7.4      | Packaging  |  | P |
|          | Masks shall be offered for sale packaged in such a way that they are protected against mechanical damage and contamination before use.   | Distinct design and warning are made on packaging, see sample body | P |
| 7.5      | Material   |  | P |
|          | Materials used shall be suitable to withstand handling and wear over the period. Any material from the filter media released shall not constitute a hazard or nuisance for the wearer. | Comfortable wearing, when releasing no hazards is produced         | P |
| 7.6      | Cleaning and disinfecting  |  | N |
|          | The materials used shall withstand the cleaning and disinfecting   | Single-use equipment   | N |

|       |  |   |   |
|-------|--|---|---|
| 7.7   | Practical performance  |   | P |
|       | The particle filtering half mask shall undergo practical performance tests under realistic conditions.   | Complied, see bellow test                                     | P |
| 7.8   | Finish of parts  | Soft equipment  | N |
|       | Parts likeyl to come into contact with the wearer shall have no sharp edges or burrs   |   | N |
| 7.9   | Leakage  |   | P |
| 7.9.1 | Total inward leakage   |   | P |
|       | The laboratory tests shall wearer to protect with high probability against the potential hazard to be expected.  | Enough safe condition is provide                              | P |
|       | Exercise results for total inward leakage shall be not greater than<br>25% for FFP1<br>11% for FFP2<br>5% for FFP3                                     | FFP2, See below test table                                    | P |
| 7.9.2 | Penetration of filter material   |   | P |
|       | Meet the requirements of Table 1   | FFP2<br>Sodium chloride test: 7.6%<br>Paraffin oil test: 8.1% | P |
| 7.10  | Compatibility with skin  |   | P |
|       | Materials that may come into contact with the wearer's skin shall not be known to be likely to cause irritation or any other adverse effect to health. | Have no irritation or adverse effect to skin and health       | P |
| 7.11  | Flammability   | Have no such hazard   | P |
|       | The material used shall not present a danger for the wearer and shall not be of highly flammable nature.   |   | P |
| 7.12  | Carbon dioxide content of the inhalation air   |   | N |
|       | The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1,0 % (by volume).  | <1.0%   | P |
| 7.13  | Head harness   |   |   |
|       | Head harness shall be designed so that mask can be doned and removed easily.   | The design is considered                                      | P |



|          |  |                                    |   |
|----------|--|------------------------------------|---|
|          | Head harness shall be adjustable or self-adjusting and sufficiently robust to hold the mask firmly in position .   | The design is considered           | P |
| 7.14     | Field of vision  |                                    | P |
|          | The field of vision is acceptable if determined so in practical performance tests.   | Clear field of vision when wearing | P |
| 7.15     | Exhalation valve(s)  |                                    | N |
|          | A particle filtering half mask may have one or more exhalation valve(s) and shall function correctly in all orientations.  |                                    | N |
|          | If an exhalation valve is provided it shall be protected against or be resistant to dirt and mechanical damage and may be shrouded or may include any other device |                                    | N |
|          | Exhalation valve(s) shall continue to operate correctly after a continuous exhalation flow of 300 l/min over a period of 30 s.                                     |                                    | N |
|          | Exhalation valve housing is attached to the faceblank, and withstand axially a tensile force of 10 N applied for 10 s.   |                                    | N |
| 7.16     | Breathing resistance   |                                    | P |
|          | The breathing resistances apply to valved and valveless and shall meet the requirements  | Complied, see below test table     | P |
| 7.17     | Clogging   |                                    | P |
| 7.17.1   | General  | Single-use device                  | P |
|          | For single-use devices clogging test is an optional test.  |                                    | P |
|          | Devices designed to be resistant to clogging, shown by a slow increase   |                                    | P |
|          | The specified breathing resistances shall not be exceeded before the required dust load of 833 mg·h/m <sup>3</sup> .   |                                    | P |
| 7.17.2   | Breathing resistance   |                                    | P |
| 7.17.2.1 | Valved particle filtering half masks   |                                    | N |
| 7.17.2.2 | Valveless particle filtering half masks  |                                    | P |

