| | | | | |
|---|---|---|---|---|
| **Prüfbericht-Nr.:** *Test Report No.*: | **60382611 001** | **Auftrags-Nr.** *Order No.*: | **168266786** | Seite 1 von 12 *Page 1 of 12* |
| **Kunden-Referenz-Nr.:** *Client Reference No.*: | N/A | **Auftragsdatum:** *Order date*: | May. 28, 2020 | |
| **Auftraggeber:** *Client*: | **Guangzhou Dayun Medical Technology Co.,Ltd.** No.632, Xintang Avenue, Xintang Town, Zengcheng District Guangzhou, Guandong, China | | | |
| **Prüfgegenstand:** *Test item*: | Disposable medical mask (Non-sterile) | | | |
| **Bezeichnung / Typ-Nr.:** *Identification / Type No.*: | DY-01 | | | |
| **Auftrags-Inhalt:** *Order content*: | Type test | | | |
| **Prüfgrundlage:** *Test specification*: | EN 14683:2019+AC:2019 except for clause 5.2.6 | | | |

| | |
|---|---|
| **Wareneingangsdatum:** *Date of receipt*: | May. 27, 2020 |
| **Prüfmuster-Nr.:** *Test sample No.*: | 20200413 |
| **Prüfzeitraum:** *Testing period*: | May. 28, 2020 to Jun. 09, 2020 |
| **Ort der Prüfung:** *Place of testing*: | See page 3 |
| **Prüflaboratorium:** *Testing laboratory*: | TÜV Rheinland (Shenzhen) Co., Ltd. |
| **Prüfergebnis*:** *Test result**: | Pass |

See Attachment: Photo documentation for details.

**geprüft von** / *tested by*:

Yazhen Xu Amanda Liu

Jun. 15, 2020 Yazhen Xu, Amanda Liu/ Engineer

| **Datum** *Date* | **Name / Stellung** *Name / Position* | **Unterschrift** *Signature* |
|---|---|---|

**kontrolliert von** / *reviewed by*:

Angela Chen

Jun. 15, 2020 Angela Chen / Department Manager

| **Datum** *Date* | **Name / Stellung** *Name / Position* | **Unterschrift** *Signature* |
|---|---|---|

**Sonstiges** / *Other*:

- The test report consists of EN 14683 test report including this cover page (12 pages) and attachment: Photo documentation (3 pages).
- The Biocompatibility (clause 5.2.6) is not evaluated in this test report.

**Zustand des Prüfgegenstandes bei Anlieferung:** Prüfmuster vollständig und unbeschädigt
*Condition of the test item at delivery*: *Test item complete and undamaged*

| | | | | | |
|---|---|---|---|---|---|
| * Legende: | 1 = sehr gut | 2 = gut | 3 = befriedigend | 4 = ausreichend | 5 = mangelhaft |
| | P(ass) = entspricht o.g. Prüfgrundlage(n) | | F(ail) = entspricht nicht o.g. Prüfgrundlage(n) | N/A = nicht anwendbar | N/T = nicht getestet |
| *Legend:* | *1 = very good* | *2 = good* | *3 = satisfactory* | *4 = sufficient* | *5 = poor* |
| | *P(ass) = passed a.m. test specification(s)* | | *F(ail) = failed a.m. test specification(s)* | *N/A = not applicable* | *N/T = not tested* |

