

ATTESTATION OF CONFORMITY

Certificate Nr: MDD-284

In conformance to the European Economic Commission 93/42/EEC Medical Devices Directive on harmonisation of laws, regulations and administrative documentation of Member States on Medical Devices and European Commission directive 2007/47/EC amending Medical Devices Directive dated 05 September 2007,

the products manufactured by

D.H.H. SRL

at the following address

Via Campobello 30, 00071 Pomezia (RM), ITALY

EN 14683:2019+AC:2019 Medical Face Masks

Model : DHH20

Type IIR

are tested according to the following initial type tests by the manufacturer

Technical standard EN 14683:2019+AC:2019 Medical face masks - Requirements and test methods


For the assessment of conformity, the following documents were also applied to:

Results of laboratory tests Çevre Industrial Testing Laboratory Bacterial Filtration Efficiency, Microbial Cleanliness, Differential Pressure and Splash Resistance Pressure tests.

UNIVERSAL CERTIFICATION has evaluated production, design, intended use, risk evaluation according to safety purpose, product itself and add-on components (if exists) and product technical drawings of the medical face masks manufactured and designed for use during the medical operations or similar medical situations with same requirements which require restriction of infectious materials to be spread to patients. With this certificate, it is approved that the product fulfils all essential requirements and the related rules of 93/42/EEC Medical Devices Directive (MDD) Class I are applied. The information on the packaging for the above listed products covers the necessary information stated in Annex I, §13, of the Medical Devices Directive (93/42/EEC) or Annex I, §23, of the Medical Device Regulation (EU) 2017/745. This information includes; reference to EN 14683 standard, type of mask (as indicated in Table 1) and other relevant information given in EN ISO 15223-1:2016 and EN 1041:2008+A1:2013. It is considered to be suitable to attach a CE mark, as seen below, on your products in accordance with the information given in this certificate with publishing an EU Declaration of Conformity.

This certificate is issued on 19/10/2020 and valid until 18/10/2021 with the conditions that no change has been made with the product references and no change in the production process or not suspended or withdrawn for any reason.

