

Product Data Sheet MKHP

Property	Method of test	Unit	max. or min.	Ref. Value PF CP 201	Test value (median)
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Mechanical properties

Flexural stress at rupture perpendicular to laminations	ISO 178	MPa	min.	135	A 174,61 B 136,08
Apparent modulus of elasticity in flexure	ISO 178	MPa	min.	7000*	A 12663 B 9294
Compressive strength perpendicular to laminations	ISO 604	MPa	min.	300*	316,86
Impact strength (Charpy) parallel to laminations	ISO 179/3C	kJ/m ²	min.		A 17,26 B 12,41
Shearing strength parallel to laminations	VDE 0318/2	MPa	min.	10*	A 26,11 B 27,75
Tensile strength	ISO 527-4	MPa	min.	120*	A 145,98 B 103,55

Electrical properties

Electric strength at 90°C in oil perpendicular to laminations	IEC 60243-1	kV/mm	min.	-	6,78
Breakdown voltage at 90°C in oil parallel to laminations	IEC 60243-1	kV	min.	-	20
Insulation resistance after immersion in water	IEC 60167	MΩm	min.	-	347
Proof tracking index PTI	IEC 60112	PTI			
Comparative tracking index CTI	IEC 60112	CTI	min.	100*	600
Tracking and erosion resistance	IEC 60112	Klasse	min.		

other properties

Thermal endurance	IEC 60216	T.I.		120*	
Density	ISO 1183	g/cm ³		1,3 - 1,4*	1,447
Water absorption, absolute	ISO 62	mg	max.	920*	128,100
Water absorption, relative	ISO 62	%	max.		0,2 - 0,4

Base material: Cellulose paper
Matrix resin: Phenolic
Melamine in the liner

* for test specimens 50 x 50 x 10 mm
Test values are derived from an average type test

RoHS- Declaration This material does not contain any substances of very high concern as listed in the EU directive 2011/65/EU, article 4, paragraph 1