| EN 14683:2019+AC: 2019<br>Medical face masks —<br>Requirements and test methods | |
|---|---|
| **Report Reference No. ..... :** | **60382611 001** |
| **Date of issue ..... :** | **See cover page** |
| **Total number of pages ..... :** | **See cover page** |
| **Testing Laboratory ..... :** | **TÜV Rheinland (Shenzhen) Co., Ltd.** |
| **Address ..... :** | 1F East & 2-4F, Cybio Technology Building No.1, No.16 Kejibei 2nd Road, High-Tech Industrial Park North Nanshan District, 518057, Shenzhen, China |
| **Applicant's name ..... :** | **Guangzhou Dayun Medical Technology Co.,Ltd.** |
| **Address ..... :** | No.632, Xintang Avenue, Xintang Town, Zengcheng District Guangzhou, Guandong, China |
| **Test specification:** | |
| **Standard ..... :** | EN 14683:2019+AC:2019 |
| **Test procedure ..... :** | Type test |
| **Non-standard test method ..... :** | N/A |
| **Test Report Form No. ..... :** | EN 14683:2019+AC:2019_A |
| **Test Report Form Originator ..... :** | TÜV Rh (SZ) |
| **Master TRF ..... :** | 2020-03 |
| **Test item description ..... :** | Disposable medical mask (Non-sterile) |
| **Trade Mark ..... :** | KUNKKA |
| **Manufacturer ..... :** | Same as the applicant |
| **Model/Type reference ..... :** | DY-01 |
| **Classification ..... :** | Type IIR |

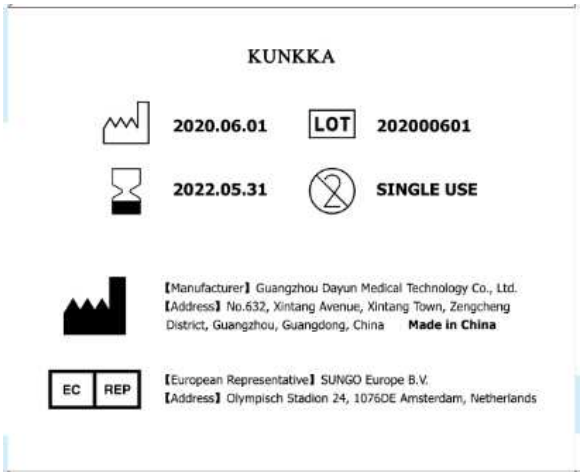
| **List of Attachments (including a total number of pages in each attachment):** | |
|---|---|
| **Attachment – Photo Documentation (3 pages)** | |
| **Summary of testing:** | |
| **Tests performed (name of test and test clause):**<br>Construction check according to:<br>Clause 5.1.1 Materials and construction<br>Clause 5.1.2 Design | **Testing location:**<br>**TÜV Rheinland (Shenzhen) Co., Ltd.**<br>1F East & 2-4F, Cybio Technology Building No.1, No.16 Kejibei 2nd Road, High-Tech Industrial Park North Nanshan District, 518057, Shenzhen, China |
| Clause 5.2.2 Bacterial filtration efficiency (BFE)<br>Clause 5.2.3 Breathability<br>Clause 5.2.4 Splash resistance<br>Clause 5.2.5 Microbial cleanliness (Bioburden) | **Pony Testing International Group**<br>2/3/4/6F., Building 35, No.680, Guiping Road, Xuhui District, Shanghai, 200233, China |

