

## Technical Data Sheet

# Durostone<sup>®</sup> UPR S19

### Typical characteristics

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

### Typical industries

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

	Test method	Unit	Guideline value
<b>Mechanical properties</b>			
Density	ISO 1183	g / cm <sup>3</sup>	1,95
Flexural strength <sup>⊥</sup>	ISO 178	MPa	470
Modulus of elasticity in flexion <sup>⊥</sup>	ISO 178	MPa	25000
Compressive strength <sup>⊥</sup>	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 <sup>2</sup>	200
<b>Thermal properties</b>			
Temperature index	IEC 60216	T.I.	155
Insulation class	IEC 60085	/	F
<b>Physical properties</b>			
Water absorption (4mm thickness)	ISO 62	%	0,1
<b>Dielectrical properties</b>			
Electric strength 90°C under oil <sup>⊥</sup>	IEC 60243	kV / mm	15
Electric strength 90°C under oil II	IEC 60243	kV/25mm	75
Relative permittivity (50 Hz)	IEC 60250	ε <sub>r</sub>	≈ 5
Specific surface resistance	IEC 60093	Ohm	10 <sup>10</sup>
Comparative tracking index	IEC 60112	CTI	600

= perpendicular to the lamination II = parallel to the lamination

### Röchling Industrial SE & Co. KG

Röchlingstr. 1 • 49733 Haren (Ems)/Germany (DE) • Tel. +49 5934 701-0  
 info@roechling-plastics.com • www.roechling.com/industrial/haren

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[info@roechling-plastics.com](mailto:info@roechling-plastics.com) • [www.roechling.com/industrial/haren](http://www.roechling.com/industrial/haren)

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