

LA MASCHERINA

EN 14683 Tipo I

Transparent – Recyclable - Reusable

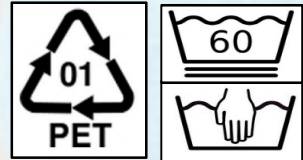
Anti-fogging for the glasses - Washable



INTRODUCTION

The traditional function of a mask is to give protection to the wearer. La Mascherina" creates a physical barrier in front of the nose and mouth, moving the point of withdrawal of the air breathed from the environment to the rear. Despite being not a medical device, it has been subjected with a favorable outcome to the biocompatibility tests required for this type of products by the harmonized standards EN ISO 10993-10 and EN ISO 10993-5, aimed in particular at verifying the potential to induce irritation and sensitization to ensure that they do not harm the wearer. Further characteristics of the "Mask" are:

1. It is made of ecological and recyclable PET material recognized as safe, non-toxic, resistant, flexible and 100% recyclable material.
2. Its surface is transparent, useful for the facial identification of the wearer without the need to remove it, which is an important element during security checks (airports, checkpoints, etc.)
3. Its transparency is an important factor for deaf people who can effortlessly read the lips during the conversation.
4. Another positive aspect of its transparency is that it helps to identify a person with a cold or other ailments that involve a significant emission of personal fluids. The individual with a heavily stained mask inside highlights a high risk of contagion.



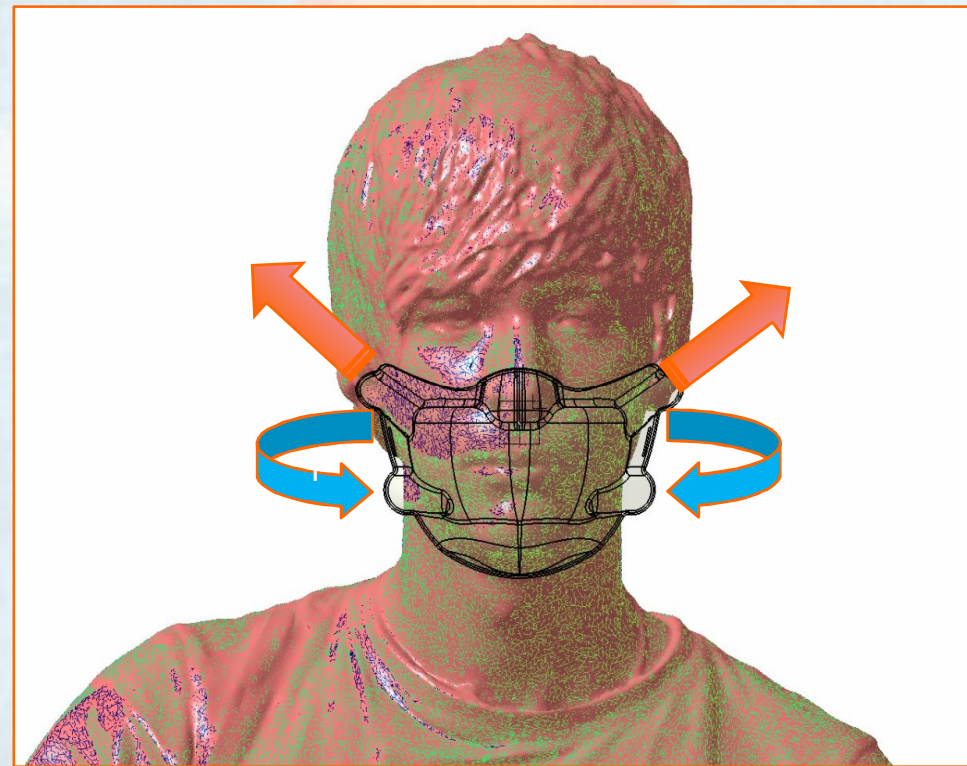
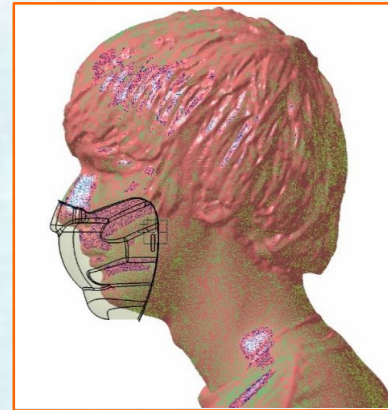
5. This product and the material from which it is made, in this case PET material, is not conducive for possible intolerances with the skin. Therefore the mask has successfully passed the biocompatibility test foreseen for this type of products by the harmonized standards EN ISO 10993-10 and EN ISO 10993-5, aimed in particular at checking the possibility of causing irritation and allergies to ensure that it does not cause any damages to the wearer. The following tests were undertaken:


