

## Technical Data Sheet

## Durostone® EPR S1

### Typical characteristics

- High mechanical and dielectric strength

### Typical industries

- Generator and Motor
- HVDC Transmission
- Building industry
- Topside
- Electrical Industry

	Test method	Unit	Guideline value
<b>Mechanical properties</b>			
Density	ISO 1183	g / cm <sup>3</sup>	1,9
Flexural strength <sup>⊥</sup>	ISO 178	MPa	500
Modulus of elasticity in flexion <sup>⊥</sup>	ISO 178	MPa	20000
Compressive strength <sup>⊥</sup>	ISO 604	MPa	300
Tensile strength II	ISO 527	MPa	400
Impact strength II (Charpy)	ISO 179	kJ / m <sup>2</sup>	100
Delamination force II	DIN 53463	N	4000
<b>Thermal properties</b>			
Thermal conductivity <sup>⊥</sup>		W / (m * K)	0,3
Coefficient of linear expansion II	TMA (Mettler)	10 <sup>-6</sup> x K <sup>-1</sup>	10 - 20
Temperature index	IEC 60216	T.I.	180
Insulation class	IEC 60085	/	H
<b>Dielectrical properties</b>			
Electric strength 90°C under oil <sup>⊥</sup>	IEC 60243	kV / mm	13
Relative permittivity (50 Hz)	IEC 60250	ε <sub>r</sub>	≈ 5
Specific surface resistance	IEC 60093	Ohm	10 <sup>13</sup>
Specific volume resistance	IEC 60093	Ω x cm	10 <sup>14</sup>
Comparative tracking index	IEC 60112	CTI	225

= 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 knowledge and experience. Due to the large number of possible influences during processing and application, it does not exempt the user/processor from carrying out their own

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