Technical Data Sheet

Durostone® UPR S19

GFK-UP

Typical characteristics

- High mechanical strength
- High dielectric strength
- Vinyl ester (VE) thermoset reinfored with e-glass fabric

Typical industries

- Transformer
- Oil-filled transformers
- Dry transformers
- Electrical Industry
- Electrical Insulating Components

	Test method	Unit	Guideline value
Mechanical properties			
Density	ISO 1183	g / cm^3	1,95
Flexural strength ⊥	ISO 178	MPa	470
Modulus of elasticity in flexion ⊥	ISO 178	MPa	25000
Compressive strength ⊥	ISO 604	MPa	450
Compressive strength II	ISO 604	MPa	250
Tensile strength II	ISO 527	MPa	400
Impact strength II (Charpy)	ISO 179	kJ / m^2	200
Thermal properties			
Temperature index	IEC 60216	T.I.	155
Insulation class	IEC 60085	/	F
Physical properties			
Water absorption (4mm thickness)	ISO 62	%	0,1
Dielectrical properties			
Electric strength 90°C under oil ⊥	IEC 60243	kV / mm	15
Electric strength 90°C under oil II	IEC 60243	kV/25mm	75
Relative permittivity (50 Hz)	IEC 60250	ε_r	≈ 5
Specific surface resistance	IEC 60093	Ω	10^{10}
Comparative tracking index	IEC 60112	CTI	600

⊥ = perpendicular to the lamination II = parallel to the lamination

The data stated above are average values verified on the basis of regular statistical tests and controls. All information in this publication is based on current technical

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