

CE Certificated, FFP2 Grade AirQUEEN Breeze Mask

Powerful filtering, excellent permeability
Introducing easy-to-breathe mask with exceptional filter!





MADE IN
K  **OREA**

Made with our own proud
technology-AirQUEEN Breeze Mask

- Nanofiber Filter Manufactured by: LEMON Co., Ltd.
- Mask Manufacture & Distribution: TOPTEC Co., Ltd.

Breathing New Technology, Nanofiber

Nanofiber Filter

Nano fibers are only 1 nanometer, 1 billionth of a meter, in thickness. Nanofiber is a new material made by building these fibers sterically for a fishnet structure that has better permeability, blockability, and durability than any fiber ever invented.



Permeability



Blockability



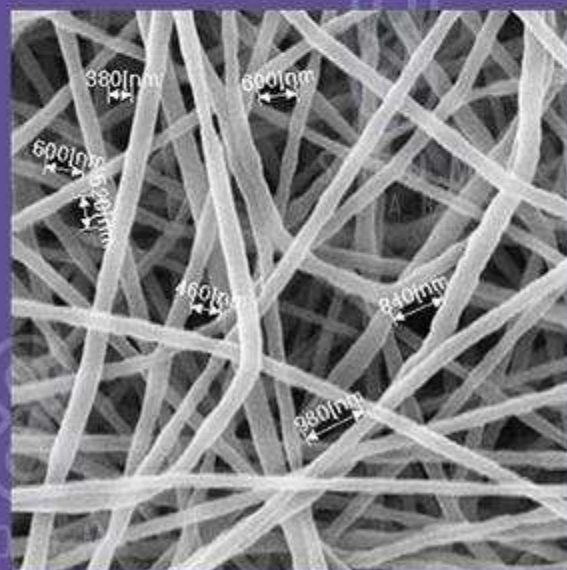
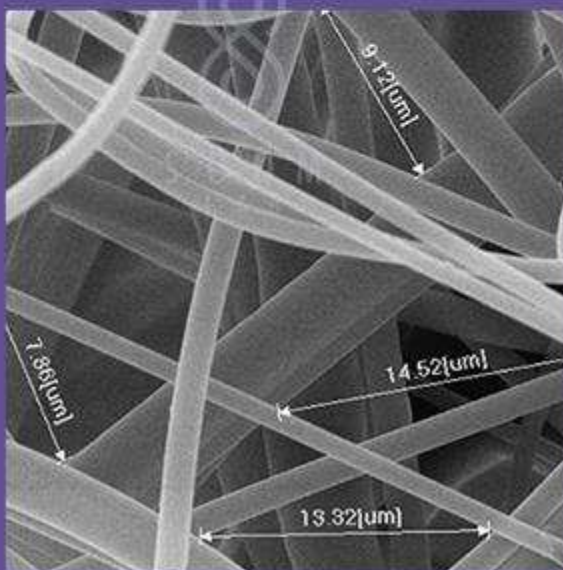
Durability



Nanofiber Filter has a different
fiber thickness / space between fibers / filtering method
from the existing electrostatic filter

Melt-Blown Filter
5,000 times
enlarged

The fiber is thick
Average space between the
fibers is over $10\mu\text{m}$



Nanofiber Filter
15,000 times
enlarged

Very thin, nano thickness
Average space between the fibers
is $1.0\mu\text{m}$, with self-filtering

We asked professor Kim Iksu, the most renowned professor in the fiber research area.

What kind of material is **Nanofiber**?

The thickness of a nano fiber is only a thousandth of a strand of hair.
Nanofiber is a material made by building these fibers sterically for a fishnet structure,
and nanofiber of 85% processing rate has both permeability and blockability.

The Nanofibers of LEMON have consistent thickness and pore size.
This means the ratio of the pores in the general area becomes very high,
which is relevant to permeability.

Because it touches the **nose** and the **mouth**,
this fiber is **very appropriate for masks**
where permeability is important



Long-lasting freshness from morning to evening!

The effectiveness of electrostatic masks decreases with each breath due to the moisture
Nanofiber Filter has great permeability, so you can feel fresh even after a long term use



Excellent filtering and permeability of Nanofiber

Nanofiber smart filter
blocks pollutants and enables easier breathing

Wearing mask all day causes skin trouble (C Newspaper)

Must wear permeable masks (M Newspaper)

Pimple breaks out due to wearing masks
(National Health Insurance Service blog)

**If you care about the skin,
permeability is even more
important**

**There is moisture in our respiratory system
If a mask has bad permeability, the moisture from within
cannot escape, which causes eczema**

If you wear a mask for a long time, you really need a permeable mask

Because we need to wear it all day,
we made it lighter. <http://airqueenmask.com>

AirQUEEN Breeze mask 4.38g

Lighter than a sheet of paper, so you won't even realize wearing it!



