VARIOPOX UNIVERSAL RESIN

DESCRIPTION

Variopox Universal Resin is a general purpose epoxy system based on solvent free epoxy resins and polyamine adduct hardeners.

PRINCIPAL CHARACTERISTICS

- Suitable as general purpose epoxy for the protection, bonding and reinforcement of various materials;
- May be used in combination with reinforcement materials such as twaron, glass fibre or carbon fibre;
- Good resistance to various chemicals;
- Good resistance to immersion in (salt) water;
- May be recoated with IJmopox ZF primer, IJmopox HB coating, Variopox Rolcoating or Double Coat;
- Available in easy to use dispenser.

COLOURS AND GLOSS

Transparent - High gloss

BASIC PROPERTIES (AT 23°C AND 50% R.H.)

Density	:	approx. 1,1 g/cm^3 (mixed product)
Solid content	:	approx. 100 % (volume)
Recommended d.f.t.	:	depending on application
Dust dry after	:	approx. 4 hours
Full cure after	:	approx. 2 days, see additional information
Recoating interval	:	min. 24 hours, see additional information max. unlimited, provided clean and dry
Shelf life	:	separate components, stored cool and dry in original packaging, minimum 6 months
Flash point (DIN53213)	:	base component >100 °C hardener 112 °C

SPREADING RATE

Depending on application : approx. 2,0 - 4,0 m^2/kg (approx. 1,8 – 3,6 m^2/l)

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, climatologic conditions and skill of labour.

SUBSTRATE CONDITION AND TEMPERATURE

Wood	:	clean and dry, free from any contamination and loose particles, moisture content maximum 12%, pre-treated with Variopox Injection resin and sanded with grit paper P120;
Other surfaces	:	clean and dry, in good condition, free from any contamination and loose particles, sanded with grit paper P120-180;

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 components thoroughly.

Mixing ratio	:	67,0 base : 33,0 hardener (by weight) 67,0 base : 33,0 hardener (by volume) Do not prepare more material than can be applied within the pot life of the mixture.

Induction time : none at 20 °C
Pot life : 15 minutes at 25 °C
20 minutes at 20 °C
30 minutes at 15 °C

Application with:

	Brush/roller
Type thinner	n.a.
% of thinner	
Nozzle orifice	n.a.
Nozzle pressure	n.a.
Cleaning	Double Coat Degreaser

ADDITIONAL INFORMATION

- Recoating and curing Variopox Universal Resin:

	15 °C	20 °C	25 °C
Minimum, with epoxy, after sanding with grit paper P120	36 hours	24 hours	24 hours
Minimum, with Double Coat, after sanding with grit paper P180	3 days	2 days	2 days
Minimum, with Double Coat Karaat, after sanding with grit paper P180	14 days	14 days	14 days
Maximum, with epoxy or Double Coat, after sanding with grit paper P120-P180	unlimited	unlimited	unlimited
Fully cured after	4 days	2 days	2 days

- Pot life
  Do not continue application when the pot life is about to end. As the reaction between base and hardener has progressed, a poor adhesion will be the result.

- Viscosity

Component	Viscosity	Unit	Method
Variopox Universal resin base	892	mPa.s	DVII+ S2 20 rpm
Variopox Universal resin hardener	504	mPa.s	DVII+ S2 50 rpm
Variopox Universal resin set[1]	646	mPa.s	DVII+ S2 20 rpm
[1] Immediately after mixing base with hardener			

- Mechanical properties

Property	Value	Unit	Test method
• Tensile strength	41	MPa	ISO 527-3
• Elongation at break	8	%	ISO 527-3
• HDT	42	°C	ISO 75-2
• Flexural strength	75	MPa	ISO 178
• Modulus of elasticity	2612	MPa	ISO 178

- Application of Variopox Universal Resin at lower temperatures:
  Curing at temperatures lower than 15 °C will result in a sticky layer on top of the cured resin. This will negatively affect adhesion of following coatings.

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SAFETY INFORMATION

See the corresponding Material Safety Data Sheet for detailed instructions on safety, disposal and health.

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325-99999

Disclaimer
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