- ISO 10993-5:2009 "Tests for in vitro cytotoxicity" Test no. 4779-20en
- ISO 10993-12: 2012 "Sample preparation and reference materials" Test no. 4779-20en
- UNI EN ISO 10993 10:2013 "Test irritation and skin sensitization" Test no. 20/3988

However, people suffering from **any dermatological problems, skin irritation or other skin allergies** it is recommended to consult a specialist to establish any incompatibilities.

6. Its conformation favors the non-poliferation of fluids either from the front and from the sides as they are partly closed. The emitter of the circulated but not filtered air, located at the bottom rear of the mask, significantly reduces the possibility of the direct ingress of body fluids from the front. Fresh air is inhaled through two lower rear canals and the warm exhaled air move towards the top of the mask and flows out through the upper rear canal, which due to the forced outflow of carbon dioxide (CO₂) enable an easier an smoother breathing.

7. Cleaning is possible with simple hot water max. 60 degrees or with the addition of detergents suitable for the skin. However, choose products that do not scratch the mask.

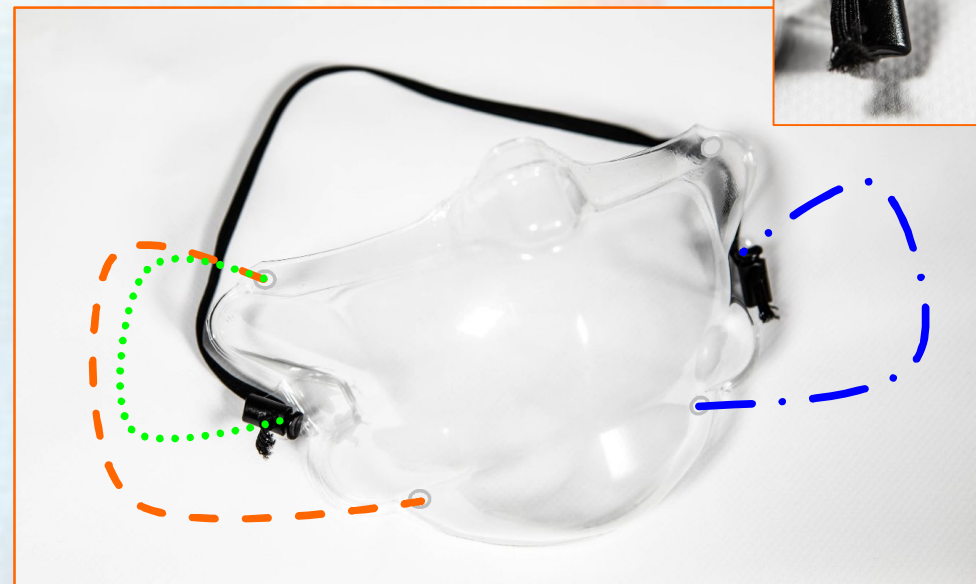
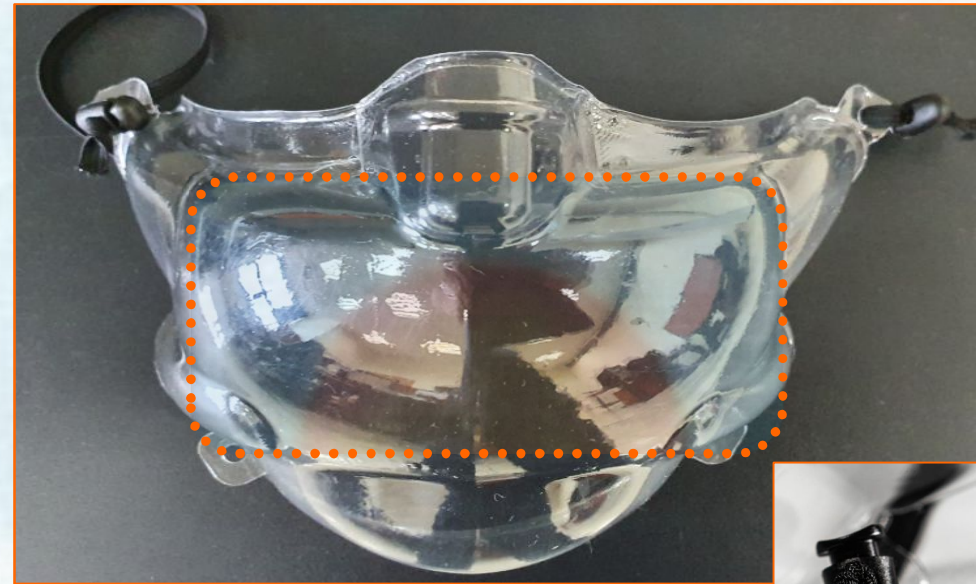


