

Physical properties Cevodur WHA - plate

comparable standards: ISO-description (ISO) PF CC 201
description (to DIN 7735) Hgw 2082 (plate)

Property	Method of testing	Unit	max./min.	Ref. Value DIN-EN 60893-3-4	Test value Median
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Mechanical properties

Flexural stress at rupture perpendicular to laminations	ISO 178	MPa	min.	100	129
Apparent modulus of elasticity in flexure	ISO 178	Mpa	min.	7000*	6902
Compressive strength perpendicular to laminations	ISO 604	Mpa	min.	-	290.94
Impact strength (Charpy) parallel to laminations	ISO 179/3C	kJ/m ²	min.	8.8	22.46
Shearing strength parallel	VDE 0318/2	Mpa	min.	25*	52.83
Tensile strength	ISO 527-4	Mpa	min.	80*	92.48

Electrical properties

Electric strength at 90°C in oil perpendicular to laminations	IEC 60243-1	kV/mm	min.	0.5**	1.66
Breakdown voltage at 90°C in oil parallel to laminations	IEC 60243-1	kV	min.	1	5
Insulation resistance after immersion in water	IEC 60167	Mohm	min.	1	20.10
Comparative tracking index CTI	IEC 60112	CTI	min.	100*	150

Other properties

Thermal endurance	IEC 60216	T.I.		120*	
Density	ISO 1183	g/cm ³		1,3 – 1,4*	1.372
Water absorption, absolute	ISO 62	mg	max..	319***	207.80
Fire behaviour and fire side effects	DIN 5510 T.2				S4; SR2; ST2
Smoke gas toxicity	DIN 5510 An. C	FED		<1	0.21

Base material: Woven cotton cloth

Matrix resin: Phenolic

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

** for thickness >=3,0mm

*** for test specimens 50 x 50 x10 mm

Test values are derived from an average type test

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.