

# Aero Breath Fit Product Introduction



# Filling the Future with Our Technology

"The future that fills everywhere with clean air by AEREA's technology."

## CALAB BRAND

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A E R E A  
The Cleanset Tech

AEREA is **air quality specialized product brand** with CALAB's independent technology to realize the society that anyone can breathe clean air.

# ✓ AEREA

Check Point

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## Respond all harmful substances

Ventilation & purification compound product  
Fine dust as well as Radon  
Respond all the indoor/outdoor harmful substances



## Own technology

2 own technologies, 14 intellectual properties  
Independent filter design and air prediction  
simulation tech through air quality specialized  
research/development



## Publicity

Solve social problems including  
Not only fine dust and viruses  
But also New renewable energy



## Economy

Having a wide marketability  
Its outstanding air quality improvement function  
And economic product



## Convenience

It reflects the design factor of user  
Anyone can use it easily and conveniently



## Safety

Domestic production principles  
And certification for all function  
Safety top priority

# Aero Breath Fit is developed for these people

Who wants to breath more comfortably than normal one

Who wants to block harmful substance completely

Who wants to have easy maintenance and economic product

Who wants to change the mask style depending on the day

Now,  
**Aero Breath Fit**  
Solves.



## Filter replaceable mask **'Aero Breath Fit'**

8 times more comfortably breath than regular mask  
And 3 months filter life.

A new concept mask that satisfies both wearing comport and  
performance with 70g high-lightweight structure.



## Line-up Strategy

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### Aero Breath

Filter replaceable electronic mask



### Aero Breath Fit

Filter replaceable mask



**99.99%** harmful substances block better than KF99  
**22times** more comfortably breath than regular mask  
One filter **max 3month** use

**99.9%** harmful substances block better than KF94  
Realize super light **70g**  
**8times** more comfortably breath than regular mask  
One filter **max 3month** use



More about  
**Aero Breath Fit**

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# 01 Safety

Patented multi layer filter removes viruses, ultra fine dust in the air max 99.9% and use medical level silicon to be safer.



## The secret of clean air

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Only one filter can **remove 99.99%** ultrafine dust, bacteria and virus



