

Epratex® EP GC 203

This glass epoxy is prepared from glass cloth impregnated with epoxy system. EP GC 203 glass epoxy can be used as a high quality construction material as well as an electric insulation material in various machines and equipments, especially in those areas, where thermal resistance is coupled with high mechanical strength requirements.

General properties	Test method	Value	Unit
ISO code	ISO 1183	EP-GC 203	
Density	ISO 1183-1	1.85	g/cm ³
Water absorption (thickness 3 mm)	ISO 62/1	0.06	%
Mechanical properties			
Flexural strength at 20°C perpendicular to laminations	ISO 178	490	MPa
Flexural modules of elasticity	ISO 178	25000	MPa
Charpy impact strength - notched - parallel to	ISO 179/3 C	90	kJ/m ²
Tensile strength	ISO 527	370	MPa
Compressive strength perpendicular to laminations	ISO 604	560	MPa
Shearing strength parallel to laminations	IEC 893-2	55	MPa
Insulation resistance after immersion in water	IEC 167	3x10 ⁷	MΩ
Electrical properties			
Dielectric strength in oil 90°C perpendicular to laminations	IEC 243	14.7	kV/mm
Breakdown voltage perpendicular to laminations	IEC 243	60	kV
Breakdown voltage parallel to laminations	IEC 243	n/a	kV
Permittivity at 1 MHz	IEC 250	5.5	-
Dissipation factor at 50 Hz	IEC 250	0.01	-
Dissipation factor at 1 MHz	IEC 250	0.05	-
Comparative tracking index (CTI)	IEC 112	180	-
Thermal endurance	IEC 216	155	T.I.
Flammability	UL 94	n/a	-

Date of issue: 8-okt-2020

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