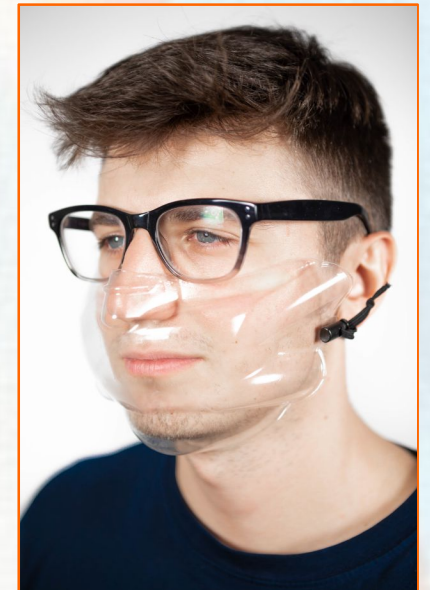
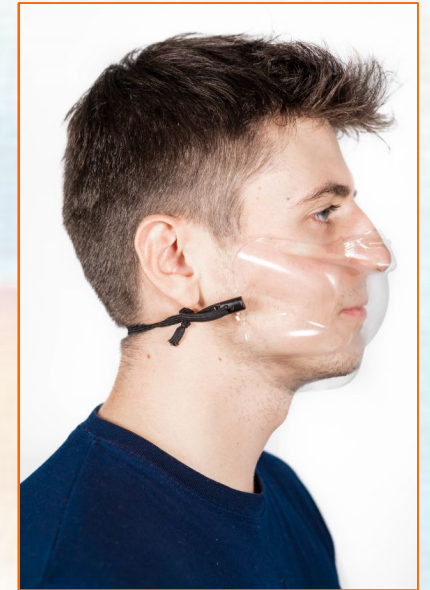
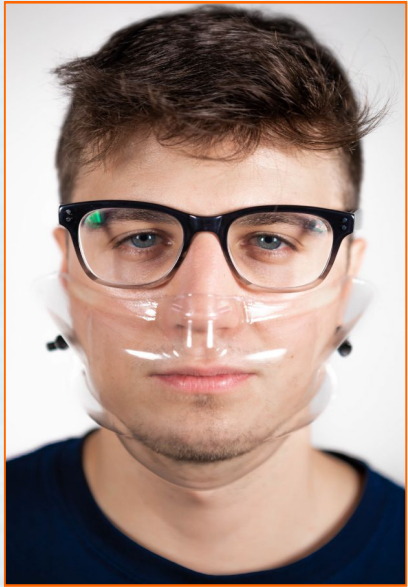
8. Due to the front tank not being pressed on the face, in comparison to ordinary textile masks, it favors gas exchange between fresh air coming from below and exhaled air flowing out from the upper canals. That tank  compared to traditional masks gives a feeling of greater accessibility of fresh air.

