

# Polijel F-210-ALM (Non-accelerated)

Performance gelcoat/Brush Type/Non-accelerated

## Product Description

Polijel F-210-ALM (Non-accelerated) is an isophthalic based , thixotropic, non-accelerated gelcoat with specific performance.Polijel F-210-ALM (Non-accelerated) high performance brush type gelcoat. Polijel F-210-ALM (Non-accelerated) (RAL 7046) 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	Clear
Versions	Brush (F-210-ALM)
Accelerator	No

## Typical Liquid Properties

Specification	Value	Unit	Test Method
Viscosity <sup>1</sup>	5000-8000	cp	ISO 2555
Thixotropy	Thixotropic	-	-
Gel Time <sup>2</sup>	11-16	min	ISO 2535
Shelf life <sup>3</sup>	6	months	-

### Remarks

<sup>1</sup> Viscosity measured at 23°C with Brookfield DV3T Rheometer (spindle 6, 50/5 rpm).

<sup>2</sup> Gel time measured at 23°C with 1 ml. Cobalt solution (1% Co concn.) and 1 ml. Mek-P (Butanox M 60 - 9,9 % Active oxygen) added to 100 gr.gelcoat.

<sup>3</sup> 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 15-20 ml of Mek-p into 1 kg of gelcoat. Correct peroxide ratio dosing and even mixing is very critical for correct gelcoat application.
- 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/m<sup>2</sup> gelcoat. Check gelcoat thickness with a gelcoat thickness gauge.
- 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.

## 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 well - ventilated 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.

## Legal Disclaimer

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### Warning

This product can expose you to styrene, which is known to the state of California to cause cancer. For more information, visit [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

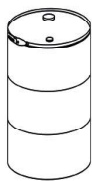
## Packaging



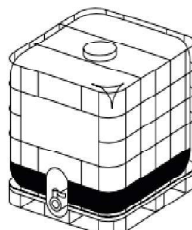
5 kg  
Mini Bucket  
Ø16x25cm



20 kg  
Bucket  
Ø30x38cm



220 kg  
Openhead Barrel  
Ø60x88cm



1.000 kg  
IBC  
121x101x117cm