

# GlassShield Table of Contents

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# **Product Description**

KubeBond GlassShield produces a thick transparent coating with a multi-layer application process. It keeps glass surfaces sparkling, easy to maintain and gives up to 12 months of protection.

Its ceramic molecular net gives strong protection and creates a surface that stays cleaner for longer. Watch the water bead and just fly off the screen quickly taking dissolved salt and dirt with it before the surface dries and stains.

Your customers will thank you when they see the effect of KubeBond GlassShield.

## **Product Features**

- ✓ Liquid Ceramic Technology. The mixture looks milky because there is much ceramic powder in the content.
- ✓ Easy to install because its milky appearance shows where it is already applied.
- Thick transparent film coat once it is fully cured.
- ✓ Excellent hydrophobic effect. Water contact angle can reach 110°C and above.
- Resistant to chemical damage.
- Durable protection against severe weather condition.
- ✓ Prevents aging and yellowing of glass caused by UV radiation.
- Makes glass surface easy to clean.

# Suitable Application Surface

✓ Glass

# **Packing Contents**

- ✓ KubeBond GlassShield: 50ml
- Application Sponge: 1pc
- ✓ White Micro-Suede Cloth: 2pcs
- ✓ Sticker KubeBond: 1pc
- ✓ Sticker CHOOSE NanoTech Certification: 1pc













# **Working Instructions**

## **Before Application:**

#### 1. Please work at an environment of 25°C (indoor), humidity 60% to 70%.

If the working environment is higher than 25°C, the curing process will be faster. It will shorten the time that is available for fixing the coating film.

We recommend working on a small area first. Adjust your working pace by observing the curing condition. Also, we suggest you start working on an area that is less obvious and make sure all conditions are ideal before starting on a full-scale application project.

If the working environment is lower than 20°C, the curing process will be slower. There will be plenty of time for you to fix the coating film.

#### 2. Please work in an environment with enough light sources.

The coating will form a layer on the car surface. If the products are not applied evenly and not fixed at the right time, there will be obvious streaks on the surface after curing.

Any flaws present can only be removed by machine polishing, and you need to redo the application. Therefore, please work in an environment with enough light sources to detect streaks.

To prevent the flaws from being found after the project is done, we recommend checking the application outcomes using white light, yellow light, refracted light and LED handheld light in advance.

## **Equipment Required:**

- 1. Application Sponge (in package)
- 2. White Micro-Suede Cloth (in package)
- 3. LED handheld light or other lighting devices
- 4. Infrared Curing Lamp: to allow the coated surface to reach 70°C and above















# **Application Steps**

## **Pre-Application:**

1. It is important that the surface be completely clean to strengthen adhesion and prolong the durability of the coat. Otherwise, there will be flaws and dirt stuck inside the coating layers.

## **Application Steps:**

- 1. Wrap the Application Sponge with White Micro-Suede Cloth as an applicator.
- 2. At the beginning of the application, pour GlassShield onto the applicator evenly until it absorbs the GlassShield. Do not pour the product directly onto the glass. It may cause uneven spotting on the surface due to the uneven amount of product absorbed by the surface.
  - \*If the amount on the applicator is not enough, it will be difficult to move the applicator and cause streaks.
- 3. Apply product on the glass surface with the applicator.
  - ✓ Apply gently.
  - Divide the big area into small ones and work on one small area at a time. To have enough time to fix the film evenly before the surface dries, divide the glass into an even smaller area if the temperature is higher.
  - Applying in a consistent direction can reduce streaking and ensures that there are no missing parts, and that every area is applied evenly.
- 4. Levelling is a procedure that makes the film more even and reaches the maximum coated thickness. The steps are as follow:
  - ✓ Wait for 30 seconds for levelling when it is at 25°C, humidity 60% to 70%.
    \*Reduce waiting time if the temperature and humidity are higher.
  - Use new and dry microfiber cloth for the procedure.
  - Use the same piece and the same side of the microfiber cloth for the whole procedure. (The purpose of this step is to make GlassShield form an even layer on the glass. If you constantly change the sides of the cloth, it will cause the coated film to become increasingly thinner. It may even wipe the product down completely.)
  - ✓ To get the best even surface, make sure you do the process really gently.













# Consumption

 $\checkmark$ 

1ml of GlassShield can be applied on a 30cm by 30cm area.

# **Multi-Layer Application Steps**

Follow the process as described previously for the single layer.

Before applying the next layer, wait at least 40 minutes under 25°C, humidity 60% to 70%. Adjust the waiting time according to the environmental condition. This means you can apply the next layer of GlassShield after 40 minutes and even after a few days.

The timing to apply the second layer is very crucial. If applied too early, it will not be able to increase the thickness since the first layer hasn't dried.

Repeat the layering process 3 times to complete the GlassShield application. If you need a better finish, please apply up to 5 layers.

## **Combination of GlassShield and Diamond Plus**

After completing the GlassShield applications, please apply Diamond Plus as a top layer so that the surface becomes smooth to prevent wiper-beating effect.