※ a sheet of A4 paper = 4.72g

3D ergonomic design to fit perfectly on all face types.

Nose bridge prevents sliding or fogging up.

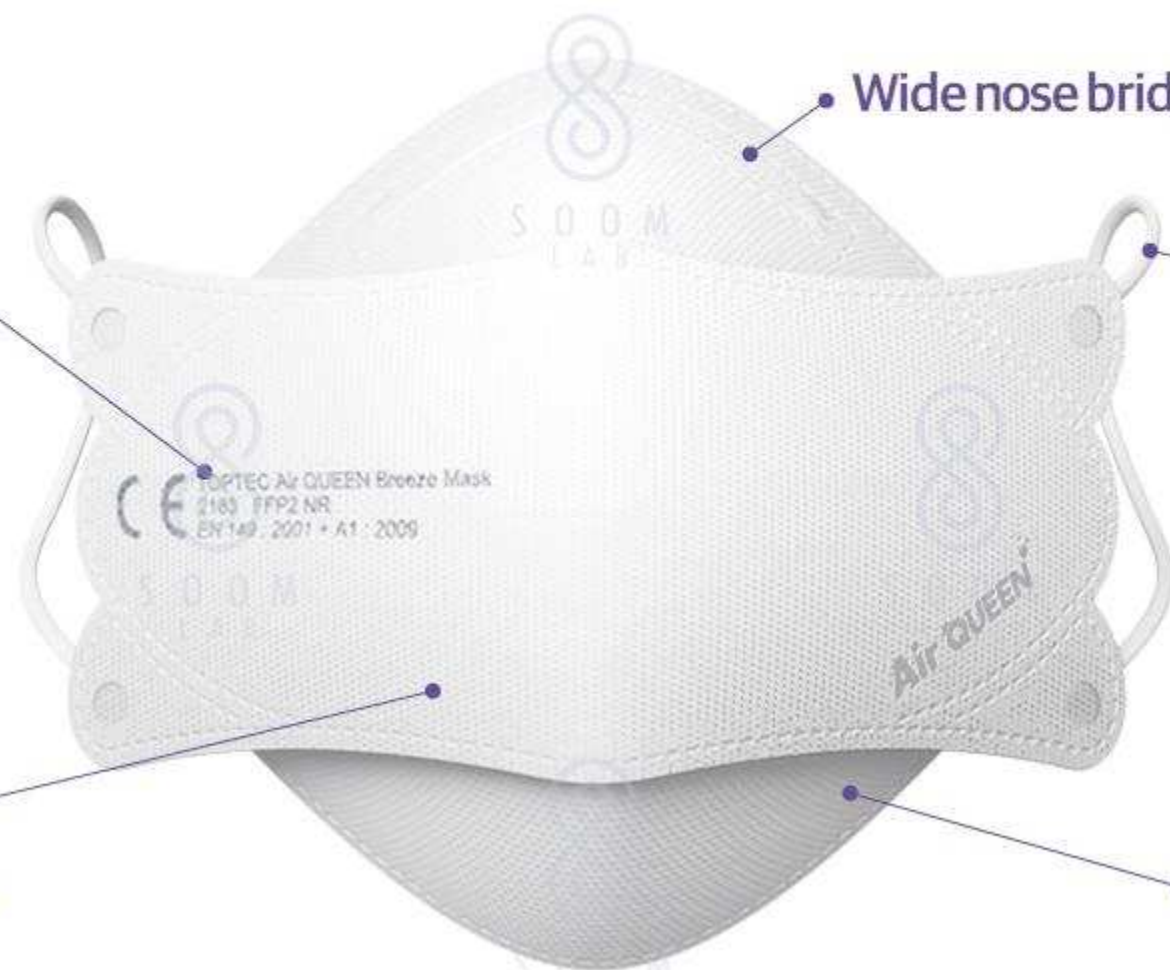
Nanofiber-
a breathing smart filter

Wide nose bridge

Comfortable elastic
ear band

High permeability
NO skin trouble

Light weight
for all-day wear



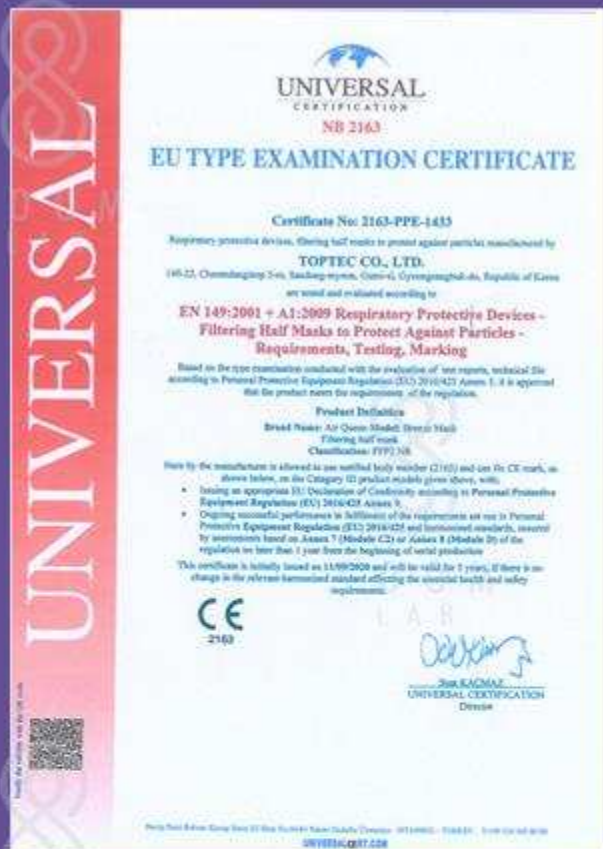


**Individually wrapped
for easy carrying and using**



CE FFP2

AirQUEEN Breeze Mask is a FFP2 grade level mask that has officially been certified by European Commission



Certificate No: 2163-PPE-1433

Respiratory protective devices, filtering half masks to protect against particles manufactured by
TOPTEC CO., LTD.
140-22, Cheomdangieop 5-ro, Sandong-myeon, Gumi-si, Gyeongsangbuk-do, Republic of Korea
are tested and evaluated according to

**EN 149:2001 + A1:2009 Respiratory Protective Devices -
Filtering Half Masks to Protect Against Particles -
Requirements, Testing, Marking**

Product Definition

Brand Name: Air Queen Model: Breeze Mask
Filtering half mask
Classification: FFP2 NR

- Certificate Holder : TOPTEC CO., LTD.
- Certificate No : 2163-PPE-1433
- Model Name : Air Queen / Breeze Mask FFP2 NR

NIOSH

AirQUEEN Breeze Mask has passed every conformity evaluation test for N95 and CE FFP2 certificates.

Nelson Labs
A Nelson-Mullins Company

Sponsor:
Kyungheon Chung
Topic Co., Ltd.
140-22, Cheongdam-gw, S-ri, Gangnam-gu, Seoul, 06171
KOREA, REPUBLIC OF

Sodium Chloride (NaCl) Aerosol Test Final Report

Test Article: Air Queen Breeze Mask
Study Number: 1200789-2021
Study Received Date: 04 May 2020
Testing Facility: Nelson Laboratories, LLC