**Fine dust**  
removal



**Bacteria**  
removal

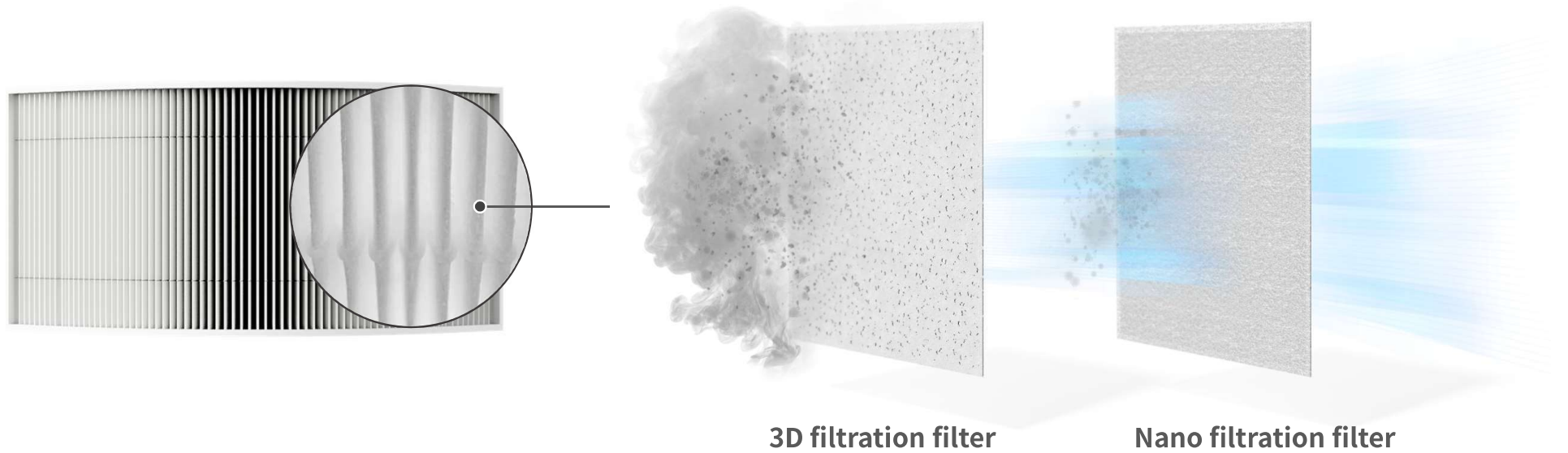


**Virus**  
removal



**Ultrafine dust**  
removal

# The secret of clean air

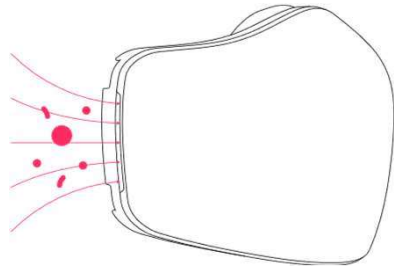


3D filtration filter

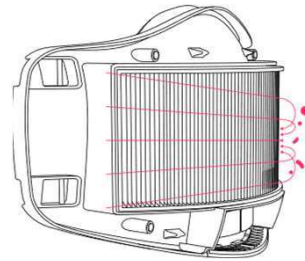
Nano filtration filter

	<p><b>3D filtration filter</b></p>	<p><b>Large dust and droplet</b> block</p>	<ol style="list-style-type: none"> <li>1. Multi layer structure by diameter</li> <li>2. Extending the filter life by removing large dust and pollen</li> </ol>
	<p><b>Nano filtration filter</b></p>	<p><b>Ultra fine dust, virus, bacteria</b> removal</p>	<ol style="list-style-type: none"> <li>1. ISO 16000/KS B 6141 certification</li> <li>2. Ultra fine dust, virus, bacteria removal</li> <li>3. 4times longer filter life Without efficiency reduction due to moisture</li> </ol>

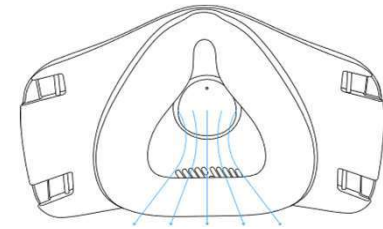
# The process of breathing clean air



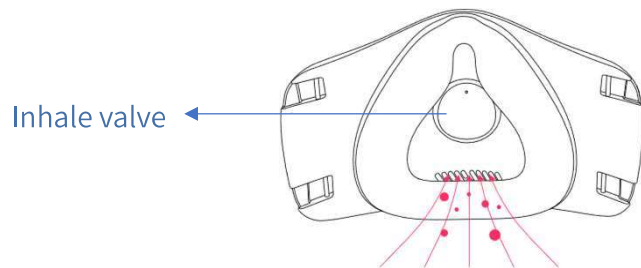
1. Inhale through the mask.



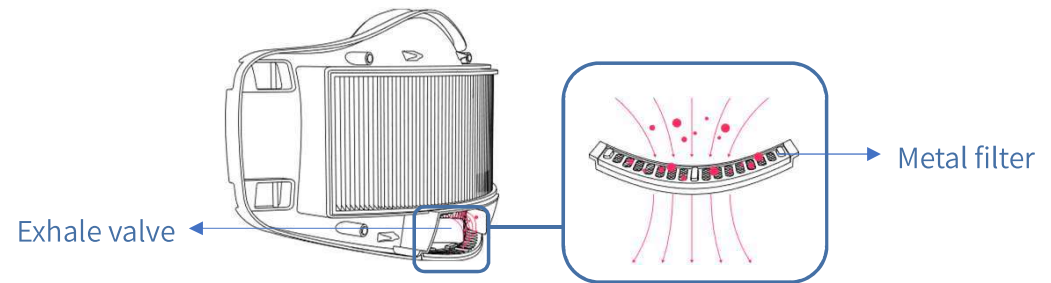
2. Virus and bacteria are filtered by E11 grade filter.