**Copy of marking plate**

**The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.**

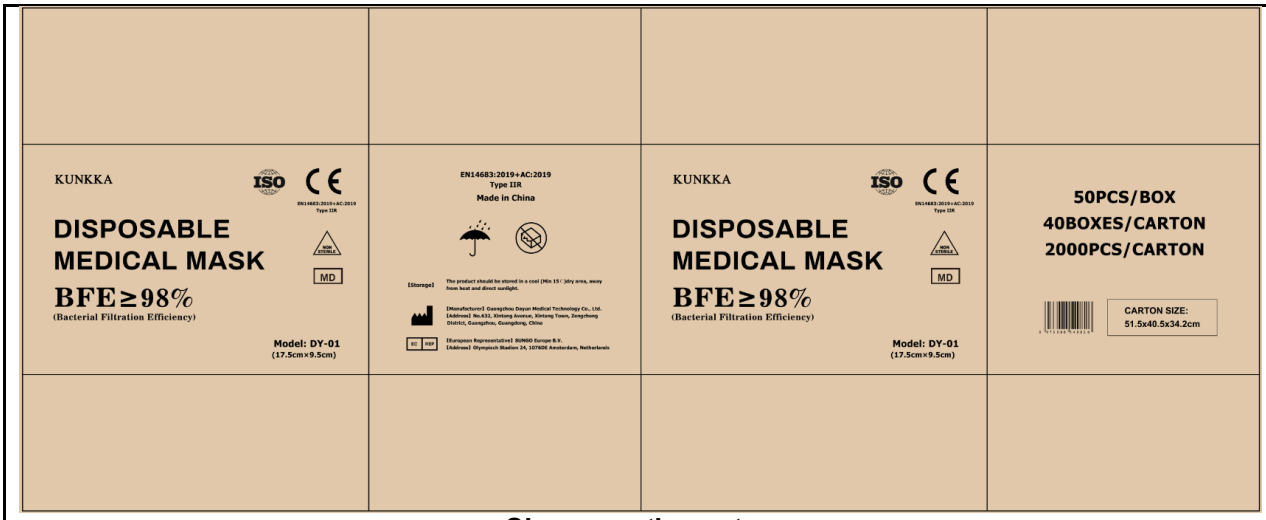

**Shown on the front package**


**Shown on the front package**





**Shown on the side package**




**Shown on the carton**

| 合格证 Q.C.PASSED | |
|---|---|
| 产品名称 Product | 一次性使用医用口罩（非灭菌） Disposable medical mask（Non-sterile） |
| 限值标准 Limit Standard | EN14683:2019+AC:2019 |
| 品　　牌 Brand | KUNKKA |
| 产品型号 Model | DY-01 |
| 产品规格 Spec. | 17.5*9.5cm |
| 包装规格 Packing Spec. | 50片/盒 50pcs/box |
| 主要成分 Material | 70% 无纺布 30% 熔喷布 70% PP non-woven, 30% melt-blown filter |
| 生产批号 Lot No. | 20200601 |
| 质 检 员 QC | QC01 |
| 检验日期 Inspection Date | 2020年06月01日 1st of June, 2020 |
| 生产日期 Production Date | 2020年06月01日 1st of June, 2020 |
| 有效期限 Expiry Date | 2022年05月31日 31th of May, 2022 |
| 生产单位 Manufacturer | 广州达运医疗科技有限公司 Guangzhou Dayun Medical Technology Co., Ltd. |
| 生产地址 Address | 广州市新塘镇新塘大道632号正华工业园 No.632, Xintang Avenue, Xintang Town, Zengcheng District, Guangzhou,Guangdong,China |

**Shown on the certificate**

**Testing**

**Date of receipt of test item(s).....:** See cover page

**Dates of tests performed.....:** See cover page

**Possible test case verdicts:**

- test case does not apply to the test object ..... : N/A
- test object does meet the requirement ..... : P (Pass)
- test object was not evaluated for the requirement ... : N/E (collateral standards only)
- test object does not meet the requirement ..... : F (Fail)

**General remarks:**

"(See Attachment #)" refers to additional information appended to the report.
"(See appended table)" refers to a table appended to the report.
The tests results presented in this report relate only to the object tested.
This report shall not be reproduced except in full without the written approval of the testing laboratory.
List of test equipment must be kept on file and available for review.
Additional test data and/or information provided in the attachments to this report.

**Throughout this report a ☐ comma / ☒ point is used as the decimal separator.**

**Name and address of factory (ies) .....:** Same as the applicant

**General product information:**

**1, The tested medical mask classified as type IIR.**
**2, The Biocompatibility (clause 5.2.6) is not evaluated in this test report.**
**3, The test results are for reference only. Relevant certification may be needed if the mask is intended to be sold in Europe.**

