

TECHNICAL DATA SHEET

IGL COATINGS™ ECOCOAT WINDOW

Material no.

Specification

Version

154287

Revision date

08.09.2023



IGL COATINGS ECOCOAT WINDOW

A 2-COMPONENT COATING SYSTEM FOR HYDRO AND OLEOPHOBIC TREATMENT OF GLASS AND CERAMIC SURFACES.

Description

ecocoat window is a user-friendly 2-component coating system for glass surfaces. The right amount of formulation is achieved by mixing the two components at a ratio of 1:1 (by volume). This mixture is ready for application after about 1 minute of shaking or stirring. It should be used within 1 day. This gives the user flexibility in designing the working steps and prevents waste. The consumption of the ready-to-use product will depend on the application method, approximately 1-5 ml/m² is sufficient for most applications.

Technical Data

| Property | Window E1 | Window E2 | Method |
|-------------|---------------------------------|----------------------------------|-----------|
| Flash point | < 15°C | 18°C | DIN 51755 |
| Density | 0.8 g/cm ³ (at 20°C) | 0.89 g/cm ³ (at 20°C) | DIN 51757 |
| Viscosity | 2 mPA.s (at 20°C) | 3.7 mPA.s (at 20°C) | DIN 53015 |

Applications

Treatment of windshields:

- Better visibility in the rain, particularly on throughways and rural roads.
- During winter: Obviates time-consuming de-icing.
- During summer: Insect splatter is easier to remove.

Easy-to-clean glass components of shower stalls, sanitary ceramics:

- Lime and soap residues can be removed easily.
- Aggressive cleaning agents are not needed. Wipe with a wet cloth is generally sufficient.

Easy-to-clean surfaces on other glass objects (e.g. greenhouses, canopies, skylights, etc.):

- The cleaning cycle is extended.
- Less cleaning agent is needed.
- Dirt is easier to remove.

Processing

- Do not apply the product at temperatures below 10°C (41°F).
- Do not expose the surfaces to be treated to direct sunlight prior to or during application.
- The surface must not be hot during application.
- Provide adequate ventilation and fresh air during application.
- If the substrate was previously treated with a coating system, proper removal, preferably with **ecoclean glass+** to ensure that the product bonds with the surface.

REMINDER: Always test on an inconspicuous area first. Kindly contact your local IGL Coatings representative if you need advice.

Step 1: Mixing the coating formulation

- Mixing the formulation at room temperature is recommended.
- Before treating the surface, **ecocoat window E2** should be mixed with **ecocoat window E1** at a ratio of 1:1 (by volume, e.g. 15ml + 15ml). The mixture should be shaken for at least 3 minutes to ensure the mixture is well mixed.
- After the mixing process, the mixture is ready to use and has to be used within 1 day.
- Before the application, the substrate has to be cleaned.
- The temperature during processing should be in the range of 10-30°C (50-86°F), **preferably 15-25°C (59-77°F)**.

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Step 2: Cleaning the surface

- In order to permit sufficient chemical bonding of **ecocoat window** to the substrate, the surfaces have to be carefully cleaned before the application. The durability of the coating depends on how well **ecocoat window** is chemically bonded with the substrate.
- For optimum pre-treatment of the surface, especially for automotive glass, abrasive cleaning with **ecoclean glass+** is recommended.
- **ecoclean glass+** should be shaken thoroughly before use. The slurry can be applied with a sponge or paper towel and should be polished uniformly for several minutes until a thin water film is obtained.
- The dried **ecoclean glass+** should be wiped off with a clean dry paper cloth or rinse off with water. Repeat several times until the slurry is completely removed.
- The abrasive cleaning ensures a completely clean and reactive glass surface.
- After the abrasive cleaning, dry the surface with a clean cloth. The surface should be coated immediately.

Step 3: Treatment process

- Direct exposure to sunlight during application should be avoided.
- In the case of windshield treatment, the two halves of the windshield (left/right) should be treated one after the other.
- A certain amount of the mixture is applied as a thick liquid and should be polished quickly and uniformly in a vertical (up and down), then horizontal (left to right) direction with the provided application cloth for at least ½ to 1 minute. If the coating evaporates before it has been uniformly polished, more **ecocoat window** must be applied.
- After 1 hour, buff off the excess solution with a clean microfiber towel. Resistance will be felt during buffing off. Persistent residues can be removed using a small amount of **ecocoat Window**.
- Repeat the step on the other half of the windshield. Always ensure the areas coated are overlapping.
- Allow the coating to dry for 1 hour then buff off using the dry IGL Microfiber Cloth to remove excess coating residue.
- The hydrophobic effect generally can be seen depending on the substrate, reactivity, and temperature after 1 hour and is further enhanced after a few hours.
- The coating should be air-dried for about 4 hours and avoid contact with water. The usage of windshield wipers must be avoided, if possible.

Re-coating Coated Glass Surfaces

The hydrophobic and oleophobic effects of **ecocoat window** are long-lasting. Once the effect wears off, the surface can be re-coated. To re-coat the surface, remove the previous coating residue with **ecoclean glass+** (Refer to Step 2) and then apply **ecocoat window** (Refer to Step 3). If the surface was previously treated with a different coating, repeated cleaning with **ecoclean glass+** is vital.

Usage

The use of **ecocoat window** on windshields does not mean that you can do without windshield wipers completely. Turn on the windshield wipers if necessary, to provide the driver with a clear view during the rain. Worn windshield wiper blades and glycol-containing windshield cleaners can form some streaks on the coated surface. In this case, replace the blades and do not use any glycol-containing anti-freeze agents in the windshield fluid reservoir.

Safety and Handling

For your safety, toxicological data, and information on property transportation, storage, and use, please read the Safety Data Sheet (SDS) before using any **IGL Coatings products**. The SDS is available upon request via email from sales@iglcoatings.com.

Disposal

Dispose of product residue in incompletely emptied bottles by bringing it to the municipal collection point for hazardous waste. To dispose of emptied bottles, dry the bottles out by exposing the bottles to air with the cap open. The bottles may be recycled once they are dried.

Storage

ecocoat window E1 and **E2** is storage-stable for at least 12 months in originally sealed containers.

The mixed formulation must be used within 1 day. Opened bottles must be stored properly and used up as soon as possible.

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