3. Inhale the clean air filtered by filter.



4. Exhale.  
At this time, the inhale valve prevents backflow,  
The exhalation falls into the exhaust .



5. Exhale valve prevents backflow,  
Metal filter filtrates droplet.

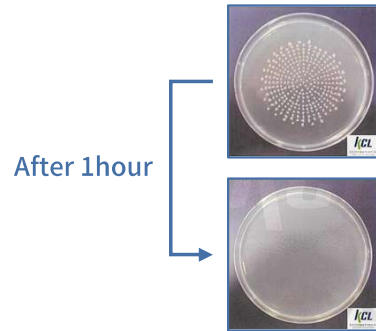
# Harmful Bacteria TEST



CFU	Colony Forming Unit
Test strains	Klebsiella pneumoniae ATCC 4352(harmful pneumonia)
Chamber size	8m <sup>2</sup>
Operating time	1hour
Result value concentration	Feller Conversion Table apply
Client proposal condition	ISO 16000-36:2018 (but, product operating time : 1hour)

## Harmful streptococcus pneumoniae

### • Test result



Test Items	Test method	Test result			Test environment
		Concentration before uptime	Concentration after uptime	Reduction rate (%)	
Microorganism reduction test (pneumonia)	Client proposal	2.7 x 10 <sup>4</sup>	< 10	<b>99.9%</b>	(23.0 ± 0.2) °C (50.5 ± 2.0) % R.H.

Remove harmful streptococcus pneumoniae floating in air **99.9%**

## Dust capture efficiency TEST



Test item	Test standard	Test result	Dust Collection efficiency(%)
Dust Collection Efficiency (NaCl)	KF94 : Dust Collection Efficiency > 94%	1 time	<b>96.4%</b>
		2 time	<b>95.8%</b>
		3 time	<b>95.1%</b>

**Remove maximum 95%** 0.3µm particle which is smaller than ultrafine dust(PM2.5, <2.5µm)

## Medical grade certification



Test items	Unit	Results
Heavy Metals	mg/kg	<b>N.D.</b>
Flame Retardants-PBBs/PBDEs	mg/kg	<b>N.D.</b>
Phthalates	mg/kg	<b>N.D.</b>
Halogen Content	mg/kg	<b>N.D.</b>

Heavy metal / Flame retardant/ phthalate / halogen compounds **all categories not detected**

## 02 Technical skills

Many patents we have through technology-intensive designed based on engineering judgement and user-centered design considering user environment.





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Produce through **proven parts and manufacturing facilities** at domestic and abroad



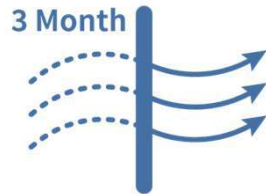
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## Aero Breath Fit **4 core function**



