**Present the SAFETY KIT** 

### **For Fire Escape**





School

Office

Public Place





This **Anti Fire Smoke Mask** is a circular handkerchief in the form of a seven-piece filter wet with a special ingredients.

It protects your breathing from poisonous gas and helps you to escape when you hide your nose and mouth in case of fire.



### Natural ingredient special solution

### Functional special solution : Moisture Barrier

Natural Ingredients harmless to human body, Sulfur component mineral water, Dongchimi liquid fermentation extract, trehalose, hyaluronic acid and xylitol, composed of fermented extract, neutralize harmful gas and form a moisture barrier to minimize harmful gas inhalation.

### 17 Herbal Extracts : Stay Calm Evacuation

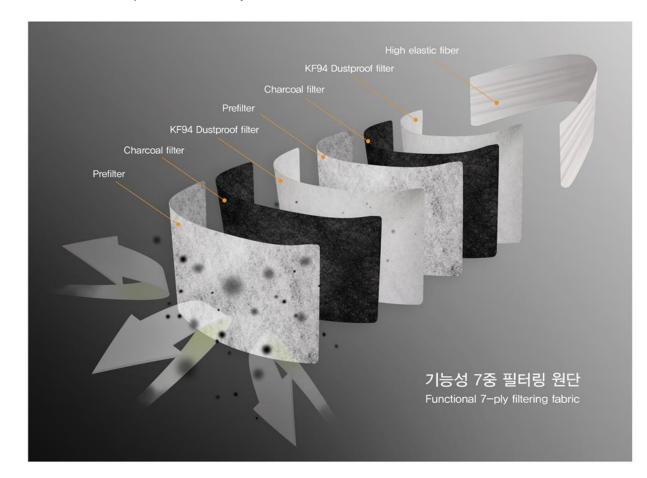
It is composed of ingredients that keep your mind stable in emergency situations. It is a very effective solution to induce calm evacuation and to lower the temperature of ingestion from toxic gas to ease breathing.





### **Functional 7-layer Filtering System**

It uses filter fabric of KF94 level which is used for dustproof mask and dust mask, and charcoal filter and prefilter fiber are composed of 7 layers.





# Respiratory protection from toxic gases

In the first 5 minutes of the fire, toxic gases such as phosgene, hydrochloric acid, sulfuric acid, and cleansing gas should be avoided more than carbon monoxide, so wet mask method is very effective. The National Emergency Management Agency (NEMA) strongly urges the wet mask method to wet the handkerchief or the clothes in the event of a fire, to close the nose and mouth and to escape in a low position.

This is because the wet mask method filters about 400 kinds of fire toxic gases by 70~80%, and is superior in performance to dry masks method.

In the initial fire, it keeps the breathing from the fine particles of the water and the water safe combustible, and it prevents the dyspnea and gives **psychological stability.** 

This product is very effective for calm fire escape.





### Easy Wear, Fast Evacuation

Take out the product, put the hand in the middle of the cylinder, and use it as a mask when you wear it on your head in case of need. Because the high elastic fiber fabric stretches freely, it can be used as a double structure (handkerchief / mask) depending on the situation.





Wearing time : 5-6 seconds Use time : 15 minutes Everyone can wear easily

### How to use



### 01. Product unpacking

If there is any indication of smoke or fire, the product will be opened immediately. Ten perforations are made for easy opening in emergency situations.



### 02. Product wearing

Put the hand in the middle of the cylindrical shape of the product, wrap it around the nose and mouth, open your mouth wide, and then breathe in your nose and mouth at the same time.



#### 03. Use turning around

It is used to keep the solution dry during the breathing due to the flame heat. It is possible to maintain a moisture barrier and to have a toxic gas filtration effect for a sufficient time.