4280 S. Redwood Rd.
Salt Lake City, UT 84123 U.S.A.
Test Procedure(s): Standard Test Protocol (STP) Number: STP0014 Rev 09
Deviations: None

Summary: This procedure was performed to evaluate particulate filter penetration as specified in 42 CFR Part 84 and TES-APR-STP-0009 for requirements on a N95 respirator. Respirators were conditioned then tested for particle penetration against a polydisperse, sodium chloride (NaCl) particulate aerosol. The challenge aerosol was dried, neutralized, and passed through the test article at a concentration not exceeding 200 mg/m³. The initial airflow resistance and particle penetration for each respirator was determined.

According to 42 CFR Part 84.84, pretesting must be performed by all applicants as part of the application process with NIOSH. Results seen below are part of that pretesting and must be submitted to and accepted by NIOSH for respirator approval.

All test method acceptance criteria were met. Testing was performed in compliance with US FDA good manufacturing practice (GMP) regulations, 21 CFR Parts 210, 211 and 820.

Robert Chaker electronically approved for:
Study Director: Curtis Genovese
02 Jun 2020 15:37 (-05:00)
Study Completion Date and Time

NIOSH-104 | airqueenmask.com | info@airqueenmask.com

NIOSH-104 Rev 0
Page 1 of 2

Filter efficiency meets all of the N95(NIOSH) and CE FFP2 performance as 96.03%~99.694% and it has been found to have excellent functions in inhalation resistance(under 35mmH2O standard 8.2~8.8mmH2O) and exhalation resistance(under 25mmH2O 7.9~8.3mmH2O standard), making it a differentiated breathing convenience with the filter function of the mask.