|        |   |                  |   |
|--------|---|------------------|---|
|        | After clogging the inhalation and exhalation resistances shall not exceed<br>- FFP1: 3 mbar<br>- FFP2: 4 mbar<br>- FFP3: 5 mbar     | FFP2: <4 mbar    | P |
|        | at 95 l/min continuous flow.  |                  | P |
| 7.17.3 | Penetration of filter materia   |                  | P |
|        | All types claimed to meet the clogging requirement shall also meet the penetration requirements given in 7.9.2 after the treatment. |                  | P |
| 7.18   | Demountable parts   | No any such part | N |
|        | All demountable parts (if fitted) shall be readily connected and secured, where possible by hand.                                   |                  |   |

|          |  |  |   |
|----------|--|--|---|
| <b>8</b> | <b>Testing</b>   |  | P |
| 8.1      | General  |  | P |
|          | No special measuring devices and methods are specified, commonly used devices and methods shall be used.               | Common methods   | P |
| 8.2      | Visual inspection  |  | P |
|          | The visual inspection is carried out appropriate by the test house prior to laboratory or practical performance tests. | Considered   | P |
| 8.3      | Conditioning   |  | P |
| 8.3.1    | Simulated wearing treatment  |  | P |
|          | A breathing machine is adjusted to 25 cycles/min and 2,0 l/stroke.   | 25 cycles/min<br>2,0 l/stroke.                                   | P |
|          | For testing, a saturator is incorporated in the exhalation line between the breathing machine and the dummy head,      | a saturator incorporated by breathing machine and the dummy head | P |
|          | The spilling out of the dummy's mouth and contaminating the particle filtering half mask the head shall be incline     | Incline considered   | P |
| 8.3.2    | Temperature conditioning   |  | P |
|          | Exposet masks to the following thermal cycle:  | Complied   | P |
|          | a) for 24 h to a dry atmosphere of (70 ± 3) °C;  |  | P |

|  |   |    |   |
|--|---|----|---|
|  | b) for 24 h to a temperature of $(-30 \pm 3)$ °C;   |    | P |
|  | Allow to return to room temperature for at least 4 h between exposures and prior to subsequent testing. | 5h | P |

|          |  |                          |    |
|----------|--|--------------------------|----|
| <b>9</b> | <b>Marking</b>   |                          | -- |
| 9.1      | Packaging  |                          | P  |
|          | The following information shall be clearly and durably marked on the smallest commercially available packaging or legible through it if the packaging is transparent.              | Complied, clearly marked | P  |
| 9.1.1    | The name, trademark or other means of identification of the manufacturer or supplier.  | See user manual          | P  |
| 9.1.2    | Type-identifying marking.  |                          | P  |
| 9.1.3    | Classification: FFP1, FFP2, FFP3.  | FFP2                     | P  |
| 9.1.4    | The number and year of publication of this European Standard.  | See above                | P  |
| 9.1.5    | At least the year of end of shelf life.  | 3 years                  | P  |
| 9.1.6    | The sentence 'see information supplied by the manufacturer', at least in the official language(s) of the country of destination, or by using the pictogram as shown in Figure 12b. | English used             |    |
| 9.1.7    | The manufacturer's recommended conditions of storage (at least the temperature and humidity) or equivalent pictogram, as shown in Figures 12c and 12d.                             | See user manual          | P  |
| 9.1.8    | The packaging of those particle filtering half masks passing the dolomite clogging test shall be additionally marked with the letter "D".  |                          | P  |
| 9.2      | Particle filtering half mask   |                          | P  |
|          | Particle filtering half masks  |                          | P  |
|          | Complying with this European Standard shall be clearly and durably marked with the following:  |                          | P  |
| 9.2.1    | The name, trademark or other means of identification of the manufacturer or  |                          | P  |