| EN 14683:2019+AC:2019 | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| **4** | **Classification** | | **P** |
| | Medical face masks specified in this European Standard are classified into two types (Type I and Type II) according to bacterial filtration efficiency whereby Type II is further divided according to whether or not the mask is splash resistant. The 'R' signifies splash resistance. | Type IIR | **P** |
| **5** | **Requirements** | | **P** |
| **5.1** | **General** | | **P** |
| **5.1.1** | **Materials and construction** | | **P** |
| | The medical face mask is a medical device, generally composed of a filter layer that is placed, bonded or moulded between layers of fabric. | 3 ply designed with two layers of polypropylene spunbond nonwoven and one layer of polypropylene melt-blown nonwoven. | **P** |
| | The medical face mask shall not disintegrate, split or tear during intended use. | | **P** |
| | In the selection of the filter and layer materials, attention shall be paid to cleanliness. | | **P** |
| **5.1.2** | **Design** | | **P** |
| | The medical face mask shall have a means by which it can be fitted closely over the nose, mouth and chin of the wearer and which ensures that the mask fits closely at the sides. | | **P** |
| | Medical face masks may have different shapes and constructions as well as additional features such as a face shield (to protect the wearer against splashes and droplets) with or without anti-fog function, or a nose bridge (to enhance fit by conforming to the nose contours). | With nose clip | **P** |
| **5.2** | **Performance requirements** | | **P** |
| **5.2.1** | **General** | | **P** |
| | All tests shall be carried out on finished products or samples cut from finished products. | | **P** |
| **5.2.2** | **Bacterial filtration efficiency (BFE)** | | **P** |
| | When tested in accordance with Annex B, the BFE of the medical face mask shall conform to the minimum value given for the relevant type in Table 1. | See appended table 5.2.2 | **P** |
| | For thick and rigid masks such as rigid duckbill or cup masks the test method may not be suitable as a proper seal cannot be maintained in the cascade impactor. In these cases, another valid equivalent method shall be used to determine the BFE. | Not such mask. | **N/A** |
| | When a mask consists of two or more areas with different characteristics or different layer-composition, each panel or area shall be tested individually. | Same characteristics and same layer-composition | **N/A** |
| | The lowest performing panel or area shall determine the BFE value of the complete mask | See above | **N/A** |

| EN 14683:2019+AC:2019 | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |
| **5.2.3** | **Breathability** | | **P** |
| | When tested in accordance with Annex C, the differential pressure of the medical face mask shall conform to the value given for the relevant type in Table 1. | See appended table 5.2.3 | **P** |
| | If the use of a respiratory protective device as face mask is required in an operating theatre and/or other medical settings, it might not fulfil the performance requirements with regard to differential pressure as defined in this European Standard. In such case, the device should fulfil the requirement as specified in the relevant Personal Protective Equipment (PPE) standard(s). | | **N/A** |
| **5.2.4** | **Splash resistance** | | **P** |
| | When tested in accordance with ISO 22609:2004 the resistance of the medical face mask to penetration of splashes of liquid shall conform to the minimum value given for Type IIR in Table 1. | See appended table 5.2.4 | **P** |
| **5.2.5** | **Microbial cleanliness (Bioburden)** | | **P** |
| | When tested according to EN ISO 11737-1:2018 the bioburden of the medical mask shall be ⩽ 30 CFU/g tested (see Table 1). | See appended table 5.2.5 | **P** |
| **5.2.6** | **Biocompatibility** | | **N/E** |
| | According to the definition and classification in EN ISO 10993-1:2009, a medical face mask is a surface device with limited contact. | The biocompatibility is not evaluated in this test report. | **N/E** |
| | The manufacturer shall complete the evaluation of the medical face mask according to EN ISO 10993-1:2009 and determine the applicable toxicology testing regime. | | **N/E** |
| | The results of testing should be documented according to the applicable parts of the EN ISO 10993 series. | | **N/E** |
| | The test results shall be available upon request. | | **N/E** |
| **6** | **Marking, labelling and packaging** | | **P** |
| | Annex I, §13, of the Medical Devices Directive (93/42/EEC) or Annex I, §23, of the Medical Device Regulation (EU) 2017/745 specifies the information that should be specified on the packaging in which the medical face mask is supplied. | See “Copy of marking plate”. | **P** |
| | The following information shall be supplied: | | **P** |
| | a) number of this European Standard; | | **P** |
| | b) type of mask (as indicated in Table 1). | | **P** |
| | EN ISO 15223-1:2016 and EN 1041:2008+A1:2013 should be considered. | | **P** |