9. Due to the decompression process described in the previous section, the air with the carbon dioxide pushed downwards from the fresh air tank is directed to the upper side canals almost entirely eliminating the escape of the steam through the upper part that nearly completely reduces the fogging of glasses even after making deeper exhalation.

10. Its realization with PET material, which is essentially the same material used to produce the most commonly used plastic bottles for beverages and food containers, makes it deformable, so the mask can be deformed within certain limits without being irreversibly damaged. It can be folded along the axis of the nose and then put it in a bag or a pocket.

11. It can be worn in a few different ways. Depending on your needs and comfort, it can be used with a single elastic band from both sides which then goes all around the back of the head. Another way of wearing it is by passing two elastic bands, one for each side, that pass behind the ears, very useful to not mess up the hairstyle. For both ways of wearing it is still possible to choose in which eyes (gaps) to put the bands on. The tension of the mask can be regulated by the two regulating blocks.








CERTIFICATI E TEST

ISO 10993-5:2009
 ISO 10993-12: 2012
 UNI EN ISO 10993 10:2013

“ Tests for in vitro cytotoxicity” nr. 4779-20en
 “ Sample preparation and reference materials” nr. 4779-20en
 “ Test irritation and skin sensitization” nr. 20/3988

LAB N° 1337 L

IN VITRO CYTOTOXICITY TEST

TEST ITEM NAME
 Mascherina Salva Collega

TEST REPORT N° 4779-20 en

SPONSOR/CUSTOMER

Microna S.r.l.
 V.le Enrico Thovez, 26
 10131 Torino
 Italy

On behalf of




Cm3 S.r.l.
 Zona Industriale, 11
 10090 Trana (TO)
 Italy

Test carried out by

Lab4LIFE S.R.L.
 Via dei Fornaciali, 21 g/h
 40129 Bologna
 (Italy)

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Lab4LIFE S.R.L. P.IVA e C.F.: 03096401207 Capitale Sociale € 45.000 i.v. N. REA: BO – 491522 - Sede legale Via dei Fornaciali 21 g/h 40129 Bologna Tel. 051323039 FAX. 0514170410

LAB N° 1337 L

Test item description¹
 Test item Name: Mascherina Salva Collega
 Code: n/a
 Lot: n/a
 Weight of the sample: 15,79 g
 Appearance of the sample: Transparent mask
 Category of the body contact: Intact skin
 Duration of the body contact: ≤ 24h
 Sterilization: No
 Manufacturing date: n/a
 Expiration date: n/a
 Manufactured by: Cm3 S.r.l., Zona Industriale 11 – 10090 – Trana (TO)
 Sampling carried out by: Sponsor
 Notes: //

Timing and analysis details
 Number of tested samples: 1
 Receipt Number: 200720-58
 Receipt date: 20/07/2020
 Test started on: 21/07/2020
 Test completed on: 24/07/2020
 Test carried out by: Elisabetta Longo
 Notes: //

Test Method and Normative References

- ISO 10993-5:2009 “Tests for in vitro cytotoxicity”
- ISO 10993-12: 2012 “Sample preparation and reference materials”




Summary of practice
 Cell cultures are grown to a near-confluent monolayer in cultures dishes. Three dishes for each sample are prepared. Moreover, three dishes are prepared for the Negative control, for the Positive control and for the Extraction solvent control. In the dishes to be treated with the sample, the medium is aspirated and replaced with test extract. Cell cultures are examined microscopically after 24 and 48h-contact to assess the presence or absence of cytotoxic effects due to the test extract.

