

Product Data Sheet EP GC 205 EN

2020046

Property	Method of testing	Unit	max. or min.	Ref. Value IEC 60893-3-2	Test value (median)
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Mechanical properties

Flexural stress at rupture perpendicular to laminations	ISO 178 RT	MPa	min.	340	474,94
	130 °C				335,43
	150 °C			170	194,86
Apparent modulus of elasticity in flexure	ISO 178 RT	MPa	min.	22000*	21.113
	130 °C				17.122
	150 °C				10.791
Compressive strength perpendicular to laminations	ISO 604	MPa	min.	350*	481,15
Impact strength (Charpy) parallel to laminations	ISO 179/3C	kJ/m ²	min.	70	A 223,42 B 204,75
Shearing strength parallel to laminations	VDE 0318/2	MPa	min.	30*	
Tensile strength	ISO 527-4	MPa	min.	300*	353,23

Electrical properties

Electric strength at 90°C in oil perpendicular to laminations	IEC 60243-1	kV/mm	min.	10,2**	13,84
Breakdown voltage at 90°C in oil parallel to laminations	IEC 60243-1	kV	min.	45	50
Insulation resistance after immersion in water	IEC 60167	MOhm	min.	50.000	961.000
Proof tracking index PTI	IEC 60112	PTI			
Comparative tracking index CTI	IEC 60112	CTI	min.	180*	
Tracking and erosion resistance	IEC 60112	Klasse	min.		

other properties

Thermal endurance	IEC 60216	T.I.		155*	in Prüfung
Density	ISO 1183	g/cm ³		1,8 - 2,0*	1,842
Water absorption, absolute	ISO 62	mg	max.	23***	10,60

Glass transition temperature	DSC	°C	min	155	173,6
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Base material Roving cloth
Matrix resin: Epoxy (epoxide)

* Typical values as per IEC 60893-4. They shall not be considered as specification requirements.

** for thickness $\geq 3,0$ mm

*** for test specimens 50 x 50 x 4 mm

Test values are derived from an average type test

RoHS- Declaration

This material does not contain any substances of very high concern as listed in the EU directive 2011/65/EU, article 4, paragraph 1