

TECHNICAL DATA SHEET

IGL COATINGS™ ECOCOAT WOOD



Material no. **154319** Revision date **08.09.2023**
Version **1.17**

IGL COATINGS ECOCOAT WOOD

A COATING SYSTEM FOR OIL, WATER, AND DIRT-REPELLENT TREATMENT OF WOOD SURFACES.

Description

ecocoat wood is a hydrophobic, multifunctional, nearly VOC-free, and water-borne silane system. The consumption of the ready-to-use product will depend on the application method, approximately 50-300 g/m² 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

Hydrophobic and oleophobic surface modification of wood, concrete, and all other absorbent surfaces.

Properties

- **ecocoat wood** 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 wood** will immediately exhibit a strong water-repelling effect. Hence, a second application on dry coated surface would be less effective.
- As a fully crosslinked impregnating coating, **ecocoat wood** is extremely resistant against all kinds of atmospheric exposure (UV-irradiation, rainfall, temperature changes) but imparts only a relatively weak UV-absorbing ability. Typical fading of color under the influence of UV may thus be delayed by **ecocoat wood** but will not be inhibited.
- Surface treated with **ecocoat wood** stays completely air-permeable despite its strongly hydrophobic and oleophobic surface. Permeability of water vapor is only marginally influenced by **ecocoat wood**.

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/m² of **ecocoat wood**.
- 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 temperatures below 0°C.
- Do not expose 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.

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

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 wood** to the substrate, the surface must be carefully cleaned of all contaminants. The durability of the coating depends on how well **ecocoat wood** is chemically bonded.
- Dry the surface before application. **ecocoat wood** should **NOT** be applied on wet surfaces (humidity <18% is recommended). Crosslinking on wet substrates will be incomplete and thus full efficiency will not be achieved.

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Step 2: Treatment process

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

Reactivity

- **ecocoat wood** does not contain solvents and, contrary to functional alkoxysilanes, does not release alcohols upon hydrolysis when applied.
- **ecocoat wood** boasts a high proportion of activated silanol functional groups. 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 wood** 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 Safety Data Sheet (SDS) before using any **IGL Coatings products**. The SDS 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 dispose emptied bottles, dry the bottles out by exposing the bottles to air with the cap open. The bottles may be recycled once completely dried.

Storage

ecocoat wood must be stored above 0°C. The recommended storage temperature is 20-25°C.

ecocoat wood is storage-stable for at least 12 months in originally sealed containers.

Opened bottles should be stored properly and used up as soon as possible.

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