# **Application Steps of Diamond Plus**

After finishing all GlassShield layers, you have two choices to apply the Diamond Plus.

- 1. Wait at least 24 hours and then apply the Diamond Plus.
- 2. Heat GlassShield's coated surface to 70°C or above for one hour. Then apply Diamond Plus immediately.













# Initial Heating is Done to Strengthen the Bonding of the Coated Film

\*\*\*\*\*YOU MUST DO THE CURING PROCESS

#### Equipment Required:

- ✓ Infrared Curing Lamp
- ✓ Infrared Thermometer

#### Temperature Requirement:

✓ Heat the coated surface to 70°C or above (Please measure with an Infrared Thermometer)

#### Time Requirement:

✓ The surface must be heated for at least one hour

# **Full Curing Condition Needed**

- 1. You need 72 hours to reach full curing.
- 2. Avoid contact with water in this 72 hours. If there are any water droplets on the surface, dry the surface immediately.
- 3. Do not wash the car and use wiper for the next 7 days after application. After 7 days, get the car to be returned to a KubeBond service center to do the first clean and to check that the coating is in the best condition.

# **Maintenance after Application**

- 1. Do not wash the car with car wash machines.
- 2. Clean only with water and a neutral detergent.
- 3. Do not apply wax on the car body after coating treatment.
- 4. To get the best quality out of your coating, please get the car back to the service center every 2 to 3 months to do coat maintenance work.

For basic maintenance, spray Diamond Plus 2 to 3 times onto a damp cloth and apply evenly on the glass















when needed.

The Diamond Plus will create nano hair on the coated surface and restore the hydrophobic effect after every maintenance.

Do not touch the surface or let it come into contact with water within 8 hours of application.

# Storage Method

- 1. Please store the products upright and keep them away from flames and flammable materials.
- 2. The suitable storage temperature is 5°C to 25°C.
- 3. Shelf life for unopened product is 5 years.
- 4. Seal the bottle tightly after opening. Otherwise, the product may start to cure when it comes into contact with air.

# Warnings

- 1. It is very important that GlassShield is used on glass surfaces only.
- 2. Once GlassShield layer dries, it cannot be removed with chemicals. It can only be removed by machine polishing.
- 3. Applicator and sponge may be used multiple times. After each use, please clean them with water or alcohol to prevent hardening.
- 4. This product is not harmful to the skin. If product comes in contact with your skin, clean it off with water.
- 5. If the products come into contact with your eyes, please wash your eyes with large amounts of water. If discomfort remains, seek medical help immediately.
- 6. This product is not edible. Please store them away from children's reach.

## **Maintenance Process**

- 1. If the car surface comes into contact with water within 72 hours after coating, wipe away the water immediately.
- 2. Slight Pollution:
  - Clean the surface with water and a neutral detergent.
  - Dry the car body.
  - ✓ After the stain is removed, apply Diamond Plus to restore its hydrophobic effect.
- 3. Extreme Pollution:

















If the stain has severely damaged the surface, please follow the machine polish process:

- ✓ Machine-polish the damaged part.
- ✓ Clean the surface.
- Redo all layers of GlassShield as before and then add Diamond Plus as the top layer on the damaged part.

# **Frequently Asked Questions**

1. Why do we need to heat GlassShield coated surface to 70°C or above for one hour after finishing the application?

It is to strengthen the bonding of the coated film in a shorter time and to let the film stabilize and enhance the long-lasting protection.

2. Why do we recommend applying Diamond Plus as the top layer on the glass?

The advantage of GlassShield is to form a ceramic film to protect the surface. With Diamond Plus as the top layer, it creates nano hair on the coated surface and enhances the hydrophobic effect. At the same time, Diamond Plus makes the coated surface smoother and hence prevents the wiper-beating effect.

3. Why does the coated surface dirty easily after coating treatment?

After coating treatment, the surface will become perfectly hydrophobic. It makes the water droplet stay on the flat surface. When the water droplet dries up, it leaves behind the dirt. You will see this as dirty spots. However, it is very easy to clean the dirt using water and a neutral detergent. On the other hand, if there was no coating treatment, the dirt will be evenly distributed on the car surface making it difficult to notice and clean off.

4. Is it possible for the coated glass to stay clean without washing after the coating treatment?

The coated glass still needs to be maintained and washed after a coating treatment. The coated area only makes the surface less likely to get dirty. Even when the surface gets dirty, it will be really easy to clean because of its excellent hydrophobic effect.

















#### Why do rainbow stripes appear on the surface after application?

If GlassShield is applied incorrectly, it will create an uneven layer. The uneven surface will make the light refract and cause the rainbow stripes to appear on the surface.

To prevent this, we recommend that you apply our products in a bright environment and check the finished area with lighting devices.

#### 6. How do we check that the GlassShield coated film is still on the surface?

Test it with a marker pen. If the coated film is still on the surface, it will resist the graffiti. As long as you maintain the coated film by Diamond Plus, the car surface will recover its hydrophobic effect.