| EN 14683:2019+AC:2019 | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |

| 5.2.2 | TABLE: Bacterial filtration efficiency (BFE) | | | | | | | P |
|---|---|---|---|---|---|---|---|---|
| **Batch/ lot no.:** | **Test Specimen no.:** | **Dimension of the test specimen L x W (mm x mm)** | **test area ($cm^2$)** | **Flow rate (l/min)** | **Mean of the total plate counts of the two positive controls** | **Mean plate count of the negative controls** | **BFE for each test specimen (%)** | **Remarks** |
| **20200413** | **1** | **175×140** | **95.0** | **28.3** | **1920** | **0** | **99.90** | **--** |
| | **2** | **175×140** | **95.0** | **28.3** | | | **99.90** | **--** |
| | **3** | **175×140** | **95.0** | **28.3** | | | **99.90** | **--** |
| | **4** | **175×140** | **95.0** | **28.3** | | | **99.90** | **--** |
| | **5** | **175×140** | **95.0** | **28.3** | | | **99.90** | **--** |

**Supplementary information:**
1, Each specimen was conditioned at 21.7 °C and 85.0 % relative humidity for 4 h to bring them into equilibrium with atmosphere prior to testing.
2, The side of the test specimen was facing towards the challenge aerosol: the inside of the test specimen.

| EN 14683:2019+AC:2019 | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |

| 5.2.3 | TABLE: Breathability (Differential pressure) | | | | P |
|---|---|---|---|---|---|
| **Batch/ lot no.:** | **Test Specimen number-Test area number** | **Differential pressure for each test area (Pa/cm²)** | **The averaged differential pressure for each test specimen (Pa/cm²)** | **Flow rate (l/min)** | **Remarks** |
| 20200413 | 1-1 | 29.9 | 29.1 | 8.0 | -- |
| | 1-2 | 27.9 | | 8.0 | -- |
| | 1-3 | 28.1 | | 8.0 | -- |
| | 1-4 | 29.4 | | 8.0 | -- |
| | 1-5 | 30.4 | | 8.0 | -- |
| | 2-1 | 28.7 | 29.0 | 8.0 | -- |
| | 2-2 | 28.2 | | 8.0 | -- |
| | 2-3 | 28.7 | | 8.0 | -- |
| | 2-4 | 30.2 | | 8.0 | -- |
| | 2-5 | 29.3 | | 8.0 | -- |
| | 3-1 | 29.1 | 29.2 | 8.0 | -- |
| | 3-2 | 27.7 | | 8.0 | -- |
| | 3-3 | 30.9 | | 8.0 | -- |
| | 3-4 | 27.5 | | 8.0 | -- |
| | 3-5 | 30.8 | | 8.0 | -- |
| | 4-1 | 25.6 | 25.3 | 8.0 | -- |
| | 4-2 | 26.1 | | 8.0 | -- |
| | 4-3 | 25.8 | | 8.0 | -- |
| | 4-4 | 25.2 | | 8.0 | -- |
| | 4-5 | 23.9 | | 8.0 | -- |
| | 5-1 | 30.2 | 30.3 | 8.0 | -- |
| | 5-2 | 29.5 | | 8.0 | -- |
| | 5-3 | 31.5 | | 8.0 | -- |
| | 5-4 | 30.8 | | 8.0 | -- |
| | 5-5 | 29.7 | | 8.0 | -- |

**Supplementary information:**
Each specimen was conditioned at 21.7 °C and 84.6 % relative humidity for 4 h to bring them into equilibrium with atmosphere prior to testing.