### **Independent purity space**

Whenever, wherever  
Feel comfortable breathing and wearing



### **Longer filter life**

Max 3months  
available filter



### **Light replaceable mask Ultra fine dust 95% removal**

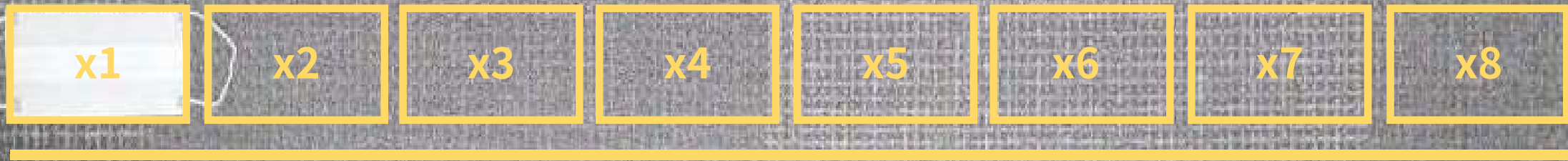
70g super light mask



Air purifier level  
E11 grade filter

## 8times more comfortable mask

Regular mask

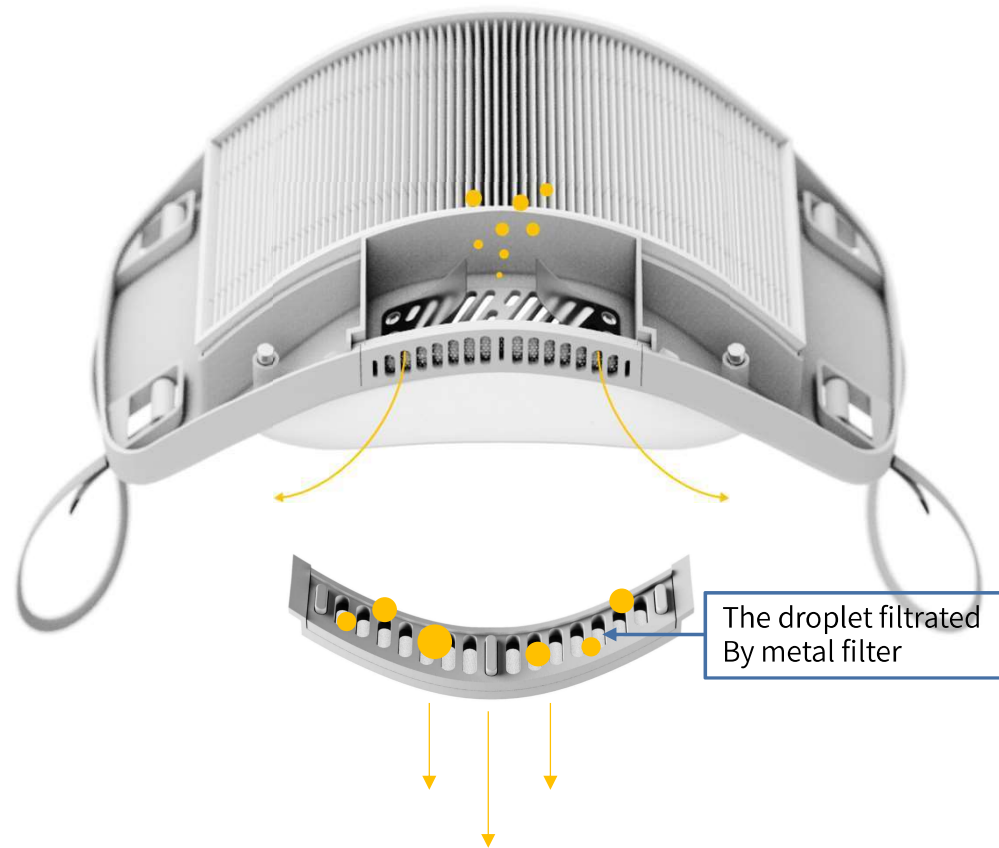


Aero Breath Fit

Aero Breath Fit **8x** more breathing comfort than a regular face mask and filter with a **max 3 months lifespan** with 8x wider filter area than regular mask

## Block droplet spill

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No worry for droplet spill !

**Exhalation is filtrated by metal filter**

And prevented from backflow with exhale valve

# Patent possession



The production of CALAB 's function which blocks highly ultra fine dust smaller than 0.3μm, harmful gas and floating bacteria has been proved officially and based on various patents and intellectual property.

# 03 Economy

A single replacement filter can be used for up to 100 days, allowing clean air to be inhaled at a more economical cost



## Maintenance cost save

	Bird beak mask C brand	Electric mask L brand	<b>Aero Breath Fit</b>
Day average cost	1,490	2,192	<b>131</b>
Month average cost	44,700	65,750	<b>4,000</b>
3months average cost	134,100	307,500	<b>12,000</b>
6months average cost	268,200	394,500	<b>24,000</b>

\*Wear each mask everyday, replace the filter according to the filter life

	Regular mask	<b>Aero Breath Fit</b>
Virus/fine dust removal	O (70~95%)	<b>O (95% over)</b>
Easy to breath	X (~50pa)	<b>O (5pa)</b>
Long filter life	X (1 time use)	<b>O (3months use)</b>
Long-term use	X (disposable products)	<b>O (filter replaceable Semi-permanent product)</b>

## Various style creation

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**3 color covers**

Pure beige/ Snow white/ Midnight black

With replaceable cover of 3 colors

You can create Various styles depending on the TPO



# 04 Convenience

Designed Based on user aspect, easy to replace filter and clean the silicon



## Simple cleaning way

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**Method 1**

Cosmetics and impurities on the mask  
Remove it with wet tissue simply.