--	--	--	--

KAKEN

Nanofiber filter is approved its safety by KAKEN which is Japanese Certification Authority.

KAKEN

試験報告書

品名: ナノファイバーマスク
試験項目: 安全性試験
試験結果: 合格

試験項目	試験結果
呼吸抵抗	合格
粒子捕集率	合格
圧力損失	合格

KAKEN KAKEN

KAKEN

試験報告書

品名: ナノファイバーマスク
試験項目: 安全性試験
試験結果: 合格

試験項目	試験結果
呼吸抵抗	合格
粒子捕集率	合格
圧力損失	合格

KAKEN KAKEN

KAKEN

試験報告書

品名: ナノファイバーマスク
試験項目: 安全性試験
試験結果: 合格

試験項目	試験結果
呼吸抵抗	合格
粒子捕集率	合格
圧力損失	合格

KAKEN KAKEN

KAKEN

試験報告書

品名: ナノファイバーマスク
試験項目: 安全性試験
試験結果: 合格

試験項目	試験結果
呼吸抵抗	合格
粒子捕集率	合格
圧力損失	合格

KAKEN KAKEN

Approved for safety by KAKEN TEST CENTER which is a Global Certification Authority evaluate a quality and a performance of textile products, household goods, and functional high-tech materials as an analyze center of JSTIIF.

KCL

This is an industrial product that passed the tests of KF94 and is [currently in process] of being approved by the MFDS

Applied for the KF approval at the MFDS early April of 2020 after passing the test done by KCL, a testing institute designated by the MFDS.

It is manufactured with the same technology as Technoweb Disposable dustproof mask (KF94) from FTENE, the subsidiary company of TOPTEC, but if the manufacturer or brand is changed, the approval from the MFDS needs to be renewed, and until then, it cannot be publically distributed.

ANTI-DROPLET

Passed Korea's Ministry of Food and Drug Safety quality control standard(KF-AD) for anti-droplet face mask

KOTITI 시험연구원 인류의 안전을 추구하고 미래기술을 선도하는 글로벌 비즈니스 파트너
Global Business Partner for Human Safety and Future Technology

TEST REPORT

KOTITI No : 8220-1509-104821-002 Issue No : 2870837083
Receipt Date : 13 / 11 / 2020 Issue Date : 01 / 12 / 2020

Sample Name	AirQueen Breeze MASK	Test Object	Research/Reference/Etc
Lot No.	-	MDF/MFG	-
Weight/Volume	-	Expiry Date	-
Company	TOPTEC Co., Ltd	President	Jae Hwan Lee
Address	122, Asanvalley-ro, Guro-gu, Seoul, Korea	Telephone	08-10-5182-2304

Test Item & Test Result

Test Item	Test Standards	Unit	Result	Test Method
Liquid resistance	Water droplets do not fall within 30 minutes		Water droplets do not fall within 30 minutes	MFDS Guidelines for setting test items

Researcher : Ah Young Kwon Technical Manager : Man Sik Wang

- ※ The test results above shall be only subject to the requested test items.
- ※ In the case of insufficient space on the page, test items and test results may be written in the appendix.
- ※ When advertising test results or indicating test results on containers or packages, the entire content of the test report shall be indicated.
- ※ This report produced in relation to the services will not be related with MFDS. And MFDS is not legally liable.

KOTITI Testing & Research Institute



KOTITI Testing & Research Institute 111, Sagimakgol-ro, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea www.kotiti.co.kr
(PAGE 1 OF 1)

What is anti-droplet face mask?

Unlike surgical and procedural masks (such as KF80, KF94, KF99) worn by medical professionals, anti-droplet face mask was made for people who need to wear them for daily activities as recommended by Korea Centers for Disease Control and Prevention.

While surgical masks can cause discomfort in respiration, this type of face mask allows for easier breathing, has relatively similar filtration rate (KF55~80%), and has anti-droplet function.

HALAL

Korea Halal Authority certifies the Air QUEEN



Certification No : KHA-20F-00362904

Name of Products : Air Queen / Nano Mask

Certification standard : KHAS 29000-General Standards for HALAL Industrial Products

The Nanofiber Filter of AirQUEEN Breeze Mask is manufactured with patent technology.