| 5.2.4 | TABLE: Splash resistance | P |
|---|---|---|

| EN 14683:2019+AC:2019 | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |

| Batch/ lot no.: | Test mask no.: | The material of tested mask | Test result (Pass/fail) | Remarks |
|---|---|---|---|---|
| **20200413** | **1** | **See clause 5.1.1** | **Pass** | -- |
| | **2** | | **Pass** | -- |
| | **3** | | **Pass** | -- |
| | **4** | | **Pass** | -- |
| | **5** | | **Pass** | -- |
| | **6** | | **Pass** | -- |
| | **7** | | **Pass** | -- |
| | **8** | | **Pass** | -- |
| | **9** | | **Pass** | -- |
| | **10** | | **Pass** | -- |
| | **11** | | **Pass** | -- |
| | **12** | | **Pass** | -- |
| | **13** | | **Pass** | -- |
| | **14** | | **Pass** | -- |
| | **15** | | **Pass** | -- |
| | **16** | | **Pass** | -- |
| | **17** | | **Pass** | -- |
| | **18** | | **Pass** | -- |
| | **19** | | **Pass** | -- |
| | **20** | | **Pass** | -- |
| | **21** | | **Pass** | -- |
| | **22** | | **Pass** | -- |
| | **23** | | **Pass** | -- |
| | **24** | | **Pass** | -- |
| | **25** | | **Pass** | -- |
| | **26** | | **Pass** | -- |
| | **27** | | **Pass** | -- |
| | **28** | | **Pass** | -- |
| | **29** | | **Pass** | -- |
| | **30** | | **Pass** | -- |
| | **31** | | **Pass** | -- |
| | **32** | | **Pass** | -- |

| EN 14683:2019+AC:2019 | | | |
|---|---|---|---|
| Clause | Requirement + Test | Result - Remark | Verdict |

**Supplementary information:**

1, Each specimen was conditioned at 21.7 °C and 84.6 % relative humidity for 4 h to bring them into equilibrium with atmosphere prior to testing.

2, The description of target area tested: the centre of the outside of specimen.

3, Any technique used to enhance visual detection of synthetic blood: cotton absorbent swab.

4, The temperature and relative humidity for testing: 21.7 °C and 84.6 %.

5, Description of any pre-treatment techniques used: N/A.

| 5.2.5 | TABLE: Microbial cleanliness (Bioburden) | | | | P |
|---|---|---|---|---|---|
| **Batch/ lot no.:** | **Mask(under test) no.:** | **Weight of each mask (g)** | **Total bioburden per individual mask (CFU/g)** | **Remarks** | |
| **20200413** | **1** | **3.37** | **15** | **--** | |
| | **2** | **3.38** | **13** | **--** | |
| | **3** | **3.38** | **6** | **--** | |
| | **4** | **3.36** | **4** | **--** | |
| | **5** | **3.39** | **12** | **--** | |
| **Supplementary information:** | | | | | |

**End of EN 14683 test report**

Product: Disposable medical mask (Non-sterile)

Type Designation: DY-01


**Figure 1 General view of package**
**(The information in this figure will be replaced by Copy of marking plate in final package)**


**Figure 2 General view of mask**
**(The information in this figure will be replaced by Copy of marking plate in final package)**

Product: Disposable medical mask (Non-sterile)