**Method 2**

When you need to wash it,  
Take silicon apart, then wash it.



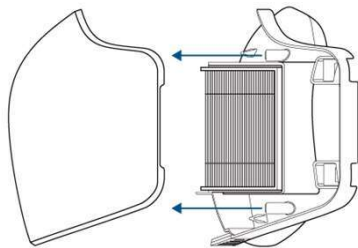
**Method 3**

If you need sterilize it,  
Boil the silicon face guard part.

# Face silicon guard and exhale filter wash/replacement way

1

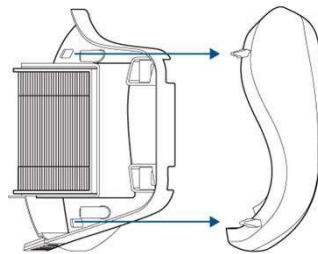
Disassemble the cover and body



2

## Face guard replacement

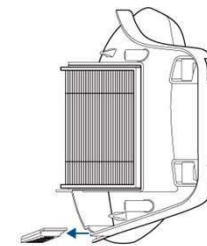
When you assemble again  
The washed face silicon guard,  
Put the bumps of silicon face guard  
In the body's hole and stick it.



3

## Exhaust filter replacement

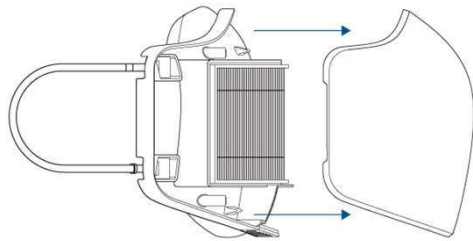
After removing the exhaust filter,  
combine the new filter and mount it  
on the main body.



## Filter replacement way

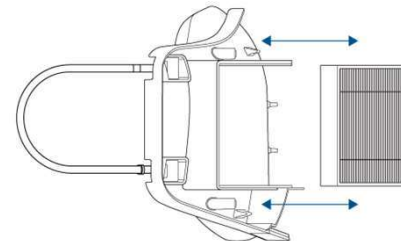
1

Disassemble the cover and main body.



2

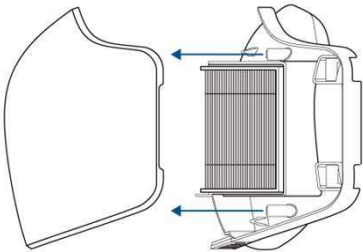
Remove the filter,  
Mount the new filter on it  
And cover it.



# Ear band replacement way

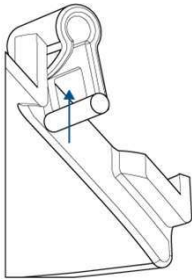
1

Disassemble the cover and main body.



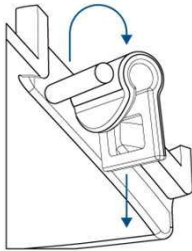
2

Push the short and long part of the ear band connection into the direction of the filter.



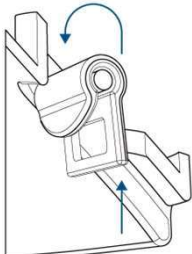
3

Disassemble the ear band.



4

Assemble Washed/ new ear band.



## Product component



- ① Aero Breath Fit Cover
- ② Aero Breath Fit Main body
- ③ Aero Breath Fit Replaceable filter
- ④ Aero Breath Fit Ear band
- ⑤ Aero Breath Fit Face silicon guard
- ⑥ Aero Breath Fit Neck supporter

## Product specification



<b>Product name</b>	Aero Breath Fit
<b>Model name</b>	ABF11PA01
<b>Color</b>	Snow white/Pure beige/Midnight
<b>Size</b>	black103x64x149mm
<b>Weight</b>	70g
<b>Filter grade</b>	E11 Grade (>95%)
<b>Material</b>	ABS + Silicon(Medical Grade)+Nylon
<b>Country of Origin</b>	South Korea
<b>Manufacturer</b>	CALAB
<b>Warranty period</b>	12months

※depending on the location of the measurement, there may be 1 ~ 2cm error.

