TECHNICAL DATA SHEET

IGL Coatings™ Ecocoat Window



Material no. **154287** Revision date **31.05.2019**

Version 1.14

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 ceramic coating system for smooth surfaces such as glass. The right amount of formulation is achieved by mixing the two components 1:1 (by volume). This total formulation is ready for application after about 1 minutes 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/cm³ (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 5°C (41°F).
- Do not expose the surfaces to be treated to direct sunlight prior 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 a ecocolean glass+ to ensure that the products bonds with the surface.

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** 1:1 (by volume, e.g. 2 x 15 ml). The obtained formulation should be mixed for a minimum of 1 minutes.
- 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).**

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 long-term stability and abrasion resistance of the coating depends on how well **ecocoat window** is chemically bonded.
- For an optimum pre-treatment of the surface, especially for automotive glass, we recommend and abrasively cleaning with IGL Coatings ecoclean glass+.

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- **ecoclean glass**+ should be shaken thoroughly before use. The slurry can be applied with a cotton cloth or paper towel and should be polished uniformly for several minutes until obtained a thin liquid film.
- The dried **ecoclean glass**+ is 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, 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.
- Place a few drops of pre-mixed **ecocoat window** formulation onto the provided application cloth.
- Apply the coating lightly on the windshield in a vertical (up and down) then horizontal (left to right) direction. Repeat the step on the
 other halves of windshield.
- Allow the coating to dry for 1 hour then buff off using the IGL Microfiber Cloth to remove excess coating residue.
- In case the solvent evaporates before it has been uniformly polished in, more formulations need to be applied.
- Do not let the film dry sporadically during the application process.
- 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.
- After buff off the excess residue, the coating should be air-dried for about 4 hours and windshield wiper use must be avoided.

Renewing Already Coated Glass Surfaces

The coating with **ecocoat window** is long-lasting. Once the effect wear off, the surface can be re-coated. For a re-coating, the cleaning with **ecoclean glass+** (Step 2) and the application of **ecocoat window** (Step 3) are done in the same way as the first treatment. If the glass was treated with a different coating before, repeated treatment with **ecoclean glass+** is vital.

Safety and handling

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

Disposal:

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

Usage:

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

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.

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