

Technical Data Sheet

EP GC 203 (Hgw 2372.4)

EP GC 203 acc. to EN 60893 / Hgw 2372.4 acc. to DIN 7735 – glass-fabric laminate with epoxy resin, elevated temperature limit (155 °C)

Typical Properties

- Very high mechanical strength
- Elevated temperature limit (155 °C)
- Low water absorption
- Very good electrical insulation properties
- Thermoset laminate (dimensionally stable)
- Colour green

Typical Industries

- Electrical engineering and switchgear construction (medium voltage)
- Transformer and apparatus manufacturing
- Mechanical and plant engineering (high-strength insulating parts)
- Jig, fixture and tool making
- Test and measurement engineering
- Drive technology

	Test Method	Unit	Value
Mechanical Properties			
Flexural strength	DIN 53452	MPa	530 (DIN 7735: 350)
Flexural strength at elevated temperature	DIN 53452	MPa	295 (DIN 7735: 175)
Tensile strength	DIN 53455	MPa	320 (DIN 7735: 220)
Compressive strength	DIN 53454	MPa	320 (DIN 7735: 150)
Impact strength	DIN 53453	kJ / m ²	145 (DIN 7735: 100)
Notched impact strength	DIN 53453	kJ / m ²	60 (DIN 7735: 50)
Bond strength (splitting force)	DIN 53463	N	4200 (DIN 7735: 3000)
Modulus of elasticity	DIN 53452	MPa	28 · 10 ³ (DIN 7735: 18 · 10 ³)
Electrical Properties			
Surface resistivity	DIN 53482	Ω	10 ¹² (DIN 7735: 5 · 10 ¹⁰)

	Test Method	Unit	Value
Electric strength $\parallel$ / $\perp$	DIN 53481	kV	80 / 70 (DIN 7735: 40 / 40)
Dielectric dissipation factor (1 MHz)	DIN 53483		0.03 (DIN 7735: 0.05)
Dielectric constant	DIN 53483		5
Comparative tracking index CTI	IEC 60112		210 (DIN 7735: 200)
Electrolytic corrosion (tracking)	DIN 53489		AN 1.2 (DIN 7735: AN 1.4)

Thermal Properties

Temperature limit	VDE 0304	°C	155
Thermal conductivity $\parallel$ / $\perp$	DIN 52612	W / (m·K)	0.3 / 0.25
Coefficient of linear expansion $\parallel$ / $\perp$	VDE 0304	10^{-6} / K	10-20 / 15
Thermal class	VDE 0534		F

General Properties

Density	DIN 53479	g / cm ³	1.7-1.9 (typical 1.85)
Water absorption (5 mm thickness)	DIN 53495	mg	15 (DIN 7735: 30)
Glow resistance	DIN 53459		2a
Colour			green

EP GC 203 (Hgw 2372.4) is a glass-fabric reinforced epoxy resin laminate to DIN 7735 / EN 60893 with an elevated temperature limit (155 °C) compared with the standard grade. The values stated comprise the minimum requirement to DIN 7735 as well as the typical measured value; they are subject to normal production tolerances and serve as an aid to material selection. They are not a legally binding assurance of specific properties. EP GC 203 (Hgw 2372.4) is not declared for direct food contact.