

Technical Data Sheet

EP GM 203

EP GM 203 acc. to EN 60893 – glass-mat reinforced epoxy resin hard laminate ("hartmatte"), high mechanical strength at a limiting temperature of 180 °C

Typical Properties

- Glass-mat reinforced epoxy resin hard laminate ("hartmatte")
- High mechanical strength, even at elevated temperature
- High limiting temperature (180 °C)
- Good electrical insulation performance
- Thermoset laminate (dimensionally stable)
- Good machinability
- Colour yellow-brown

Typical Industries

- Electrical engineering and switchgear construction (high-temperature applications)
- Power supply and transformer engineering
- Mechanical and plant engineering
- Jig, fixture and tool making
- Aerospace and rail technology
- General mechanical component manufacturing

	Test Method	Unit	Value
Mechanical Properties			
Flexural Strength 23°C	ISO 178	N/mm ²	≥360
Flexural Strength 150°C	ISO 178	N/mm ²	≥200
Flexural Strength 180°C	ISO 178	N/mm ²	≥100
Tensile Strength	ISO 527	N/mm ²	≥250
Compressive Strength ⊥ to Laminations	ISO 604	N/mm ²	≥600
Modulus of Elasticity (Flexural) ⊥	ISO 178	N/mm ²	≥20000
Notched Impact Strength	ISO 179	kJ/m ²	≥50
Electrical Properties			
Comparative Tracking Index CTI	IEC 60112	–	180
Electric Strength (90°C, oil)	IEC 60243-1	kV	≥60
Electric Strength ⊥ (90°C, 3 mm)	IEC 60243-1	kV/mm	≥13
Insulation Resistance after Water Immersion	IEC 60167	Ω	≥5 · 10 ⁹
Thermal Properties			
Limiting Temperature	EN 60893	°C	180
Thermal Conductivity	ISO 8302	W/(m·K)	0.35
General Properties			

	Test Method	Unit	Value
Density	ISO 1183	g/cm ³	2.0
Water Absorption	ISO 62-1	mg	≤40
Colour			yellow-brown

EP GM 203 is a glass-mat reinforced hard laminate made of epoxy resin ("hartmatte") to EN 60893, designed for high mechanical strength at a limiting temperature of 180 °C. The values stated are typical, researched properties based on common publicly available data sheet information for this product type; they are subject to the usual manufacturing tolerances and serve as an aid to material selection. They are not a legally binding warranty of specific properties. Actual values may vary depending on manufacturer and sheet thickness. EP GM 203 is not declared suitable for direct food contact.

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