ISTANBUL – 19/10/2020



Suat KACMAZ
UNIVERSAL CERTIFICATION
Director



Verify the validity with the QR Code

TECHNICAL EVALUATION REPORT

REPORT DATE / NO: 19.10.2020 / 10-2020-T0460

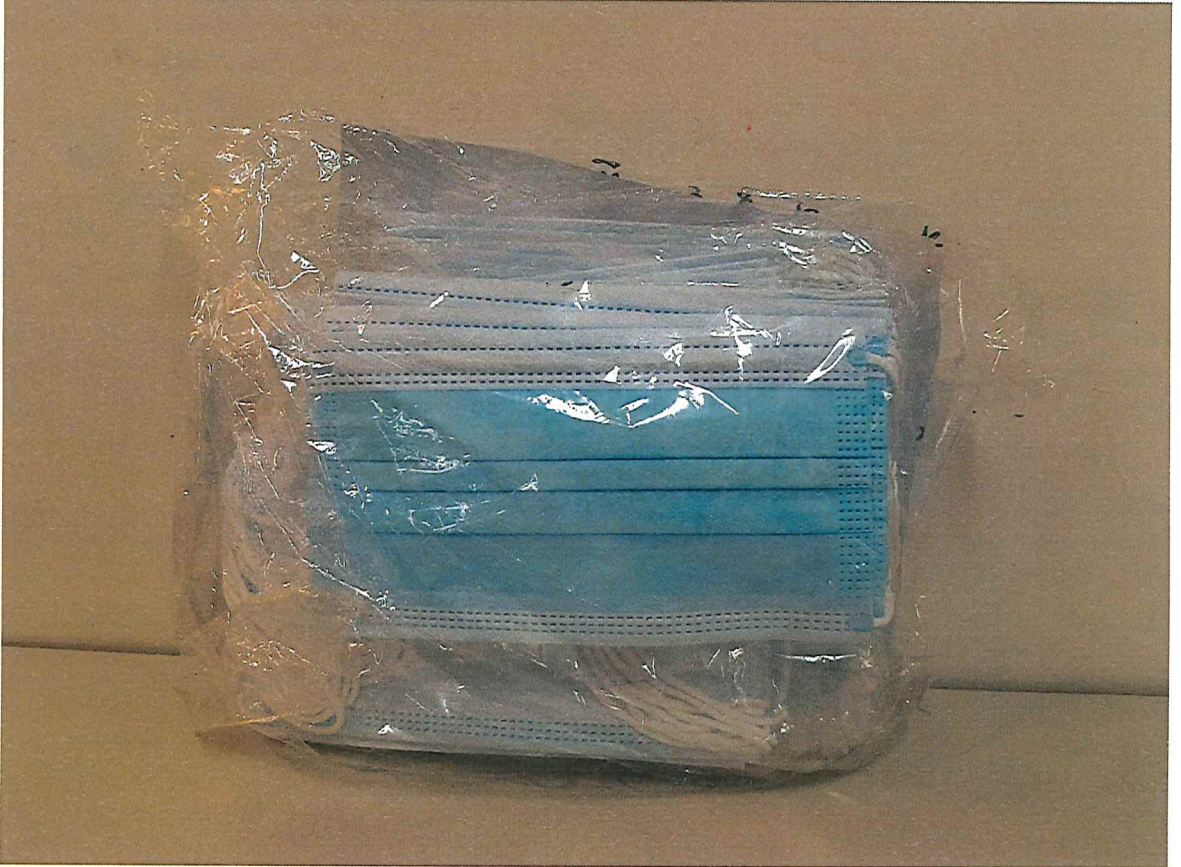
Manufacturer: D.H.H. SRL

Address: Via Campobello 30, 00071 Pomezia (RM), ITALY

The medical masks manufactured by the above manufacturer, are evaluated based on the Annex ZA of harmonised standard EN 14683/AC:2019 and the essential health and Safety requirements of 93/42/EEC, Medical Device Directive for Class I products on avoluntary base upon the manufacturer request.

Product Description: Medical Face Mask

Model: DHH20



As a third party evaluation, the technical file provided by the manufacturer is evaluated and the samples provided by the manufacturer are tested according to Annex ZA of the EN 14683/AC:2019 standard.

See Annex I: Test report provided by Çevre Endüstriyel Analiz Laboratuvarı 16.10.2020 2022987E-R1 date and with report number.

This report or the issued certificate, in case the report is positive, does not take over or change the sole responsibility of the manufacturer covered under 93/42/EEC Medical Device Directive. The manufacturer shall fulfil all responsibilities for Class I products under 93/42/EEC Medical Device Directive.

The results of the evaluation are as follows;

A- Review of the technical file

The manufacturer owns a technical file based on the requirements of 93/42/EEC Medical Device Directive in which the essential health and Safety requirements for Class I products are handled and have documented procedures to fulfil these requirements. The positive result of this report or the possible certificate to be issued based on positive result of this report shall not be used as the share of the responsibility of manufacturer on the fulfilment of any responsibility to be fulfilled before putting the product on the EU market.

B- Product Test Results

The tests referenced in Annex ZA are conducted on the samples provided by the manufacturer and the results are evaluated;

1. Biocompatibility

In the evaluation of the technical file, it was observed that the manufacturer has established a mechanism for the evaluation of raw materials or semi-finished goods on their biocompatibility. The manufacturer claims that the request and evaluation of proofs for biocompatibility of the goods is an essential part of the procurement policy and declares that the produced masks are complies with the biocompatibility requirements and have authorised responsible staff members for ensuring the success of this policy. It is considered that the manufacturer have an effective policy for the biocompatibility of the product.

2. Bacteria Filtration Efficiency

At least 5 samples are subjected to a bacteria aerosol with a flow rate of 28.3 L/min for 2 minutes with a test setup defined in the Annex B of EN 14683/AC:2019 standard. With the results of the incubation of samples taken in different particule sizes are shown in the annexed test report.

The minimum bacteria filtration efficiency performance required by each performance classes are shown below;

Test	Type I*	Type II	Type IIR
Bacterial Filtration Efficiency (BFE), (%)	≥ 95	≥ 98	≥ 98

* Type I medical face masks should only be used for patients and other persons to reduce the risk of spread of infections particularly in epidemic or pandemic situations. Type I masks are not intended for use by healthcare professionals in an operating room or in other medical settings with similar requirements.

According to the evaluation of the results of 5 samples tested, the minimum bacteria filtration efficiency is given as **99,6%**. According to this result, the bacteria filtration efficiency performance of the masks is classified as **Type IIR**.

It was observed that the avarage positive control values and negative control value is also reported as a confidence parameter of the test result are meaningful.

3. Microbial Cleanliness (Bioburden)

It is expected to have the number of colony forming units per gram to be lower than 30 for all performance class of masks according to the test result based on ISO 11737-1 standard.

In the evaluation of the test result, the maximum count of the colony forming unit is reported as **3** For this test result the samples complies the requirement for all performance classes (Type I, Type II and Type IIR).

4. Differential Pressure

The test is conducted to measure the breathing resistance as the differential pressure and the expected result for Type I and Type II classes is not to be higher than 40 Pa/cm² and for Type IIR class not to be higher than 60 Pa/cm².

According to the test results, the highest differential pressure measured is 34,6 Pa/cm² and the samples complies the requirement for all performance classes (Type I, Type II and Type IIR).

5. Splash Resistance Pressure

In the test, done according to ISO 22609:2004 the product's splash resistance is expected to be equal or higher than 16kpa for the Type 2R class.

All 15 samples tested were able to provide Type IIR performances as 16kPa resistance.

C- Summary and Conclusion

Evaluation	Requirement	Result	Classification
Bacterial Filtration Efficiency (BFE), (%)	≥ 95 % – Type I ≥ 98 % – Type II ≥ 98 % – Type IIR	99,6 %	Type I Type II Type IIR
Differential pressure (Pa/cm ²)	< 40 – Type I < 40 – Type II < 60 – Type IIR	34,6	Type I Type II Type IIR
Splash resistance pressure (kPa)	Not Required – Type I Not Required – Type II ≥ 16 – Type IIR	> 16	Type IIR
Microbial cleanliness (cfu/g)	≤ 30 – Type I ≤ 30 – Type II ≤ 30 – Type IIR	3	Type I Type II Type IIR
Overall Performance Classification			Type IIR

– End of Report –