|       |   |           |   |
|-------|---|-----------|---|
|       | supplier.   |           |   |
| 9.2.2 | Type-identifying marking.   |           | P |
| 9.2.3 | The number and year of publication of this European Standard.   | See above | P |
| 9.2.4 | The symbols FFP1, FFP2 or FFP3 according to class.  | FFP2      | P |
| 9.2.5 | If appropriate the letter D (dolomite) in accordance with clogging performance. This letter shall follow the class designation (see 9.2.4). |           | N |
| 9.2.6 | Sub-assemblies and components with considerable bearing on safety shall be marked so that they can be identified.                           |           | N |

|           |   |                                    |   |
|-----------|---|------------------------------------|---|
| <b>10</b> | <b>Information to be supplied by the manufacturer</b>   |                                    | P |
| 10.1      | Information supplied by the manufacturer shall be at least in the official language(s) of the country of destination.   | English                            | P |
| 10.3      | The information supplied by the manufacturer shall contain all information necessary for trained and qualified persons on <ul style="list-style-type: none"> <li>- application/limitations;</li> <li>- the meaning of any colour coding;</li> <li>- checks prior to use;</li> <li>- donning, fitting;</li> <li>- use;</li> <li>- maintenance (e.g. cleaning, disinfecting), if applicable;</li> <li>- storage;</li> <li>- the meaning of any symbols/pictograms used of the equipment.</li> </ul> | See user manual<br>See user manual | P |
| 10.4      | The information shall be clear and comprehensible. If helpful, illustrations, part numbers, marking shall be added.   | Clearly considered                 | P |

|      |  |                 |   |
|------|--|-----------------|---|
| 10.5 | Warning shall be given against problems likely to be encountered, for example: <ul style="list-style-type: none"><li>- fit of particle filtering half mask (check prior to use);</li><li>- it is unlikely that the requirements for leakage will be achieved if facial hair passes under the face seal;</li><li>- air quality (contaminants, oxygen deficiency);</li><li>- use of equipment in explosive atmosphere.</li></ul> | See user manual | P |
| 10.6 | The information shall provide recommendations as to when the particle filtering half mask shall be discarded.  |                 | P |



**Attachments: test table**

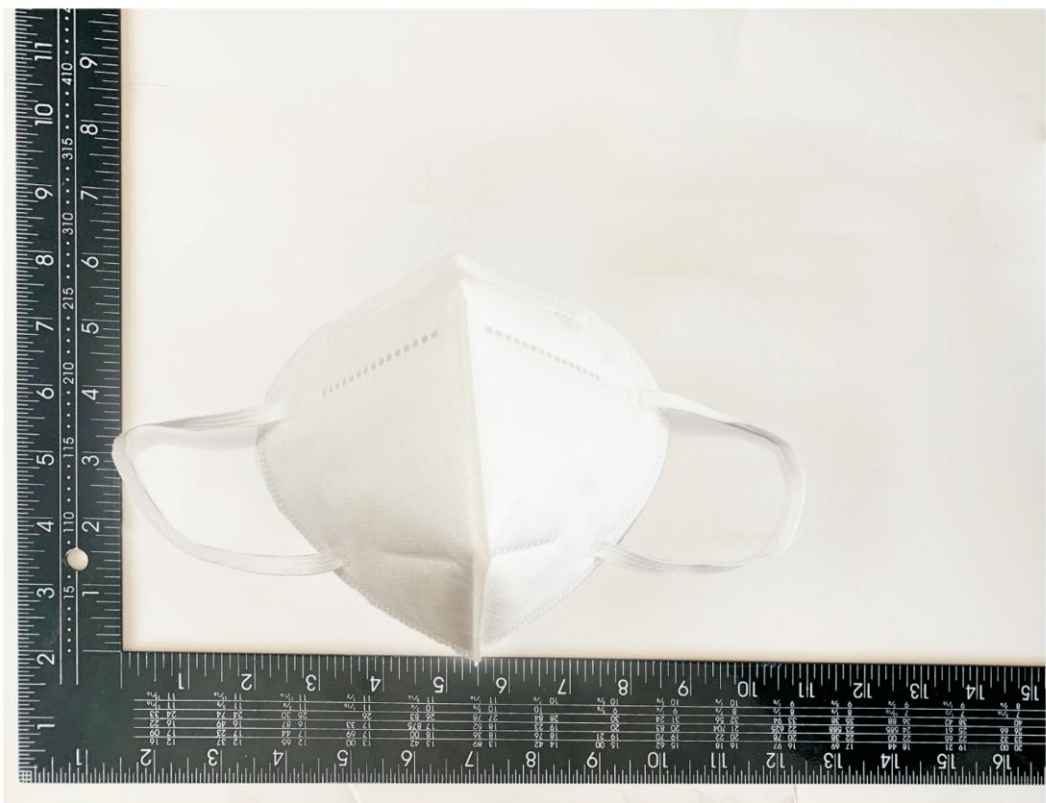
| Table 8.5  |                          | Leakage test |          |          |          | P        |
|--|--------------------------|--------------|----------|----------|----------|----------|
| Item   | Models                   | Sample 1     | Sample 2 | Sample 3 | Sample 4 | Sample 5 |
|  | Test subject walk (km/h) |              | 5        | 5        | 5        | 5        |
| Particle size distribution(um)   |                          | 0.08~1.6     | 0.08~1.6 | 0.08~1.6 | 0.08~1.6 | 0.08~1.6 |
| NaCl flow rate (L/min)   |                          | 99~104       | 99~104   | 99~104   | 99~104   | 99~104   |
| NaCl concentration before mask (mg/m <sup>3</sup> )                                      |                          | 7.9~8.3      | 7.9~8.3  | 7.9~8.3  | 7.9~8.3  | 7.9~8.3  |
| NaCl concentration after mask (mg/m <sup>3</sup> )                                       |                          | 0.49         | 0.48     | 0.49     | 0.50     | 0.49     |
| Note: Test ark volume is 2m <sup>3</sup><br>Test result total inward Leakage is 6.2%<11% |                          |              |          |          |          |          |

