

PEEK-mod

	Test method	Unit	Value
Physical Properties			
Specific gravity	ISO 1183	g/cm ³	1,45
Water absorption	ISO 62	%	0,3
Humidity absorption	ISO 62	%	0,04
Maximum permissible service temp.	UL746B	°C	260
Lower permissible service temp.	UL746B	°C	-
Mechanical Properties			
Tensile strength at yield	ISO 527	MPa	85
Elongation at yield	ISO 527	%	7
Tensile strength at break	ISO 527	MPa	83
Elongation at break	ISO 527	%	7
Impact strength	ISO 179	kJ/m ²	30
Notch impact strength	ISO 179	kJ/m ²	5
Ball indentation, Rockwell hardness	ISO 2039	MPa	-
Shore -D	ISO 368	-	85
Flexural strength	ISO 178	MPa	140
Modulus of elasticity	ISO 527	MPa	5920
Thermal Properties			
Vicat-softening point. VST/B/50	ISO 306	°C	-
Vicat-softening point. VST/A/50	ISO 306	°C	-
Heat deflection temperature HDT/B	ISO 75	°C	-
Heat deflection temperature HDT/A	ISO 75	°C	315
Coef. of linear thermal expansion	ISO 11359	K ⁻¹ *10 ⁻⁴	0,3
Thermal conductivity	ISO 22007-4	W/(m*K)	0,82
Glass transmission temperature	ISO 3146	°C	146
Melting temperature	ISO 3146	°C	341
Electrical Properties			
Volume resistivity	IEC 60093	Ω*cm	≥10 ¹⁰
Surface resistivity	IEC 60093	Ω	≤10 ⁵
Dielectric Iconstant at 1MHz	IEC 60250	-	-
Dielectric loss factor at 1MHz	IEC 60250	-	-
Dielectric strength	IEC 60243-1	kV/mm	-
Tracking resistance	IEC 60112	V	-
More Properties			
Bondability	-	-	0
Physiological indifference according	EEC FDA	- -	- +
Flammability	UL 94	-	V-0
Limiting Oxygen Index	ASTM D2863	%	-
UV stabilisation	-	-	+

Explanation of symbols:

n.b.	= no break
+	= yes
o	= limited
-	= no

All specifications are deemed to be approximate values and may vary depending on the processing methods used and the specimen or test piece. In general, data specified applies to average values measured on extruded sheets with a thickness of 4mm. Deviations from the values specified are possible if the sheets in this thickness are not available. Information presented herein cannot necessarily be applied to finished items or products. Suitability of materials for a specific field of application must be assessed by the party responsible for processing or the end-user. All technical specifications presented herein are designed merely to provide assistance in terms of project planning. Under no circumstances do they constitute a guaranteed property or quality of the items presented.