

Technical Data Sheet

WHITE GELCOAT

Polijel F-210-H20 White

Performance gelcoat

Product Description

Polijel F-210-H20 White is an isophthalic based , thixotropic, preaccelerated gelcoat with specific performance. **Polijel F-210-H20 White** high performance brush type gelcoat. **Polijel F-210-H20 White** has UV and atmospheric resistance in combination with chemical resistance against common chemical substances. It is produced in different colors and white.

Highlights

- High UV and atmospheric resistance
- Low water absorption
- High chemical resistance
- High thermal shock resistance
- Improved opacity and hiding power
- Easy brush application
- Efficient surface cure

Key Features

Base	ISO
Appearance	White
Versions	Brush (F-210-H20 White)
Accelerator	Yes

Typical Liquid Properties

Specification	Value	Unit	Test Method
Viscosity ¹	5000-6000	cp	ISO 2555
Thixotropy	Thixotropic	-	-
Gel Time ²	15-22	min	ISO 2535
Shelf life ³	6	months	

Remarks

¹ Viscosity measured at 25°C with Brookfield DV3T Rheometer (spindle 6, 50/5 rpm).

² Gel time measured at 25°C with 2 ml. Mek-P (Butanox M 50 - 8,9 % Active oxygen) added to 100 gr. gelcoat.

³ Please read the storage conditions.

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Application and Use

- Mix the gelcoat in bucket gently before use, avoid excessive high shear rates and avoid air entrapment during mixing. High shear rates would change the gel coat's rheological properties. Air entrapment during mixing will cause bubbles, pinholes and porosity on the gelcoat surface and film.
- Ideal application temperature should be between 18-25°C and humidity less than 80%. Mold should be polished and clean before gelcoat application. Gelcoat temperature should be between 18-25°C, colder temperatures will cause longer dry times. Temperatures more than 25°C can give faster surface cure, but if the viscosity of the gelcoat is too low, this will cause sagging of the gelcoat film.
- Add 10-12 ml of Mek-p (peroxide) for summer times and 15-20 ml of Mek-p for winter times depending on application temperature into 1 kg of gelcoat. Correct peroxide ratio dosing and even mixing is very critical for correct gelcoat application (Peroxide ratio may change according to gelcoat formulation these ratios are for gelcoats with 1% Mek-p cure system)
- Apply spray type gelcoat with a spray gun of 2,5-3,5 mm nozzle diameter at 3-5 bar spray gun pressure at a distance of 30-55 cm. Use appropriate pressure (3-4 bar) and nozzle for airless systems. Avoid high application pressures to prevent pinholes. Pressure more than 5 bar may cause pinholes and air entrapment in the gelcoat film. Pressure values more than 5 bar is not recommended except special products with special viscosities and application properties. Distances less than 30 cm would cause sagging of the gelcoat film, more than 55 cm will cause more gelcoat consumption.
- Total gelcoat film thickness should be between 600-800 µm. It is recommended to apply 100-150 µm in the first pass and wait for 2 minutes before the application of following layers.
- Obtain total gelcoat thickness in 2-4 layers with 700-800 gr/m² gelcoat. Check gelcoat thickness with a gelcoat thickness gauge.
- Correct application pressure for spray type gelcoats and film thickness is very important to prevent sagging of wet gelcoat film.
- Minimum 2, maximum of 4 layers of gelcoat application is recommended for Brush type gelcoats.
- Clean all the equipment after application.
- Check the gelcoat cure degree before starting lamination layers. Press your finger for 30 seconds on gelcoat film to check cure degree. When you do not see gelcoat residue on your finger but gelcoat to remain sticky on the film, you can continue with lamination layers.

Mechanical Properties

Cured Resin Values

Property	Value	Unit	Test Method
Heat Deflection Temperature HDT	79	°C	ISO 75-A
Heat Deflection Temperature HDT	90	°C	ISO 75-B
Water Absorption	0,14	%	ISO 0062
Barcol Hardness (Barcol 934-1)	45	-	ASTM-D 2583
Flexural Strength	143	MPa	ISO 0178
Elongation at Break, Flexural	4,4	%	ISO 0178
Tensile Strength	60	MPa	ISO 0527
Elongation at Break, Tensile	2	%	ISO 0527

Remarks

As mentioned above data is valid base resin.
Before the mechanical tests, the cured resin is post - cured.

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Handling and Storage Conditions

The product should be stored indoors in the original, unopened, damage free packaging, in a dry place at temperatures under 23°C. If the resin temperature falls below 18°C it should be warmed up to a minimum of 18°C before use. Storage and handling of flammable liquids is subject to national or local regulations so always ensure that storage complies with those regulations. Shelf life is reduced at higher temperatures and the properties of the resin might change with increased time of storage.

The shelf life of styrene containing unsaturated polyesters will be significantly reduced when exposed to light. Store in dark and in 100 % light tight containers only.

Avoid contact with food or drinks. Avoid conditions that could cause static electric discharge. Use only in wellventilated areas. Keep away from open heat, flame and sparks. Avoid contact with eyes, skin or clothing. Do not spill

on the environment. Dispose of contents and container according to local, regional and national regulations. Use personal protective equipment during use. Always keep the container closed. Prevent contact with vapors by providing sufficient ventilation of the working area, and by using approved respiratory protection. Ensure that dust from finishing operations is kept under control by collection devices and by effective ventilation.

Empty packagings are subject to same classification as the product.

A Material Safety Data Sheet of this product is available on request.

Packaging

20 kg Bucket (Ø30x38cm)

Origin Turkey - Made by

