Vakuumdichttechnik GmbH

40789 Monheim Am Knipprather Busch 31

Technical Datasheet

Special Impregnating resin IMTEC 500

Description: Mixture of mono- and polyfunctional methacrylic monomers

Physical data of liquid resin:

Appearance:	Colourless to light yellow, clear, fluorescent on demand	
Smell:	like ester	
Flash point:	161 °C ASTM D 93	
Boiling point:	139°C at 1 hPa	
Viscosity at 20°C:	11 mPas at 22°C	
Density at 20°C:	1,07 ±0,01g/ml	
Vapour pressure at 20°C:	0,1 mbar	
Washability:	very good	
Solubility in water:	1 g/Liter	
Storage conditions:	non-catalysed:	1 year at max. 35°C
	catalysed:	½ year at max. 25°C
Gel time at 90°C:	1 - 6 Minuten degassed	
(depends on catalyst type and amount)	2 - 7 Minuten not degassed	

Physical properties of hardened resin:

Appearance:	Clear plastic with or without some cracks. Fluorescent execution to retrieve the plastic in the porosity of the castings using an UV-lamp.
Density:	1,4 g/ml
Shrinkage:	≈ 15%
Hardness:	95 Shore D
Temperature range:	-50°C to +180°C, short time up to +200°C
Chemical resistance:	Chemical resistance list is available upon request.
Pressure resistance:	according to ambient material
Heat conductivity:	0,18°C W/m K (*)
Specific heat:	1,47 KJ/kg K (*)
Surface resistance:	$10^{15}\Omega$ DIN 53482 (*)
Specific volume resistance:	$>10^{15}$ Ω cm DIN 53482 (*)
Dielectric number DIN53483:	3,5 ±0,4 at 50 Hz (*)
	2,7 ±0,5 at 10^{6} Hz (*)
Dielectrical breakdown voltage:	450±50 kV DIN 53481 (*)
Dielectric loss factor DIN 53483:	0,05 ±0,01 tan α at 50Hz (*)
	0,022 ±0,018 tan α at 10^{6} Hz (*)

(*) No defined values but typical values for this type of resin.

All information is given without obligation. Our general business terms and conditions apply.

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