POLTIX GELCOAT M-EB

DESCRIPTION

Poltix Gelcoat M-EB is a gelcoat based on a pre-accelerated unsaturated vinylester resin.

PRINCIPAL CHARACTERISTICS

- Thixotropic, reduces sagging on vertical surfaces;
- Pre-accelerated;
- Rapid curing;
- Specifically developed as gelcoat for polyester moulds;
- Excellent scratch and impact resistance, thus preventing crack formation;
- Maximum resistance to chemicals and solvents, thus preventing dull patches after release;
- Recommended for moulds which are frequently used with a high number of product lifts;
- Semi flexible reducing risk of crack formation.

COLOURS

10 colours and transparent according to shade card, see additional information

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

Density	:	approx. 1,1 g/cm^3, depending on colour and type
Solid content	:	approx. 100 % (volume)
Recommended d.f.t.	:	500 - 850 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. 105 ºC
Shelf life	:	separate components, stored cool and dry in original packaging, at least 3 months
Flashpoint (DIN53213)	:	base component 34 ºC hardener component 52 ºC (MEK peroxide)

SPREADING RATE

At 500 µm (dry film) : approx. 1,8 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

Model : 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 ºC is allowed. The temperature of the substrate should be minimum 3 ºC above dew point.

INSTRUCTIONS FOR USE

Before use mix base and hardener thoroughly.

Mixing ratio : 100 base : 1,5 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 : 5 minutes at 25 °C
10 minutes at 20 °C
15 minutes at 15 °C
The pot life depends also on colour.

Application with :

	Brush
Type of thinner	n.a.
% of thinner	n.a.
Nozzle orifice	n.a.
Nozzle pressure	n.a.
Cleaning with	Double Coat Degreaser, Ethyl acetate or Acetone

ADDITIONAL INFORMATION

- Recoating Poltix Gelcoat M-EB

	15 °C	20 °C	25 °C
Minimum, with Poltix Gelcoat M-EB	4 hours	3 hours	2 hours
Minimum, with laminate	4 hours	3 hours	2 hours
Maximum, with Poltix Gelcoat M-EB	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 M-EB
  - Poltix Gelcoat M-EB is only recommended for brush application. Poltix Gelcoat M-EB is not suitable for airless application. Application by roller may result in thin patches.
  - Use brushes with unpainted handles.
  - Apply Poltix Gelcoat M-EB evenly, without runs or sags, preferably in two coats.
  - Avoid a too low film thickness, apply sufficient material to achieve a film thickness of at least 300 µm. Areas with a too low film thickness will not give full polymerisation and will lead to surface defects after the first use of the mould in both mould as product. These defects will be visible as dents, spots with low gloss or other irregularities.
  - A too low temperature 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 M-EB is pre-accelerated with a combination of special accelerators and promoters.

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- Available colours of Poltix Gelcoat M-EB

Colourcode	*Description*
YT 007	Transparent
YT 700	White
YT 711	Light grey
YT 721	Middle grey
YT 722	Orange

Colourcode	*Description*
YT 751	Light blue
YT 753	Blue
YT 754	Navy blue
YT 791	BLack
RAL 6010	Grass green

- Points of special attention for the model
  - The model or plug should be coated with a coating system with full resistance to styrene, e.g. Poltix Spuitplamuur and Double Coat.
  - Apply several layers of mould release agent.
  - Any surface defect visible on the model or plug will be copied to the mould!

- Points of attention for the mould
  - Put the mould into service when Poltix Gelcoat M-EB is sufficiently cured. The minimum Barcol hardness (934-1) should have a value of 35.

- 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.

Date: May-19
238-99999

Disclaimer
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