

Technical Data Sheet

EP GC 205

EP GC 205 acc. to EN 60893 (Hgw 2370.4 acc. to DIN 7735) – glass-roving-fabric-reinforced epoxy resin with very good mechanical and dielectric properties at an elevated limiting temperature

Typical Properties

- Very good mechanical strength
- Very good dielectric properties
- Elevated limiting temperature (155 °C, thermal class F)
- Thermoset laminate (dimensionally stable)
- Good machinability
- Colour green

Typical Industries

- Electrical engineering and switchgear construction (medium voltage)
- Mechanical and plant engineering (high-strength insulating parts)
- Power transmission engineering
- Jig, fixture and tool making
- Test and measurement engineering
- Applications with elevated operating temperature

	Test Method	Unit	Value
Mechanical Properties			
Flexural strength	DIN 53452	MPa	350
Tensile strength	DIN 53455	MPa	220
Compressive strength	DIN 53454	MPa	180
Impact strength	DIN 53453	kJ / m ²	100
Notched impact strength	DIN 53453	kJ / m ²	70
Bond strength (splitting force)	DIN 53463	N	3000
Modulus of elasticity	DIN 53452	MPa	16 · 10 ³
Electrical Properties			
Volume resistivity	DIN 53482	Ω	10 ¹⁰
Electric strength / ⊥	DIN 53481	kV	40 / 40
Dielectric loss factor (1 MHz)	DIN 53483		0.04
Dielectric constant	DIN 53483		5
Comparative tracking index CTI	IEC 112		200
Electrolytic corrosion	DIN 53489		AN 1.4
Thermal Properties			
Limiting temperature	VDE 0304, T.21	°C	155

	Test Method	Unit	Value
Thermal conductivity	DIN 52612	W / (m·K)	0.3
Coefficient of linear thermal expansion	VDE 0304	10 ⁻⁶ / K	10-20
Thermal class	VDE 0534		F
General Properties			
Resistance to glow heat	DIN 53459		2a
Density	DIN 53479	g / cm ³	1.7-1.9
Water absorption (5 mm thickness)	DIN 53495	mg	30
Colour			green

EP GC 205 (Hgw 2370.4 acc. to DIN 7735) is a glass-roving-fabric-reinforced epoxy-resin laminate per EN 60893 with very good mechanical and dielectric properties at an elevated limiting temperature (155 °C, thermal class F) compared with standard grades. The values stated are typical properties and are subject to the usual manufacturing tolerances; they serve as an aid to material selection and do not constitute a legally binding guarantee of specific properties. Actual values may vary somewhat depending on manufacturer and sheet thickness. EP GC 205 is not declared for direct food contact.