

Technical Data Sheet

PBT GF30 natural

PBT, glass-fibre reinforced 30 %

Typical Properties

- Glass-fibre reinforced PBT compound with high stiffness
- Very low moisture absorption, high dimensional stability

Typical Industries

- Electronics
- Mechanical Engineering
- Vehicle Construction

	Test Method	Unit	Value
General Properties			
Density	DIN EN ISO 1183-1	g / cm ³	1.46
Water absorption (24 h / 96 h, 23 °C)	DIN EN ISO 62	%	0.02 / 0.04
Flammability	UL 94		HB
Mechanical Properties			
Yield stress	DIN EN ISO 527	MPa	46
Elongation at break	DIN EN ISO 527	%	6
Tensile modulus of elasticity	DIN EN ISO 527	MPa	3.400
Unnotched impact strength (Charpy)	DIN EN ISO 179-1eU	kJ / m ²	37
Shore hardness	DIN EN ISO 868	scale D	77
Thermal Properties			
Melting temperature	DIN EN ISO 11357	°C	224
Thermal conductivity	ISO 22007-4	W / (m·K)	0.33
Thermal capacity	ISO 22007-4	kJ / (kg·K)	1.20
Coefficient of linear thermal expansion (23–60 °C)	DIN EN ISO 11359-1/2	10 ⁻⁶ / K	80
Coefficient of linear thermal expansion (23–100 °C)	DIN EN ISO 11359-1/2	10 ⁻⁶ / K	100
Service temperature, long term	Average	°C	110
Service temperature, short term (max.)	Average	°C	200

The specified values are average values obtained from individual measurements and are up to the latest standards. They are intended merely as information about our products and as an aid to the selection of material. We therefore cannot legally bindingly vouch for specific properties or suitability for specific purposes, as properties may also depend, for example, on the dimensions of the semi-finished products. The short-time maximum operating temperature applies only to applications that involve a low mechanical load during a few hours only. The long-term maximum operating temperature is based on the heat-ageing of the plastics through oxidation, which results in a reduction of the mechanical properties. On thick-walled parts only the surface layer - which can be better protected by the addition of antioxidants - is affected by oxidation at high temperatures. The core normally remains unimpaired. The short-term and long-term maximum operating

temperatures depend on pressure and media. The minimum operating temperature is mainly determined by possible impact and shock stresses during operation. The specified values apply to low stresses.

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