## 04. If you've difficulty using your hands

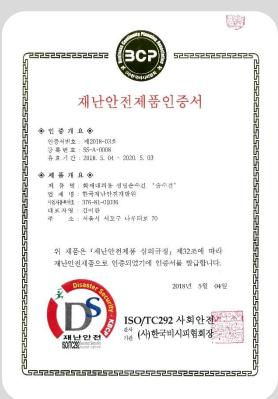
This product will be worn on your head left and right. To maximize the adhesion, the breathable towel is made of double-layered highelastic fabric, allowing you to escape by freeing your hands.

### 05. Evacuate your face

Please calmly escape in a low position. If there is a risk of burns due to flames, please use the halfsplit of this product.



### **Install Simulation**



### **Disaster Safety Certification**





### Test report, harmful gas removal efficiency

| KS7<br>한국표준시험연<br>Korea Standard Test Re                                   | 1구원 T:1600-6687 F:02-600                                   |   |
|--|--|---|
|  | Test repo  | t   |
| Request No :<br>Report No :  | AATR20180629-001<br>KSAA118G00902001                       | Request date : 2018. 6. 29<br>Issue date : 2018. 7. 9 |
| Company :<br>Address :<br>Person :<br>Submit Company :<br>Name of Sample : |  |   |
| KS K 0693:2011   | Test item  | Test result<br>Sample                                 |
| Staphylococcus a<br>ATCC 6538  | urous Antibacterial activity<br>(%)                        | 99.9  |
| Concentration of In<br>Klebsiella pneumo<br>ATCC 4352                      | oniae Antibacterial activity (%)                           | Researcher  |
| Concentration of In  | noculum 1.5 × 10 <sup>6</sup> CFU/mL<br>1SO 105 F02 Cotton | 7 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (               |
|  | Korea Standard Test Re                                     |   |
|  |  |   |

| Target gas                           | Test<br>Concentratio<br>n<br>(ppm) | Breakthroug<br>h<br>Concentratio<br>n<br>(ppm) | Removal<br>Efficiency<br>(%) | Duration<br>(min)              |
|--------------------------------------|------------------------------------|--|------------------------------|--------------------------------|
| Carbon<br>monoxide<br>(CO)           | 100±10                             | 11   | 87                           | More than<br>5mins<br>minimum  |
| Hydrogen<br>Chloride<br>(HCL)        | 80±5                               | 5  | 92                           | More than<br>12mins<br>minimum |
| Sulfur Dioxide<br>(SO <sub>2</sub> ) | 40±5                               | 2  | 92                           | More than<br>6mins<br>minimum  |
| Ammonia<br>(NH₃)                     | 60±5                               | 3  | 90                           | More than<br>6mins<br>minimum  |

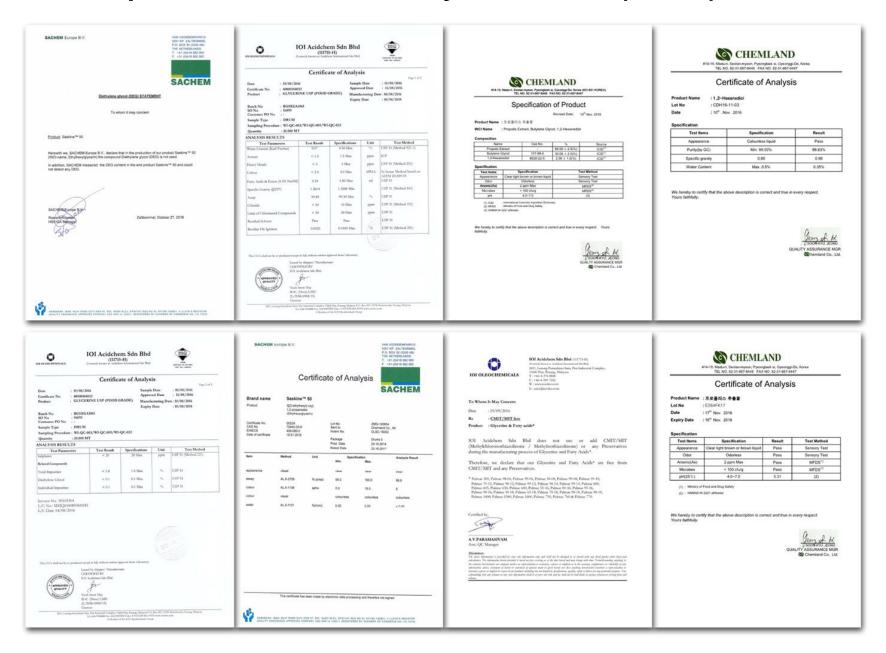
This product fabric has a thick layer of undiluted solution for each seven layers of fabric layer, so it is more efficient to remove harmful gas than general dry filter type gas mask.

