# Test Report

**Applicant:** Wenzhou Jiada Technology Co., Ltd
**Address:** No.401, Building 19th, Rainbow Wisdom Park, Longgang City, Cangnan Area, Wenzhou City, Zhejiang Province, China.

**The following sample(s) was/were submitted and identified on behalf of the client as:**

| | |
|---|---|
| Product name: | FILTERING HALF MASK |
| Model: | JD-99(V) |
| Trade mark: | JIADA |
| Manufacturer: | Wenzhou Jiada Technology Co., Ltd |
| Address: | No.401, Building 19th, Rainbow Wisdom Park, Longgang City, Cangnan Area, Wenzhou City, Zhejiang Province, China. |
| Classification: | FFP2 NR |
| Sample quantity: | 69 Pcs |
| Sample Received Date: | Mar. 17, 2021 |
| Testing Period: | Mar. 17, 2021~ Mar. 24, 2021 |

**Test Requirement:**

According to the requirement of the client, the test item(s) of the sample is according to the standard EN 149:2001+A1:2009.

**Test Result(s):** Please refer to the following page(s)

**Test Method:** Please refer to the following page(s)

Compiled by: _____ Reviewed by: _____

Approved by: _____ Date: 2021-03-24

**Summary of assessment***

| Clause | Assessment |
|---|---|
| 7.9.2 Penetration of filter material | Pass |
| 7.11 Flammability | Pass |
| 7.12 Carbon dioxide content of the inhalation air | Pass |
| 7.16 Breathing resistance | Pass |

**Key**

| | |
|---|---|
| Pass | Requirement satisfied. |
| NRq | The clauses were not required. |
| Fail | Requirement not satisfied. Refer to the "Result details" section for more information. |
| N.A. | Requirement not applicable. |

| Test | Uncertainty |
|---|---|
| Penetration of filter material (NaCl) | 1.60 % |
| Penetration of filter material (Paraffin Oil) | 1.78 % |
| Carbon dioxide content of the inhalation air | 5.34 % |
| Breathing resistance (30 L/min) | 3.60 % |
| Breathing resistance (95 L/min) | 2.20 % |
| Breathing resistance (160 L/min) | 2.00 % |

* Assessment relates only to those specimens which were tested and subjects in this report.

# Test Result

**Clause 7.9.2 Penetration of Filter Material**
(EN 149:2001+A1:2009, Clause 8.11)

<table>
<tr><th>Test Requirement</th><th>Results</th><th>Comment</th></tr>
<tr><td>The penetration of the filter of the particle filtering half mask shall meet the requirements of the following table.
<table>
<tr><td rowspan="2">Classification</td><td colspan="2">Maximum penetration of test aerosol(%)</td></tr>
<tr><td>Sodium chloride test 95 L/min</td><td>Paraffin oil test 95 L/min</td></tr>
<tr><td>FFP1</td><td>20</td><td>20</td></tr>
<tr><td>FFP2</td><td>6</td><td>6</td></tr>
<tr><td>FFP3</td><td>1</td><td>1</td></tr>
</table></td><td>Detail refer to Appendix 1</td><td>Pass</td></tr>
</table>

**Appendix 1: Summarization of Test Data**

Penetration of filter material

| Aerosol | Condition | Sample No. | Penetration (%) | | Assessment |
|---|---|---|---|---|---|
| | | | Average in 30s after 3 min | Max. during exposure | |
| Sodium chloride test | A.R. | 1# | 0.86 | / | Pass |
| | | 2# | 0.88 | / | |
| | | 3# | 0.84 | / | |
| | S.W. | 7# | 0.84 | / | |
| | | 8# | 0.83 | / | |
| | | 9# | 0.83 | / | |
| | M.S. + T.C. | 13# | / | 1.15 | |
| | | 14# | / | 1.11 | |
| | | 15# | / | 1.22 | |
| Paraffin oil test | A.R. | 4# | 1.50 | / | |
| | | 5# | 1.83 | / | |
| | | 6# | 2.05 | / | |
| | S.W. | 10# | 2.12 | / | |
| | | 11# | 1.98 | / | |
| | | 12# | 1.96 | / | |
| | M.S. + T.C. | 16# | / | 2.05 | |
| | | 17# | / | 1.92 | |
| | | 18# | / | 1.90 | |
| Flow rate of test aerosol: 95.0 L/min | | | | | |

**Clause 7.11 Flammability**

(EN 149:2001+A1:2009, Clause 8.6)

| Test Requirement | Results | Comment |
|---|---|---|
| The material used shall not present a danger for the wearer and shall not be of highly flammable nature when tested, the particle filtering half mask shall not burn or not to continue on burn for more than 5 s after removal from the flame. | Detail refer to Appendix 2 | Pass |

**Appendix 2: Summarization of Test Data**

Flammability

| Condition | Sample No. | Result | Assessment |
|---|---|---|---|
| A.R. | 31# | Nonflammable | Pass |
| | 32# | Nonflammable | |
| T.C. | 33# | Nonflammable | |
| | 34# | Flammable, burn for no more than 5 s | |

**Clause 7.12 Carbon Dioxide Content of The Inhalation Air**

(EN 149:2001+A1:2009, Clause 8.7)

| Test Requirement | Results | Comment |
|---|---|---|
| The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1.0 % (by volume). | Detail refer to Appendix 3 | Pass |

**Appendix 3: Summarization of Test Data**

Carbon Dioxide Content of The Inhalation Air

| Condition | Sample No. | Result | | Assessment |
|---|---|---|---|---|
| A.R. | 19# | 0.40% | Mean value: 0.39% | Pass |
| | 20# | 0.39% | | |
| | 21# | 0.38% | | |