Target cells: BSCL 56/L929 (mice connective tissue)

Extraction conditions: a representative part of the sample having a total external surface of 48 cm² was extracted with 16 ml of Cell Culture Medium MEM at 37°C for 24 hours under agitation at 150 RPM. Extraction ratio 3 cm²/ml as per ISO 10993-12. The extract was used immediately after preparation.

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Reagents: MEM with Earle's salts added with foetal bovine serum, L-glutamine and some antibiotics.
Positive control: Latex gloves Pic Indolor, lot 1007097322 (internal code K* cito 0212) treated as the sample
Negative control: Riblene MR10 (internal code: K cito 0712) treated as the sample

Incubation: The dishes treated with the Test extract, with the Positive and Negative controls and with the Extraction solvent control are incubated for 48 h at (37±1)°C in a 5% CO₂ atmosphere.

Apparatus

- Incubator, which maintains the cultures at 37°C, 5% CO₂;
- Microscope, with inverted phase contrast optics;
- Water Bath;
- Laminar Flow Cabinet;
- Sterile Disposable;
- Tissue Culture Dishes;
- Stirrer.

Interpretation of Results: The determination of the cytotoxicity is performed after a 24 and 48 h incubation period examining the cells under the microscope to assess general morphology, vacuolation, detachment, cell lysis, membrane integrity. The change from normal morphology of the Negative control is rated on a reactivity grade from 0 to 4 (see Grading system). Moreover, for the dishes treated with the Test extract the confluence of the monolayer is evaluated and the colour of test medium is compared to the negative control

Grading system

Grade	Reactivity	Reactivity description
0	None	Discrete intracytoplasmic granules; no cell lysis.
1	Slight	Not more than 20% of the cells are round, loosely attached and without intracytoplasmic granules; occasional lysed cells are present
2	Mild	Not more than 50% of the cells are round and devoid of intracytoplasmic granules; no extensive cell lysis and empty areas between cells
3	Moderate	Not more than 70% of the cell layers contain rounded cells or are lysed
4	Severe	Nearly complete destruction of the cell layers

The achievement of a numerical grade greater than 2, based on the reactivity table, is considered a cytotoxic effect

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LAB N° 1337 L

CONCLUSIONS

The cells treated with the Test extract after 24 hours and 48 hours of incubation do not show any changes from normal morphology of the Negative control. The Test extract does not show any reactivity.

The sample can be considered not cytotoxic

Notes:

Information provided by the Customer. The Laboratory declines all responsibility for the data provided by the Customer which may influence the validity of the results.

This Test Report refers exclusively to the sample examined as received.

This Test Report cannot be partially reproduced, unless approved by Lab4LIFE S.r.l.

Issued: Bologna, 24/07/2020

Issue authorized by:
Head of the Laboratory
(Lorenzo Autore, Dr.)

Elisabetta Longo, Dr.
National Order of Biologists n° AA_077435

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Certificate of Analysis



Product: EpiDerm™ Reconstructed Human Epidermis

Lot Number: **30882**

Part#: EPI-200, EPI-212, EPI-218

Description: Reconstructed human epidermis tissue containing normal human keratinocytes. This product is for research use only. Not for use in animals, humans or diagnostic purposes.

I. Cell source

All cells used to produce EpiDerm™ are purchased or derived from tissue obtained by MatTek Corporation from accredited institutions. In all cases, consent was obtained by these institutions from the donor or the donor's legal next of kin, for use of the tissues or derivatives of the tissue for research purposes.

Keratinocyte Strain: **00267**

II. Analysis for potential biological contaminants

The cells used to produce EpiDerm™ tissue are screened for potential biological contaminants. Tests for each potential biological contaminant listed below were performed according to the test method given. Results of "Not detected" indicate that testing for the potential biological contaminant was not observed as determined by the stated test method.