Cutting-edge technology that mass-produces consistent nanofiber filters
Selected as one of 100 technologies to lead Korea in 2020
Approximately 50 patents around the world



- Patent Registration no. : 10-1040055
- Name of Invention:
An electrospinning device and an apparatus for manufacturing nano-fiber

ISO

The Nanofiber Filter of AirQUEEN Breeze Mask is produced in a clean and sanitary facility.

Proven suitable for
ISO 9001
quality management
system



Proven suitable for
ISO 14001
environment
management system



The Nanofiber Filter used for AirQUEEN Masks is produced in a facility approved for environment management system, so it is safe and sanitary.

SGS

The Nanofiber Filter of AirQUEEN Breeze Mask is approved by European SGS, REACH, and RoHS, and therefore is safe.

- Cadmium N/D
- Lead N/D
- Mercury N/D
- Hexavalent chromium N/D
- Other 182 categories N/D

SGS

Test Report No. F690101/LF-CTSA0A18-00327 Issued Date: 2018. 01. 16. Page 1 of 17

LEMON CO., LTD.
1100-65 Sanho-daero, Sandongmyeon,
Gumi-si, Gyeongbuk,
Korea



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

SGS File No.	1. AVGA18-00327
Product Name	1. Nano membrane (sanitary pad)
Item/Part Name	1. N/A
Received Date	1. 2018. 01. 09
Test Period	1. 2018. 01. 09. ~ 2018. 01. 16.
Test Requested	1. One hundred-Seventy-four (174) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on July 7, 2017 regarding Regulation (EC) No. 1907/2006 concerning the REACH. Eight (8) substances in the Public Consultation List of potential Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) on Sep. 5, 2017 regarding Regulation (EC) No. 1907/2006 concerning the REACH.
Test Method	1. Please refer to next page(s).
Test Result(s)	1. Please refer to next page(s).
Summary	1. According to the specified scope and evaluation screening, the test results of SVHC are <0.1% (w/w) in the articles of the submitted sample.

SGS Korea Co., Ltd

Jeff Jang

Jeff Jang / Chemical Lab Mgr

This document is the property of SGS Korea Co., Ltd. and is loaned to the client for their use only. It is not to be reproduced, distributed, or used for any other purpose without the prior written consent of SGS Korea Co., Ltd. The client is responsible for the safekeeping and return of this document to SGS Korea Co., Ltd. upon completion of the test. The client is also responsible for the safekeeping and return of this document to SGS Korea Co., Ltd. upon completion of the test. The client is also responsible for the safekeeping and return of this document to SGS Korea Co., Ltd. upon completion of the test.

SGS Korea Co., Ltd. 1100-65 Sanho-daero, Sandongmyeon, Gumi-si, Gyeongbuk, Korea 71010
Tel: +82-54-271-4000 Fax: +82-54-271-4001 E-mail: sgs@sgs.co.kr www.sgs.co.kr

Report of the SGS Group (Member of the Eurochem Group)

✓
RoHS

Metal
material and
harmful
compound
not detected



Organic
solvent and
compound
not detected



Quality Indication According to Electric Products and Household Safety Law

- Product: AirQUEEN Mask
- Manufactured in: Korea
- Manufacturer: TOPTEC
- Distributor: TOPTEC
- Weight: 4.38g
- Product Type: Mask
- Expiry Date: 36 months
- Storage Directions: closed container,
in room temperature (1~30°C)
- Entire Ingredients:
felt (outer fabric, filter, inner fabric),
plastic sheath wire, polypropylene ring, nylon strap



AirQUEEN Mask is an industrial product.

AirQUEEN Mask uses the Nanofiber Filter technology of LEMON and is manufactured by TOPTEC.

Currently, the MFDS approval is being processed, and when it is approved as sanitation mask, 80% of the product supply will be distributed as public distribution.



Masks are a must! Prepare in advance with AirQUEEN Breeze Mask!

SOOMLAB is a partner of LEMON that joint-developed the Hyper Purifying Breathing Mask which is SOOMLAB's unique brand that has exclusive sales right.

SOOMLAB is a primary sales company of AirQUEEN Breeze mask and authorized as a distributor by TOPTEC, a parent company of LEMON.

SOOMLAB and BOOSTERZ are in charge of marketing, distribution, and sales of AirQUEEN Breeze Mask.

[AirQUEEN Mask mass purchase inquiry]

Email : contact@soomlab.co.kr

Store : <http://airqueenmask.com>