Type Designation: DY-01


**Figure 3 General view of mask**

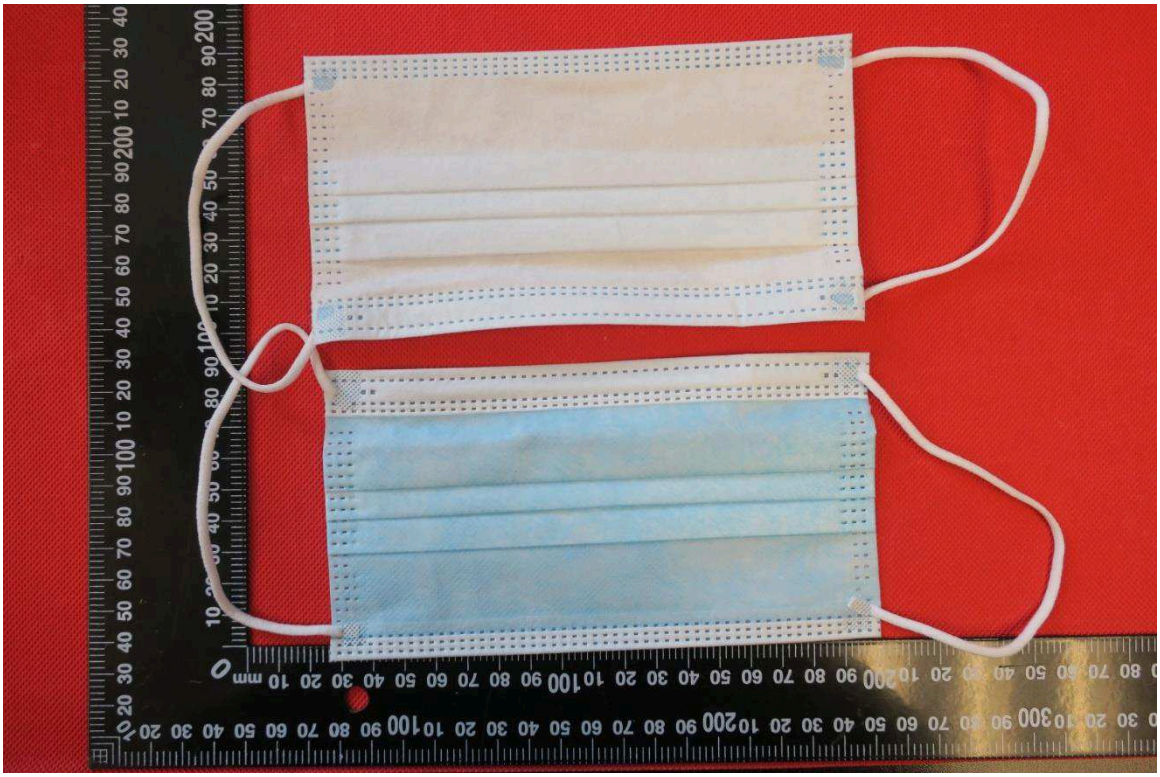


**Figure 4 General view of mask**

Product: Disposable medical mask (Non-sterile)

