

Physical properties Cevodur 10G44

comparable standards:

 ISO-description (ISO)
description (to DIN 7735)

 EP GC 203
Hgw 2372.4 (plate)

Property	Method of testing	Unit	max./min.	Ref. Value DIN-EN 60893-3-4	Test value Median
Mechanical properties					
Flexural stress at rupture perpendicular to laminations	ISO 178 RT 130°C 150°C	MPa	min.	340 170	452.14 287.27 198.87
Apparent modulus of elasticity in flexure	ISO 178 RT 130°C 150°C	MPa	min.	22000*	22551 17802 16287
Compressive strength perpendicular to laminations	ISO 604	MPa	min.	350*	504.52
Impact strength (Charpy) parallel to laminations	ISO 179/3C	kJ/m ²	min.	50	A 103.52 B 103.55
Shearing strength parallel to laminations	VDE 0318/2	MPa	min.	30*	
Tensile strength	ISO 527-4	MPa	min.	300*	A 342.25 B 303.22

This table is a valuable help in the choice of a material. The data listed here fall within the normal range of products properties, but they should not be used to establish material specification limits nor used alone as the basis of design.

Electrical properties					
Electric strength at 90°C in oil perpendicular to laminations	IEC 60243-1	kV/mm	min.	10.2**	13.61
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	MΩ	min.	50'000	315.000
Proof tracking index PTI	IEC 60112	PTI			
Comparative tracking index CTI	IEC 60112	CTI	min.	200*	200
Tracking and erosion resistance	IEC 60112	Klasse	min.		

Other properties					
Thermal endurance	IEC 60216	T.I.		130*	155
Density	ISO 1183	g/cm ³		1.8-2.0*	1.805
Water absorption, absolute	ISO 62	mg	max.	23***	8.00

Base material: Woven glass cloth

Matrix resin: Epoxy (epoxide)

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

** for thickness ≥ 3.0 mm

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

Test values are derived from an average type test