TECHNICAL DATA SHEET

IGL Coatings™ Ecocoat Fabric

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IGL COATINGS ECOCOAT FABRIC

A COATING SYSTEM FOR OIL, WATER, AND DIRT REPELLENT TREATMENT OF POROUS TEXTILE SURFACES.

DESCRIPTION

ecocoat fabric is a hydrophobic, multifunctional, nearly VOC-free, water-borne silane system. The consumption of the ready-to-use product will depend on the application method, approximately 50-300 g/m^2 is sufficient for most applications.

Technical data

Property	Value	Method
Flash point	>90°C	DIN 51755
Density	1.01 g/cm^3 (at 20°C)	DIN 51757
Viscosity	1 mPA.s (at 20°C)	DIN 53015

Applications

Treatment of textile, paper, suede/nubuck leather and all other textile surfaces.

Properties

- **ecocoat fabric** can be painted, rolled or sprayed.
- In a spray application, it is mandatory to minimize the aerosol emission generated (e.g. application of HPLV spray process, air driven low-pressure spray processes).
- Consecutive application steps should be carried out before the first application is dried.
- A dried coat of **ecocoat fabric** will immediately exhibit a strong water repelling effect. Hence, a second application on dry coated surface would be less effective.
- Surface treated with **ecocoat fabric** stays completely air-permeable despite its strongly hydrophobic and oleophobic surface.
- Permeability of water vapor is only marginally influenced by **ecocoat fabric**.
- **ecocoat fabric** is sensitive to freezing temperatures. Frozen material can flocculate upon defrosting and may in part loose its beneficial properties.

Recommended dosage during application:

- Full range effectiveness and durability (up to 1500 hours of QUV-stability in transparent systems) can be achieved with 300 g/m^2 of **ecocoat fabric.**
- That amount can be applied by either one-step or multi-step procedures, depending on the absorptiveness of the substrate.

Processing

- Do not apply the product at temperature below 0°C.
- Do not expose surface to be treated to direct sunlight.
- The surface must not be hot during application.
- Provide adequate ventilation and fresh air during application.
- **ecocoat fabric** may impart slight yellowing on bright colored surfaces. A test spot is always important before application. This will by no means influence the hydrophobic and oleophobic performance of the products.

Step 1: Cleaning the surface

- The temperature during application should be in the range of 5-30°C (41-86°F), **preferably 15-25°C (59-77°F)**.
- In order to permit sufficient chemical bonding of **ecocoat fabric** to the substrate, the surface must be carefully cleaned of all contaminants. The long-term stability and abrasion resistance of the coating depends on how well **ecocoat fabric** is chemically bonded.

- Dry the surface before application**. ecocoat fabric** should **NOT** be applied on wet surfaces (humidity <18% recommended). Crosslinking on wet substrates will be incomplete and thus full efficiency will not be achieved.

Step 2: Treatment process

- Apply **ecocoat fabric** thoroughly and uniformly onto the surface until the entire surface is damp.
- Some surfaces require 2 layers due to high absorption of the surface.
- Allow the surface to dry in room temperature, or force dry after 20 minutes.
- The hydrophobic effect generally can be seen depending on the substrate, reactivity and temperature after substrate is fully dried and is further enhanced after a few hours.

Reactivity

- **ecocoat fabric** does not contain solvents and, contrary to functional alkoxysilanes, does not release alcohols upon hydrolysis when applied.
- **ecocoat fabric** boasts of a high proportion of already active silanol functions. Consequently, a chemical coupling to the substrate as well as high crosslinking density due to the formation of two- and three- dimensional networks is obtained.
- Special alkyl-functional groups contained in **ecocoat fabric** provide strong hydrophobic and oleophobic surface properties (low energy surfaces).

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.

Storage

ecocoat fabric must be stored above 0°C. Moreover, storage temperature should stay below 40°C.
In the unopened container, **ecocoat fabric** has a shelf life of at least 12 months.