

SHARP Face Shield Film with Moth eye Technology

SHARP
Be Original.

Product Introduction

- The necessity of face shield and protective eyewear is increasing in the new lifestyle introduced by COVID-19.
- ➔ By applying SHARP's unique low-reflection, anti-fog, and anti-fouling Moth-eye film technology, we introduce the "moth-eye face shield" that can bring safety and comfort in this 'new normal'.

Standard film

Moth eye film



Reflecting

Almost NO reflection

Reflectance:
approx. $4\% \times 2 = \sim 8\%$

Reflectance:
approx. $0.3\% \times 2 = \sim 0.6\%$

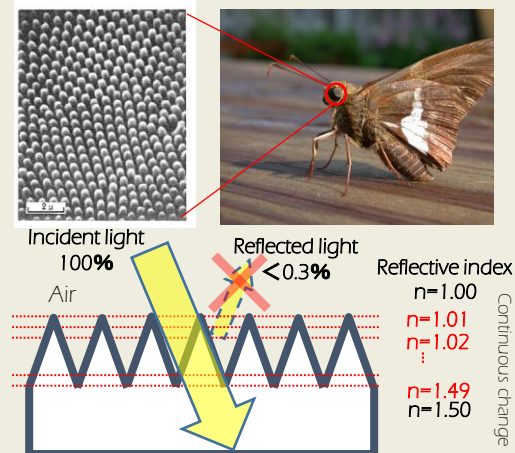
Moth eye technology overview

1. Ultra low reflection

- Drastically improves visibility by cutting reflection of lighting etc. (Reflection $< 0.3\%$)
- ME technology was originally developed to improve the visibility of the displays.

<Anti-reflection function and its principle>

- Moth-eye coating technology mimics nature by creating nano-concave structures of size 100 to 200 nm on the surface of the film, like those on moth eyes which enable them to fly even in the dark.
- By continuously changing the refractive index due to fine irregularities, it is possible to prevent the reflection of almost any light.



2. Super hydrophilic function

Anti-fog / quick drying

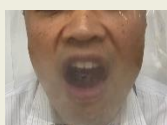
- Bactericidal※

Ideal for the **inside/outside** of the face shield

Ultra hydrophilic Moth eye processing

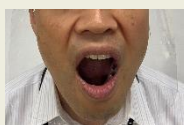
Without moth-eye

- Reflection
- Fogging



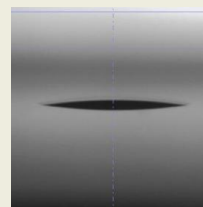
With moth-eye

- No-reflection
- No-fogging



- By having super hydrophilic functions on both sides, it is possible to provide a clear view, without clouding – all the time.

For example – even when moving from an air-conditioned room to a warm, humid space



Water contact angle $< 5^\circ$. Water droplets spread on the surface, increasing the surface area and dry quickly.

◆ **Safety precautions** *Please observe the following precautions

Warning To prevent injury

Don'ts

- If it is damaged, never use it.
- Do not clean with benzene, thinner, kerosene, acidic detergent, alkaline detergent, etc.
- Do not use in situations where there is a high risk of this product will fall off.
- Never disassemble or modify the main body or accessories.
- Do not use it only by children or within reach of infants.
- Do not use for purposes other than those described in this instruction manual.
- Do not use while driving a car / motorcycle or bicycle.

Note To prevent injury

Do's

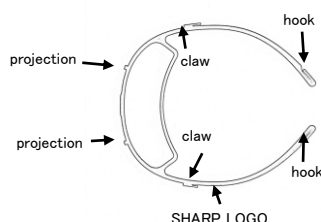
- Be careful when handling the film so that the edges of the film do not hurt your hands or face.
- Not use if the film is dirty or damaged.
- Install the film and frame correctly according to the instructions in the instruction manual.
- Discontinue use if you have an abnormality on your skin or if it does not fit your skin

◆ **Purpose of use**

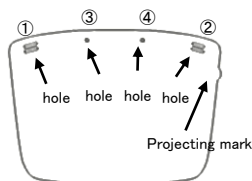
- This product is designed to reduce the contact of liquid droplets and dust on the face.
- Do not use it as a protective device against solids or fire.

◆ **Name of each part**

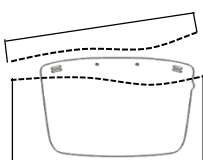
Frame



Film

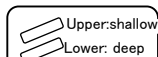


□ **Film takeout method**

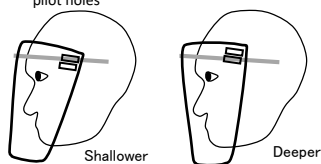


You can prevent fingerprints from adhering to the film by taking out only the top of the film with holes and attaching the film to the frame

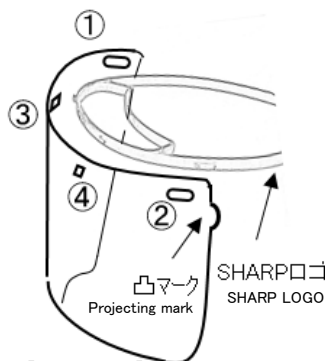
□ **Film angle switching hole**



Two holes are provided so that the angle of the film when the face shield is attached can be changed in two steps. It becomes shallow to insert the claws of the frame into the upper hole, and it becomes deep to insert the claws of the frame into the pilot holes



□ **Fitting method**



【 Preparation 】

- Set the projecting mark on the film towards SHARP logo side on the frame.

【 Procedure 】

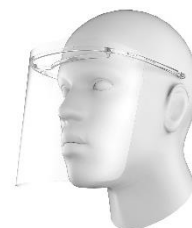
1. Insert the claws of the frame in the order of holes ① → holes ② on the film side.
2. Fit the protrusions of the frame into the two holes ③ and ④ in the center of the film.

【 Wearing 】

- Lightly spread the handle of the frame and attach it to your head.
- Secure the frame on your forehead.
- If it is loose, pass a commercially available elastic cord through the hook of the frame and tighten it.

□ **Removing method**

1. Remove the two holes ③④ in the center of the film from the protrusions on the frame.
2. Remove the holes on the film side in the order of ② → ① from the claws on the frame.



◆ **Care**

- If the film surface becomes dirty, soak a soft cloth such as a tissue or eyeglass cloth with commercially available rubbing alcohol (excluding gel type) or diluted neutral detergent, and wipe it gently. If unevenness remains after wiping, wipe it gently with a tissue soaked in water and wrung well. There are concave and convex patterns on the film. If you rub it violently, the pattern might damage, and the function may deteriorate.
- If the film cannot be cleaned or the film is damaged, please replace it with a new film (sold separately).

◆ **Precautions for use**

- This shield cannot be used in places where harmful dust or gas is generated, or for the purpose of preventing them.
- Discontinue use if you have an abnormality on your skin or if it does not suit your skin type.
- If you feel sick while wearing it, discontinue use.
- If you feel that it fits too tight on your head, adjust the mounting position or insert something like a cushion.
- Please keep out of reach of infants.
- Do not use or store near fire.
- Store this product away from high temperatures and humidity and places exposed to direct sunlight.
- When disposing of this product, please dispose of it in accordance with the regulations of the local government.

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