**Clause 7.16 Breathing Resistance**

EN 149:2001+A1:2009, Clause 8.9)

| Test Requirement | Results | Comment |
|---|---|---|
| The breathing resistances apply to valved and valveless filtering half masks and shall meet the requirements as the following table. | Detail refer to Appendix 4 | Pass |

| Classification | Maximum permitted resistance (mbar) | | |
|---|---|---|---|
| | Inhalation | | Exhalation |
| | 30 L/min | 95 L/min | 160 L/min |
| FFP1 | 0.6 | 2.1 | 3.0 |
| FFP2 | 0.7 | 2.4 | 3.0 |
| FFP3 | 1.0 | 3.0 | 3.0 |

**Appendix 4: Summarization of Test Data**

| Specimen | Condition | Inhalation(mbar) | | Exhalation resistance(mbar) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | At 30 L/min | At 95 L/min | At 160 L/min | | | | |
| | | | | A | B | C | D | E |
| 22# | A.R. | 0.40 | 1.33 | 2.01 | 2.01 | 2.00 | 1.99 | 1.99 |
| 23# | | 0.40 | 1.35 | 2.02 | 2.02 | 2.01 | 2.01 | 2.00 |
| 24# | | 0.39 | 1.34 | 2.01 | 2.00 | 2.01 | 2.00 | 1.99 |
| 25# | S.W. | 0.41 | 1.35 | 2.02 | 2.01 | 2.02 | 2.01 | 2.00 |
| 26# | | 0.41 | 1.36 | 2.03 | 2.02 | 2.03 | 2.02 | 2.01 |
| 27# | | 0.40 | 1.35 | 2.01 | 2.02 | 2.01 | 2.01 | 2.00 |
| 28# | T.C. | 0.37 | 1.30 | 1.92 | 1.91 | 1.92 | 1.91 | 1.90 |
| 29# | | 0.36 | 1.29 | 1.93 | 1.92 | 1.93 | 1.92 | 1.91 |
| 30# | | 0.37 | 1.29 | 1.91 | 1.90 | 1.91 | 1.90 | 1.89 |
| / | F.C. | / | / | / | / | / | / | / |
| / | | / | / | / | / | / | / | / |
| / | | / | / | / | / | / | / | / |

A: facing directly ahead; B: facing vertically upwards; C: facing vertically downwards; D: lying on the left side; E: lying on the right side

**Sample photo(s)：**

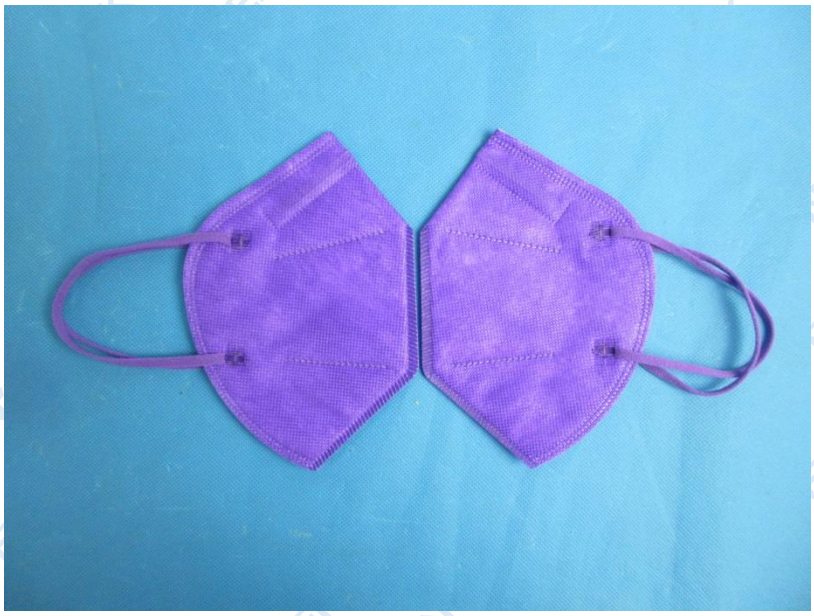

Fig.1

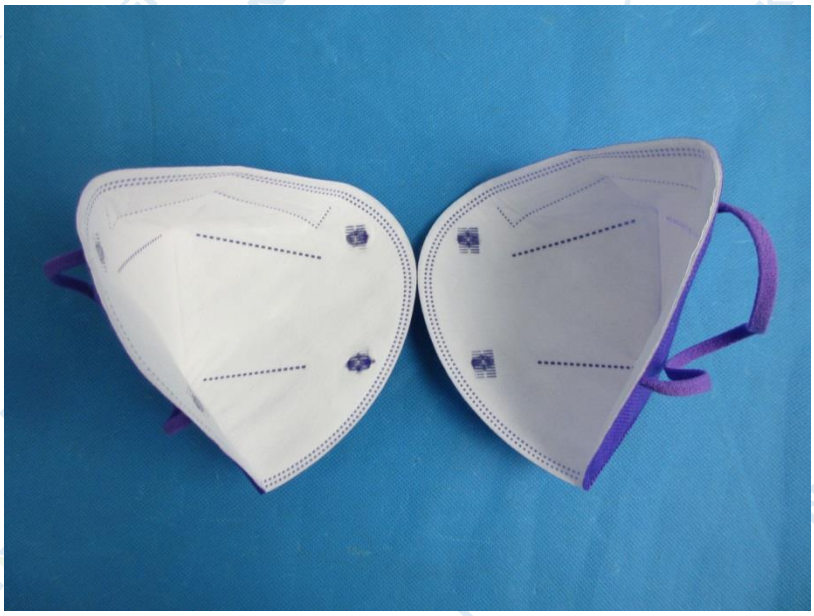

Fig.2

****End of Report****

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