Type Designation: DY-01

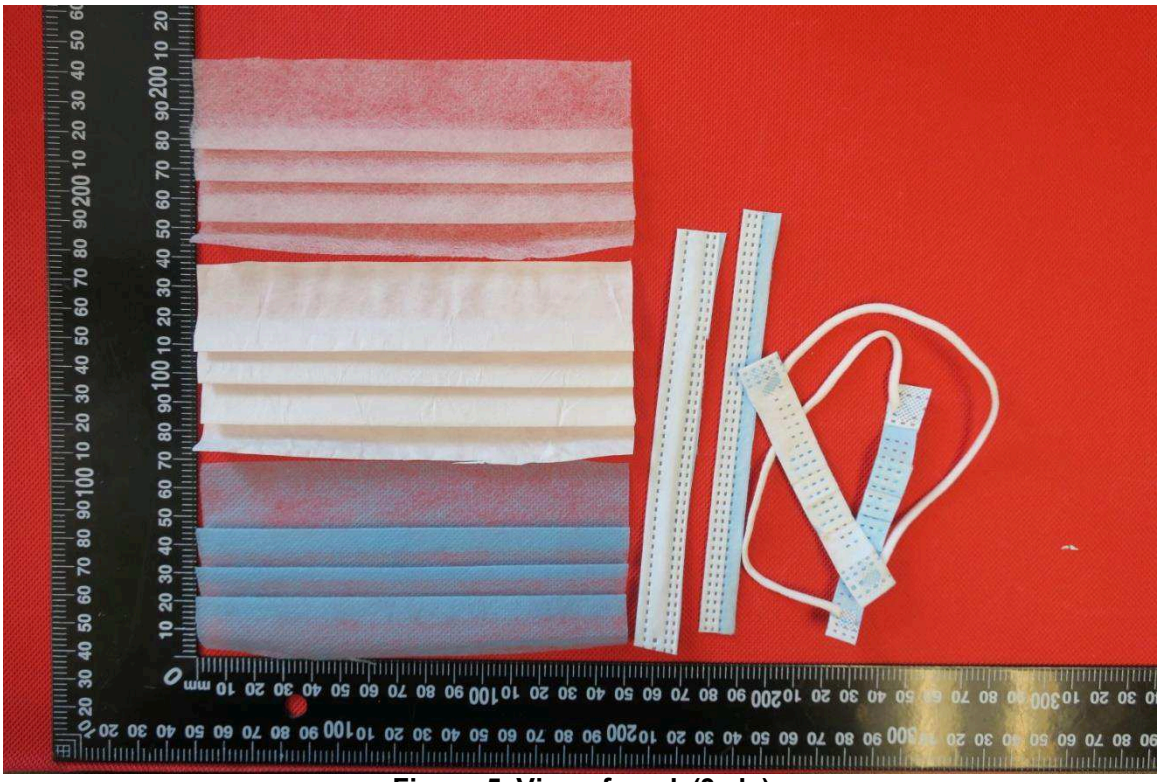


**Figure 5 View of mask (3 ply)**

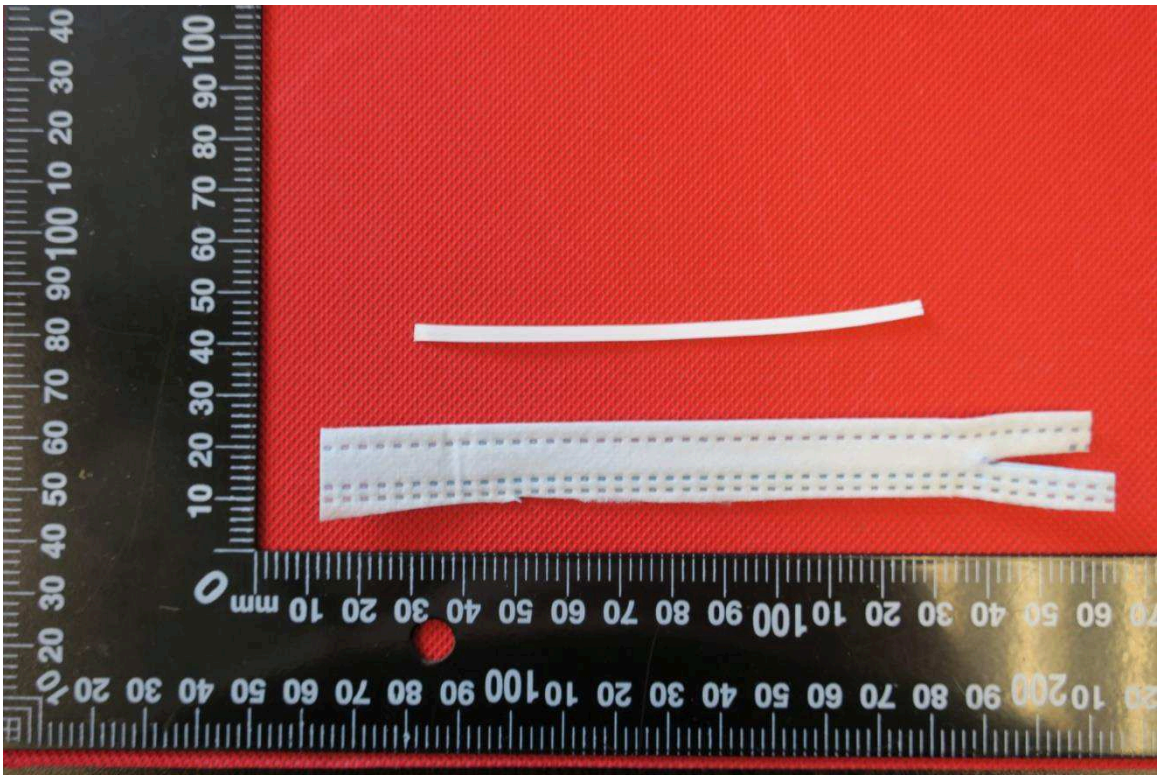


**Figure 6 View of nose clip**

**END OF THE PHOTO DOCUMENTATION**