This product is made in a cylindrical shape with both ends connected to each other. It can be used for more than 5 minutes if only one part is used intensively after opening the fabric of the handkerchief.

This product is basically sterilized and then packed in a vacuum process. The solution contains harmless natural ingredients, so it can be used for 3 years or more for up to 5 years without deterioration.

The storage period is at least 3 years when stored in a normal environment. It is designed to be stored for up to 5 years when stored in a suitable environment avoiding high temperature or low temperature places and not exposed to direct sunlight.

### All components : Material Safety Data Sheet (MSDS)







4 Anti fire smoke mask in box

In-box Fire detector

### Phosphorescent self-emission and Acrylic storage box







### Solar hybrid LED lighting type steel storage box



### **Maker Introduce**



Korea Disaster Safety Development Institute



- Q. How do I open it if there are signs of smoke or fire?
- A. Ten perforations are made to open easily in emergency situations.

## Q. There's too much solution, so it's hard to breathe.

- A. You may feel difficulty breathing on first use, but this is normal for filtering harmful gas and you can breathe smoothly after 1~2 breaths. In addition, although the solution can be sucked in with the breathing, the solution is a harmless component to the human body. As a result, the rate of simultaneous air and liquid inhalation is less than 90~98% of the air inhalation and less than 5% of the liquid inhalation. (Korea Filter Test Laboratory(KFTL))
- A. The solution has been fully filled to maintain moisture for more than 3 years. If it is difficult to breathe a little at the first opening, you can use a little squeeze solution from the handkerchief.

#### Q. How long is it used?

A. The cylindrical structure of this product is specially designed to use evenly during the breathing to keep the solution from drying out due to flame heat. If you use it by turning it, you can see toxic gas filtration effect for more than 15 minutes while maintaining moisture barrier.

## Q. Isn't it hard to use your hands when you evacuate?

A. It is made of double-layered fabric of high-elasticity fabric that maximizes the adhesion so that it can be worn on the head in case of need and escape by freeing the hand.

#### Q. Will not it be damaged by the flame?

A. It is useful to catch hot objects such as heated door knobs. If there is a risk of burns due to flames, please divide the connecting parts of the breath towel in half and wrap it in your face.

#### Q. How many years is the shelf life of this product?

A. The storage period is at least three years when stored in a normal environment. It is designed to be stored for up to 5 years when stored in a suitable environment avoiding high temperature or low temperature places and not exposed to direct sunlight.

#### Q. Do you have fire certification?

A. This product is not a fire fighting supplies, but a fire fighting aids. Therefore, it is classified as a commodity and does not need any certification, but it is a product that obtained disaster safety product certification (registration number SS-A-0008).

#### Q. Is the mask harmless to the human body?

- A. Anti Fire Smoke Mask for fire evacuation the following is a list of the components of the specialist organizations that have requested safety evaluation. "All ingredients of your product seem to be made up of edible ingredients. While wet wipes contain cleaning raw materials, fragrances and preservatives compared to regular wipes, all ingredients of your product use natural, edible ingredients and ingredients I do not see the problem."
- A. The MSDS(Material Safety Data Sheets) of all ingredients of Anti Fire Smoke masks for fire escape are available.

#### Q. Is there a mask test report for fire escape?

A. There is an antibacterial test report from the Korea Standards Test Institute and a filter test report from Korea Filter Test Lab.

# Thank you



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