

### VIAPAL UP 355 E/66

**UP-resin**

**based on orthophthalic acid  
medium viscosity  
high reactivity  
non-accelerated**

**for universal application**

**VIAPAL UP 355 E/66** is a medium viscous, unsaturated polyester resin of high reactivity dissolved in styrene.

**VIAPAL UP 355 E/66** is a universal type specially for

hand lay-up  
spray moulding  
vacuum process  
hot press moulding  
cold press moulding  
centrifugal moulding  
filament winding

**VIAPAL UP 355 E/66** can be thinned with styrene in any ratio, however, additions of more than 10% are not recommended since the mechanical properties will be adversely influenced.

#### Specification of VIAPAL UP 355 E/66 - as supplied

Properties		Unit	Test Method
Viscosity at 20°C	210 - 270	s	DIN 53211
Non-volatile matter (NVC)	66 ± 2	% b.w.	DIN 53216
Styrene compatibility	unlimited	--	DIN 55955-B
Colour index	max. 2	JFZ	DIN 6162
Density at 20°C	1.13	g/cm <sup>3</sup>	DIN 53217/2
Shrinkage on curing	7.0	% b.v.	DIN 16945/6.5
Flash point	about 35	°C	DIN 53213
Storage stability at max. 25°C in darkness	6	months	--
Geltime at 20°C with 2.0% MEKP 1.0% Co 1	8 ± 4	minutes	DIN 16945/6.3.1.2

### Data of cured VIAPAL UP 355 E/66

Properties		Unit	Test Method
Barcol hardness (935)	84	--	--
Density at 20°C	1.21	g/cm <sup>3</sup>	DIN 53479
Refractive index n <sup>20</sup> <sub>D</sub>	1.557	--	DIN 53491
Tensile strength	55	N/mm <sup>2</sup>	DIN 53455
Elongation	2.0	%	DIN 53455
Flexural strength	110	N/mm <sup>2</sup>	DIN 53452
Modulus of elasticity	3200	N/mm <sup>2</sup>	DIN 53457
Impact strength	7	kJ/m <sup>2</sup>	DIN 53453
Impact strength with notch	1.0	kJ/m <sup>2</sup>	DIN 53453
Compressive strength	160	N/mm <sup>2</sup>	DIN 53454
Hardness after 10 sec	175	N/mm <sup>2</sup>	VDE 0302
Water absorption	0.3	%	DIN 53495

### Mechanical properties of glass fiber reinforced VIAPAL UP 355 E/66

Properties	Laminate with 30% glassfibre chopped strand mat		
		Unit	Test Method
Tensile strength at break	100	N/mm <sup>2</sup>	DIN 53455
Elongation	1.9	%	DIN 53455
Flexural strength	180	N/mm <sup>2</sup>	DIN 53452
Modulus of elasticity	7000	N/mm <sup>2</sup>	DIN 53457
Impact strength	65	kJ/m <sup>2</sup>	DIN 53453
Impact strength with notch	51	kJ/m <sup>2</sup>	DIN 53453
Compressive strength	225	N/mm <sup>2</sup>	DIN 53454
Martens temperature	95	C°	DIN 53458