

DESCRIPTION

Poltix Gelcoat Ortho is a gelcoat based on a pre-accelerated orthophthalic unsaturated polyester resin pigmented with lightfast pigments.

PRINCIPAL CHARACTERISTICS

- Thixotropic, reduces sagging on vertical surfaces;
- Pre-accelerated;
- Rapid curing;
- Semi-flexible but with excellent scratch and impact resistance;
- Protective coating for reinforced polyester laminates such as boats, auto parts, decorative sheeting, etc.;
- Excellent hiding power;
- Available in two versions: for brush application and airless application.

COLOURS AND GLOSS

49 colours according to shade card and transparent, other colours on request

BASIS PROPERTIES (AT 20 °C AND 50% R.H.)

Density	:	approx. 1,1 tot 1,3 g/cm ³ , depending on colour and type
Solid content	:	approx. 100 % (volume)
Recommended d.f.t.	:	350 - 450 µm (dry), depending on application
Full cure after	:	2 hours
Application second layer gelcoat after	:	min. 3 hours, see additional information max. 24 hours, provided free from any contamination
Laminate to be applied after	:	min. 3 hours, see additional information max. 24 hours, provided free from any contamination
H.D.T. (DIN53458)	:	approx. 65 °C
Shelf life	:	separate components, stored cool and dry in original packaging, at least 3 months
Flashpoint (DIN53213)	:	base component 34 °C hardener component 52 °C (MEK peroxide)

SPREADING RATE

At 350 µm (dry film)	:	approx. 2,4 m ² /kg
At 400 µm (dry film)	:	approx. 2,1 m ² /kg
At 450 µm (dry film)	:	approx. 1,9 m ² /kg

The practical spreading rate depends on a number of variables, such as: shape and size of object to be painted, the condition and profile of the substrate, the method of application, environmental conditions and skill of labour.

SUBSTRATE CONDITION AND TEMPERATURE

Mould : in good condition, clean and dry, free from any contamination, loose particles and other foreign matter; pre-treated with a suitable mould release agent;

During application and curing a minimum temperature of 15 °C is allowed. The temperature of the substrate should be minimum 3 °C above dew point.

INSTRUCTIONS FOR USE

Before use mix base and hardener thoroughly.

Mixing ratio : 100,0 base : 2 hardener (parts by weight)
Do not prepare more material than can be applied within the pot life of the mixture.

Induction time : None
Pot life : airless version: brush version:
5 minutes at 25 °C 10 minutes at 25 °C
10 minutes at 20 °C 15 minutes at 20 °C
15 minutes at 15 °C 20 minutes at 15 °C
The pot life depends also on colour.

Application with :

		Only airless version	
	Brush	Airless spray, external mixing	Airless spray, internal mixing
Type of thinner	n.a.	n.a.	n.a.
% of thinner	n.a.	n.a.	n.a.
Nozzle orifice	n.a.	0,016 inch	0,023 inch
Nozzle pressure	n.a.		
Cleaning with	Double Coat Degreaser, Ethyl acetate or Acetone		

Application by airless is only possible with the special airless version of Poltix Gelcoat Ortho.

ADDITIONAL INFORMATION

- Recoating Poltix Gelcoat Ortho

	15 °C	20 °C	25 °C
Minimum, with Poltix Gelcoat Ortho	4 hours	3 hours	2 hours
Minimum, with laminate	4 hours	3 hours	2 hours
Maximum, with Poltix Gelcoat Ortho	24 hours	24 hours	18 hours
Maximum, with laminate	24 hours	24 hours	18 hours

The actual minimum and maximum interval depends also on the colour.

- Recommended filmthickness
The recommended filmthickness in this datasheet is for each separate layer and depends on application method. We recommend to apply two coats. This will prevent holidays and areas with too low film thickness. Brush marks, runs and sags and areas with too low thickness might be visible in the product after release from mould. Areas with too low thickness may yellow excessively when exposed to direct sunlight.
- Application of Poltix Gelcoat Ortho
 - Use for airless application only the special airless quality of Poltix Gelcoat Ortho.
 - Use for brush application brushes with unpainted handles.
 - Apply Poltix Gelcoat Ortho evenly, without runs or sags, preferably in two coats.
 - A too low temperate will give a long gel time. The polymerisation will be incomplete. A too high temperature will shorten gel time. A too high application temperature will give a too rapid curing and will cause air entrapment.
- Pre-accelerated
Poltix Gelcoat Ortho is pre-accelerated with a combination of special accelerators and promoters.
- Chemical resistance
The resistance against chemicals (such as used in swimming pools) may vary depending on colour. Please contact our sales department for further information.

- Flame retardant quality
Poltix Gelcoat Ortho is also available in a special flame retardant quality.
- Hardener
As hardener/catalyst we recommend Butanox M50 (Akzo Nobel) or Peroxan ME50L (Pergan).
After mixing the base component with the harder the temperature of the mixture will increase rapidly due to an exothermic reaction. Do not prepare more material than can be applied within the pot life of the mixture.

SAFETY INFORMATION

This product contains solvents. Take all necessary safety measurements when using this product and arrange proper ventilation and safety equipment for all personnel. For details on safety and health see our material safety data sheet.

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Disclaimer

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