

## DOGLAS® 180G

<b>Product description</b>	Engineered composite material made of resin-bound glass fabric
<b>Standard colour</b>	yellow, brown
<b>Main applications</b>	Electrical and thermal insulation parts for machine engineering and process industry
<b>Delivery program</b>	Sheets, panels and highly precise machined parts and finished components

### ➔ Physical characteristics

Properties	Test Standard	Unit	Typical value
Specific gravity	ISO 1183	g/cm <sup>3</sup>	1,85
Water absorption	ISO 62	%	0,1

### ➔ Thermal characteristics

Properties	Test Standard	Unit	Typical value
Operating temperature, continuous	–	°C	180
Operation temperature, short-term	–	°C	210
Coeff. of linear thermal expansion	DIN 51045	10 <sup>-6</sup> x K <sup>-1</sup>	15
Thermal conductivity	DIN 52612	W/mK	0,3

### ➔ Mechanical characteristics

Properties	Test Standard	Unit	Typical value
Compressive strength at 23 °C	ISO 604	N/mm <sup>2</sup>	600
Compressive strength at 200 °C	ISO 604	N/mm <sup>2</sup>	260
Flexural strength at 23 °C	ISO 178	N/mm <sup>2</sup>	450
Modul of elasticity	ISO 178	N/mm <sup>2</sup>	20000
Tensile strength	ISO 527	N/mm <sup>2</sup>	400
Split load	DIN 53463	N	3500

### ➔ Electrical characteristics

Properties	Test Standard	Unit	Typical value
Comparative tracking index	IEC 112	-	CTI 350
Permittivity	DIN 53483	-	5,1
Electric strength (I)	IEC 243-1	KV/3 mm	30
Electric strength (II)	IEC 243-1	KV/25 mm	36

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The standard values shown in this data sheet are measured by standard test methods. Depending on operation terms and dimensions the material properties can differ from these values.

Please contact our applications and sales engineers to clarify the suitability of the material for your application.