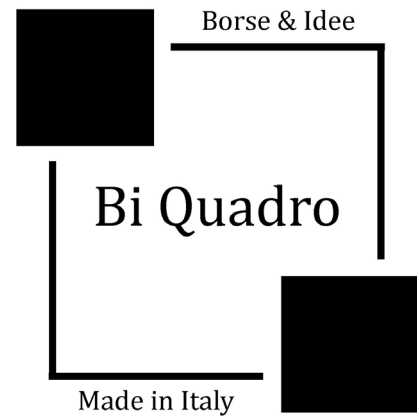


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**Title:**

BQ FACE MASKS  
AIR PERMEABILITY TEST  
AND COMPARISON

**Certified Machinery:**

AIR TRONIC  
AIR PERMEABILITY TESTER  
MESDAN-LAB

**Product Name:**

BQ Face Mask  
code MFMW010

**Issue n.**

1002

**Date:**

30 March 2020



## 1. INTRODUCTION

This test report present the level of air permeability, meant as speed of the air flow vertically passing through the sample under present and known testing conditions, of the non-woven fabric [TNT].

## 2. DETAILS OF CLASSIFIED PRODUCT

### 2.1 GENERAL

The product, Nontex non-woven fabric, is defined as being suitable for face masks applications.

### 2.2 MATERIAL DESCRIPTION

The non-woven fabric [TNT], is fully described below.

#### *Tensile strength*

method.....	EDANA 20.2 - 89
unit.....	gr/m2 – N/5cm
direction.....	MD - CD
typical value.....	55,00 – 41,00

#### *Elongation at break*

method.....	EDANA 20.2 - 89
unit.....	gr/m2 – %
direction.....	MD - CD
typical value.....	60,00 – 63,00

#### *Tear strength*

method.....	EDANA 20.2 - 89
unit.....	gr/m2 – N - N
direction.....	MD - CD
typical value.....	23,00 – 29,00

The TNT material releases 1,5 mg/dmq. This value is considerably less than that required by the UE No 10/2011, article 12, which prescribes a maximum value of 10 mg/dmq.

The TNT material does not contain any substance present in the candidate list of substances of Very High Concern above 0.1% , as stated in the regulation 1907/2006/CE (REACH) – update of the 16 January 2020.

The TNT material is hydrophilic and breathable, (value of permeability NWSP 070.1)

The TNT material is fully tested according to code 01A (ISO 10993.5 - Bio lab Report M3O8201 80471-01) showing that the fabric is NON Cytotoxic.

The TNT material origin is preferentially from C.E.E.

### 2.3 PRODUCT DESCRIPTION

BQ Face Mask code MFMW010

Professional white disposable comfort loop face mask

Ergonomic design keeps mask away from the mouth, reducing liquid contamination from saliva and aiding com-

fort

Elastic earloops provide a secure fit.

Each mask is fitted with a foldable noseband and chinband to optimise the fit for facial protection and comfort.



Test has been performed with an AIR TRONIC calibrated electronic instrument conceived to determine the air permeability of non-woven materials.

Reference standards:

- UNI EN ISO 9237 - UNI EN ISO 9073-15 - UNI EN ISO 7231 -
- ASTM D737 - ASTM D3574 - JIS L 1096 meth A
- NWSP 070.1.50 (15)

The air permeability value is expressed in mm/sec.

Test instrument calibrated to standard air flow parameter 125 S.P and 162 [Pa]



#### 4. PERMEABILITY TEST

The air permeability value is expressed in mm/sec.

Test instrument calibrated to standard air flow parameter 125 S.P and 162 [Pa]

Test result: **17.1** mm/sec



#### 5. FIELD OF APPLICATION

The classification is valid for the following applications:

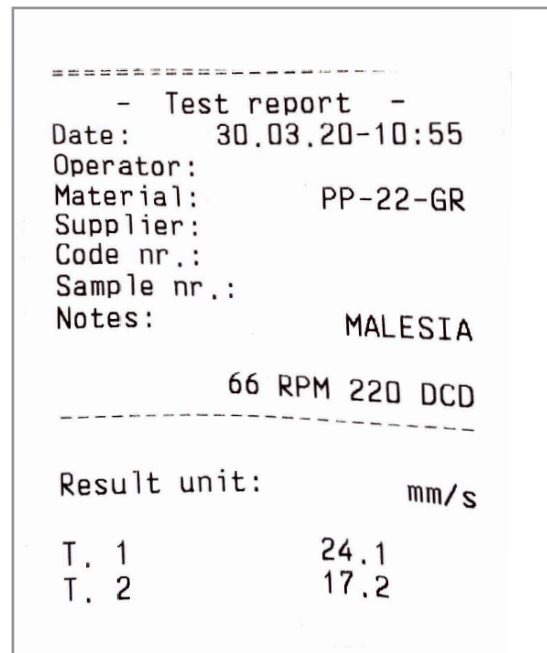
- Protection from firm and fluid deleterious kinds of dust, smoke, and aerosols.
- Particles which may be fibrogenic – which means they irritate the respiratory system in the short term and can result in reduction of elasticity of pulmonary tissue in the long run.

These respiratory masks are made for working environments in which deleterious and mutagenic particles can be found in the breathing air.

Respirator masks of this class contain at least 94 % of the particles measuring up to 0.6  $\mu\text{m}$  and may be used in environments transgressing the OEL up to a maximum of the tenfold concentration.

#### 7. LIMITATION

This document doesn't represent type approval or certification of the product.



## 6. COMPARISON TESTS

The product BQ Face Mask code MFMW010, has been tested against certified medical masks and FFP2 certified face masks.

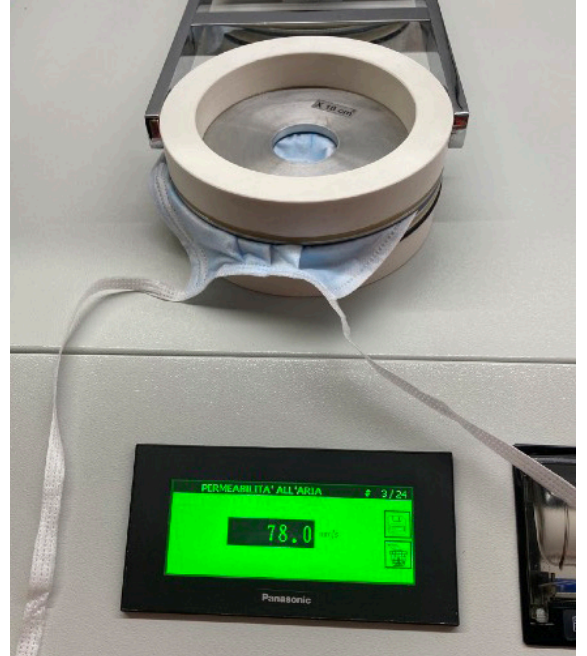
The results are that the BQ Face Mask has a level of protection higher than certified FFP2 PPEs.



Test result: **78.0** mm/sec



Test result: **24.1** mm/sec



```
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- Test report -  
Date: 30.03.20-11:00  
Operator:  
Material: PP-22-GR  
Supplier:  
Code nr.:  
Sample nr.:  
Notes: MALESIA  
  
66 RPM 220 DCD  
-----  
Result unit: mm/s  
T. 1 24.1  
T. 2 17.2  
T. 3 78.1
```

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