HIV-1 virus - Oligonucleotide-directed amplification	Not detected
Hepatitis B virus - Oligonucleotide- directed amplification	Not detected
Hepatitis C virus - Oligonucleotide- directed amplification	Not detected
Bacteria, yeast, and other fungi - long term antibiotic, antimycotic free culture	Not detected

III. Analysis for tissue functionality and quality

Test	Specification	Acceptance criteria	Result and QA Statement	
Tissue viability	MTT QC assay, 4 hours, n=3	OD (540-570 nm) [1.0-3.0]	1.838 ± 0.14	Pass
Barrier function	ET-50 assay, 100 µL 1% Triton X-100, 4 time-points, n=3, MTT assay	ET-50 [4.77-8.72 hrs]	5.13 hrs	Pass
Sterility	Long term antibiotic and antimycotic free culture	No contamination	Sterile	Pass

Tissue viability and the barrier function test are within the acceptable ranges and indicate appropriate formation of the epidermal barrier, the presence of a functional stratum corneum, a viable basal cell layer, and intermediate spinous and granular layers. Results obtained with this lot conform to the requirements of the OECD TG 431 and 439.

Initials: **SL**
Date: **29.07.2020**

Nelson Rivas
Quality Assurance Associate

July 29, 2020
Date

CAUTION: Whereas all information herein is believed to be correct, no absolute guarantee that human derived material is non-infectious can be made or is implied by this certificate of analysis. All tissues should be treated as potential pathogens. The use of protective clothing and eyewear and appropriate disposal procedures are strongly recommended.

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QC-10-012-0075 Rev. C

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MatTek Corporation

EpiDerm QC (EPI-200)

LOT: 30882 TESTING DATE: 29-Jul-2020
TESTED: Post Refrigerated Storage
COMMENTS: NO

Dosed with: 1.0% Triton X-100 (100µL)

Exposure Time (hr)	Well	OD	MTT (OD)	Std Dev (OD)	Viability %	Std Dev (%)
4	1	1.0423	1.113	0.112	60.5	6.1
	2	1.2410				
6	1	1.0526	0.796	0.044	43.3	2.4
	2	0.8301				
8	1	0.7468	0.067	0.025	3.7	1.4
	2	0.8106				
10	1	0.0889	0.034	0.004	1.8	0.2
	2	0.0729				
H20 (4 hr)	1	0.0401	1.838	0.140	100.0	7.6
	2	0.0292				
	1	0.0399				
	2	1.6884				
	1	1.966				
	2	1.5584				

Avg cv (%) [14.4] Exp. CV (%) [11.4]
ET-50 (hrs): 5.13

EPI-200 Acceptance Criteria
1996 EpiDerm Database (n=184)

	T01 (hrs)	SDS (hr)	H2O (OD)	H2O CV	Exp. CV
avg	6.74	0.92	1.47	4.6	9.6
s.d.	0.99	0.23	0.13		
c.v.	14.60	24.60	8.90		
avg +2*sd	8.72	1.38	1.73		
avg -2*sd	4.77	0.47	1.21		

QC Evaluation: **PASS**
Initials: **MS**
Date: **7/29/2020**



LA MASCHERINA

DEPENDING ON THE CHOSEN PACKAGE (OPTION 1 – 2 OR 3 MASKS) CONSIST OF:

- PCS. 1 SEALED BAG
- PCS. 1 – 2 - 3 MASK/S
- PSC. 1 – 2 – 3 ELASTIC BAND/S THAT CAN BE PASSED AROUND THE HEAD (LGHT=60CM)
 OR CUT IT INTO TWO HALVES TO PUT THEM AROUND THE EARS
- PSC. 2 – 4 – 6 STRING STOPPERSFOR ADJUSTING THE TIGHTNESS OF THE STRING/S
- PCS. 1 MANUALS AND CERTIFICATES