| Table 8.9-1                                  |                                 | Inhalation breathing resistance test at 30 L/min |          |          |          | P        |
|--|---------------------------------|--|----------|----------|----------|----------|
| Item   | Models                          | Sample 1   | Sample 2 | Sample 3 | Sample 4 | Sample 5 |
|  | Inhalation gas velocity (L/min) |  | 30       | 30       | 30       | 30       |
| Maximum resistance (mbar)                    |                                 | 0.66   | 0.65     | 0.67     | 0.65     | 0.63     |
| Note: Maximum permitted resistance <1.0 mbar |                                 |  |          |          |          |          |

| Table 8.9-2 |        | Inhalation breathing resistance test at 95 L/min |          |          |          | P        |
|-------------|--------|--|----------|----------|----------|----------|
| Item        | Models | Sample 1   | Sample 2 | Sample 3 | Sample 4 | Sample 5 |

|   |      |      |      |      |      |
|---|------|------|------|------|------|
| Inhalation gas velocity (L/min)               | 95   | 95   | 95   | 95   | 95   |
| Maximum resistance (mbar)                     | 2.21 | 2.22 | 2.25 | 2.21 | 2.23 |
| Note: Maximum permitted resistance < 3.0 mbar |      |      |      |      |      |

|   |   |          |          |          |          |
|---|---|----------|----------|----------|----------|
| Table 8.9-3                                   | Exhalation breathing resistance test at 160 L/min |          |          |          | P        |
| Models<br>Item                                | Sample 1  | Sample 2 | Sample 3 | Sample 4 | Sample 5 |
| Exhalation (L/min)                            | 160   | 160      | 160      | 160      | 160      |
| Maximum resistance (mbar)                     | 2.35  | 2.36     | 2.41     | 2.39     | 2.35     |
| Note: Maximum permitted resistance < 3.0 mbar |   |          |          |          |          |



# Certificate of Compliance



No. 4M200327T.JJH0Q83

Certificate's Holder:

JIANGSU JIULANG HIGH-TECH CO., LTD  
 NO.29, Bu yue Road, Qiaolin Sub-district, Pukou District, Nanjing City, Jiangsu Province, China

Certification ECM Mark:



Product:  
 Model(s):

KN95 respirator  
 MF-01 (class of device: FFP2 NR D)

Verification to:

Standard:  
 EN 149:2001+A1:2009

related to CE Directive(s):  
 R 2016/425 (Personal Protective Equipment)

Remark: This document has been issued on a voluntary basis and upon request of the manufacturer. It is our opinion that the technical documentation received from the manufacturer is satisfactory for the requirements of the ECM Certification Mark. The conformity mark above can be affixed on the products accordingly to the ECM regulation about its release and its use.

