









Physical properties Cevodur 6G 91

comparable standards: ISO-description (ISO) PI GC 301

The most temperature-resistant material of all types. Retains its outstanding mechanical properties even at very high application temperatures. Used as thermal insulation plates in moulds, dies, casting tools, presses and similar applications where the requirements for compression strength and temperature resistance are rigorous. See the graph.

Property		Method	Thickness	unit	value	
Mechanical properties						
Flexural strengt at RT		ISO 178	≥ 1.6 mm	MPa	450	*1
Flexural strengt at elevated temp. 200°C		ISO 178	≥ 1.6 mm	MPa	360	
Modulus of elasticity		ISO 178	≥ 1.6 mm	MPa	25000	*1
Compressive strength		ISO 604	≥ 5.0 mm	MPa	650	*1
Izod impact strength, parallel		ISO 180/2A	≥ 5.0 mm	kJ/m ²	55.0	*1
Shearing strength, parallel		IEC 60893-2	≥ 5.0 mm	MPa	55.0	*1
Tensile strength		ISO 527	≥ 1.6 mm	MPa	300	*1
Electrical properties						
Electric strength in oil at 90°C		IEC 60243-1	3.0 mm	kV/mm	20	*2
Electric strength in oil at 90°C		IEC 60243-1	≥ 3.0 mm	kV/25mm	60	*2
Permittivity 50 Hz		IEC 60250	≥ 1.6 mm		4.0	*3
Permittivity 1 MHz		IEC 60250	≥ 1.6 mm			
Dissipation factor 50 Hz		IEC 60250	≥ 1.6 mm		0.10	*3
Dissipation factor 1 MHz		IEC 60250	≥ 1.6 mm			
Insulation resistance after immersion in water 1 MHz		IEC 60167	Alle	MΩ	500000	*4
Comparative tracking index		IEC 60112	≥ 3.0 mm	CTI	250	*1
Physical and thermal properties						
Thermal endurance index 20 000 h (T.I.)		IEC 60216	≥ 3.0 mm	°C	200	
Flammability		IEC 60695	4.0 mm		V-0	*1
Density		ISO 1183-A	Alle	g/cm ³	1.95	*1
Water absorption		ISO 62-1	50x50x3mm	mg	25.0	*4

Base material: Glass fabric
Matrix resin: Polyimid

* Conditioning

- 1: 24h/23°C/50%RH
- 2: 24h/23°C/50%RH + 1h/Öl 90°C
- 3: 96h/105°C + 1h/23°C/20%RH
- 4: 24h/50°C + 24h/Wasser 23°C
- 5: 96h/105°C + 1h/Öl 90°C

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.