## Q & A

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### Q. What's the differences regular mask and Aero Breath Fit?

A. Aero Breath Fit is filter replaceable mask that improves not only regular mask's disadvantages such as difficulty breathing, steaming up inside, but also **maximizes the filter life till 3 months**.

### Q. Is it available to use for kids?

A. the Aero Breath Fit is for adult, we recommend you to use over 14ages. We are preparing the kids product which is under 14 ages, please refer it..

### Q. If i use it when i work out, wouldn't i lack breathing?

A. Aero Breath Fit is designed to offer air enough by patented technology and 8times wider filter area. But, it might be difficult to breath smoothly if you use the filter over the recommend period, so please be aware of how to use it.

### Q. Don't I get makeup on my mask?

A. Aero Breath Fit is designed to improve cosmetic stain which has been pointed out as an uncomfortable factor, it has silicon where it comes into contact with your face so you easily clean it with wet tissue.



## Q & A

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### **Q. wouldn't the mask slip down or the glasses get steamed up?**

A. Aero Breath Fit offers fabric type ear band basically. You can adjust the ear band string depending on your face shape, so it prevents the mask from slipping down. Also its design has high-sealing power by medical level silicon, and it helps not to get steamed up your glasses.

### **Q. Is it ok to get wet?**

A. Aero Breath Fit isn't electric mask, but if the water get into the filter, you feel uncomfortable breathing. It is designed not to wet by considering the environment such as rainy day, but it is not water proof product. If your filter get wet, I recommend you to dry the filter then use it again.

# Thank you!

AEREA  
The Cleanset Tech

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# 일회용 마스크의 불편한 사용경험과 환경오염 문제의 증가

기존 마스크의 불편한 사용 경험 증가



TV 뉴스 보도자료(MBC, 2020.06.23)

일회용 마스크로 인한 환경오염 이슈 발생



인터넷 뉴스 보도자료(나우뉴스, 2021.01.13)

[ 일회용 마스크의 문제점을 극복 가능한 대체제의 필요성 대두 ]

# 실외 미세먼지/감염성 위험 증가에 따른 마스크 사용의 생활화

미세먼지로 인한 마스크 사용의 생활화

**[14일(목) 퇴근길 날씨] 대기질 '나쁨'... "KF80' 이상 마스크 쓰세요!"**

2021-01-14 17:00:00

☰ ✉ 📄 가 가



/사진=뉴스시스

[핀포인트뉴스=이정훈 기자] 오늘 오후 무렵부터는 수도권 공기가 탁해질 것으로 보여, 퇴근길에는 'KF80' 이상 마스크로 미세먼지 차단에 신경을 쓰는 것이 좋겠다.

인터넷 뉴스 보도자료(핀포인트뉴스, 2021.01.14)

지속적인 팬데믹 현상으로 인한 마스크 수요 대응 필요

**코로나19 여파, 마스크 대란**

CBS노컷뉴스 황진한 기자 | 2020-02-27 11:54

뉴스듣기

☰ ✉ 📄 가



- ▶ 5만원 있다면 당장 시작해라! "월수익 오천만원 가능해..."
- ▶ 로또1등 "6자리" 예상번호 16,21,29... 짝이라! 1등당첨!!

코로나19 확진자가 334명 늘어 총 1595명으로 집계된 27일 오전 서울 양천구 행복한백화점에서 진행된 '중소기업유통센터, 마스크 긴급 노마진 판매 행사'를 찾은 시민들이 마스크를 구매하고 있다.

인터넷 뉴스 보도자료(노컷뉴스, 2020.02.27)

**[ 미세먼지와 코로나19로 인한 마스크에 대한 수요 및 시장 급증 ]**