Additional information and clarification about the Marking:



The manufacturer is responsible for the CE Marking process, and if necessary, must refer to a Notified Body. This document has been issued on the basis of the regulation on ECM Voluntary Mark for the certification of products, RG01\_ECM rev.3 available at: [www.entecerma.it](http://www.entecerma.it)

Issuance date: 27 March 2020

Expiry date: 26 March 2025

Reviewer  
 Technical expert  
 Amanda Payne



Approver  
 ECM Service Director  
 Luca Bedonni



Ente Certificazione Macchine Srl

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 ☎ +39 051 6705141 📠 +39 051 6705156 ✉ info@entecerma.it 🌐 www.entecerma.it



证书号第2804550号



# 发明专利证书

发明名称：一种智能膜材料防雾霾口罩

发明人：仲兆祥；武军伟；周群；郭红林

专利号：ZL 2016 1 1215953.5

专利申请日：2016年12月26日

专利权人：江苏久朗科技股份有限公司

授权公告日：2018年02月02日

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申长雨







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中国认可  
国际互认  
检测

TESTING

CNAS L0450



161011110680

# 检验检测报告

## TEST REPORT



国家服饰及布艺产品质量监督检验中心(江苏)

National Apparel and Cloth Art Products Quality Supervision and Inspection Center(Jiangsu)

江苏省纺织产品质量监督检验研究院

Jiangsu Textiles Quality Services Inspection Testing Institute

# 江苏省纺织产品质量监督检验研究院


## 检 验 报 告



JST-FW202000682



共 2 页 第 1 页

|              |   |              |                       |
|--------------|---|--------------|-----------------------|
| 产品名称         | 口罩  | 型号规格         | —                     |
| 委托单位         | 江苏久朗科技股份有限公司  | 商 标          | —                     |
| 地 址          | 南京市浦口区桥林街道步月路29号12幢-204   | 检验类别         | 委托送样                  |
| 生产单位         | 江苏久朗科技股份有限公司  | 样品等级<br>安全类别 | KN95/—                |
| 地 址          | 南京市浦口区桥林街道步月路29号12幢-204   | 到样日期         | 2020-03-24            |
| 抽样地点         | —   | 检验日期         | 2020-03-24~2020-03-27 |
| 样品数量         | 60只   | 分包情况         | —                     |
| 抽样基数<br>抽样批量 | —/—   | 样品状态         | 符合检验要求                |
| 批号或货号<br>或款号 | —   | 生产日期         | —                     |
| 检验/判定<br>依据  | GB 2626-2006《呼吸防护用品 自吸过滤式防颗粒物呼吸器》   |              |                       |
| 检验结论         | 见检测结果页。   |              |                       |
| 备注           | <div style="text-align: right;">                     签发日期： 2020年03月27日                 </div>  |              |                       |

批准：

赵越

编制：

陈海燕

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# 检测结果



JST-FW202000682

共 2 页 第 2 页

| 序号 | 检验项目     |      | 测试方法        | 技术要求        | 检验结果   | 单项判定 |
|----|----------|------|-------------|-------------|--|------|
| 1  | 过滤效率(%)  | 未处理样 | GB2626-2006 | $\geq 95.0$ | 98.4, 98.4, 98.1, 98.2, 98.1, 98.2, 98.1, 98.3, 98.2, 98.2 | 合格   |
| 2  | 吸气阻力(Pa) | 未处理样 | GB2626-2006 | $\leq 350$  | 165, 177   | 合格   |
| 3  | 呼气阻力(Pa) | 未处理样 | GB2626-2006 | $\leq 250$  | 137, 141   | 合格   |

合格  
检测