

Mechanical properties

Properties	Test Method	Unit	Values
Apparent density*	DIN 53479/ISO 1183	g/cm ³	~ 1,43
Tensile stress at yield (tensile strength)	DIN 53455/ISO 527	MPa	≥ 55
Elongation at tear	DIN 53455/ISO 527	%	≥ 15
Flexural strength	DIN 53452/ISO 178	MPa	≥ 80
Compressive strength	DIN 53454/ISO 3605	MPa	≥ 70
Modulus of elasticity	DIN 53457/ISO 527-2/1A/50	MPa	≥ 3000
Notched impact strength	DIN 53453/ISO 179-1ePA	KJ/m ²	≥ 4
Impact strength	DIN 53453/ISO 179	KJ/m ²	
0 °C			no failure
-20 °C			-
-30 °C			-
-40 °C			-
Ball indentation hardness (358 N/30 s)	DIN 53456/ISO 2039	MPa	~ 100
Shore hardness	D DIN 53505		82

Thermal properties

Properties	Test Method	Unit	Values
Vicat softening temperatures	DIN 53460/ISO 306 (process B50)	°C	≥ 75
Deflection temperature	DIN 53461/ISO 75	°C	~ 68
Coefficient of linear thermal expansion (from -30°C to +50°C)	DIN 53752 (process Ae)	mm/mK	0.08
Thermal conductivity (from 0°C to 60°C)	DIN 52612	W/mK	0.16

Electrical Properties

Properties	Test Method	Unit	Values
Dielectric constant Er (at 1 kHz)	VDE 0303 T4	-	3.4
Dielectric dissipation factor tan δ (at 1 kHz)	VDE 0303 T4	-	0.016
Surface resistance	DIN VDE 0303 T30 / DIN IEC 93	Ω	10 ¹⁵
Volume resistivity	DIN VDE 0303 T30 / DIN IEC 93	Ω • m	10 ¹⁴
Dielectric strength	DIN VDE 0303 T21 – 1 mm sheet	KV/mm	≥ 23
Tracking resistance	DIN IEC 112	Grade	CTI 600
Arc resistance	DIN VDE 0303 T5	Ident. No.	2.2.2.2

Other properties

Properties	Test Method	Unit	Values
Water absorption after 7 days	DIN 53495	%	< 0.08
Fire behaviour	DIN 4102- B 1	-	1-3 mm
	UL 94 (USA) File E100599	-	≥ 1 mm
	BS476 Part 7	Class 1	
	BS476 Part 6	Class 0**	

*These are standard values which apply to an average density.

**When adhered to a non-combustible substrate