

# Technical datasheet

## PBT (Polybutylene terephthalate)

<b>Example of application</b>
› mechanical engineering; building sector/road construction; leisure industry

<b>Advantages</b>	<b>Disadvantages</b>
› low water absorption › high impact resistance › high wear resistance	› not resistant to hydrolysis › low range of dimensions

<b>Basic information</b>	<b>Specification</b>
<b>Format</b>	<b>round material:</b> on request <b>sheets:</b> on request

Physical properties	Standard term/Specification*	Unit	Testing method
Density	1.30	g/cm <sup>3</sup>	ISO 1183
Moisture ingress	0.25	%	DIN EN ISO 62

Mechanical properties	Standard term/Specification*	Unit	Testing method
Tensile strength	60	MPa	DIN EN ISO 527
Elongation at break	50	%	DIN EN ISO 527
E-Module	2.500	MPa	DIN EN ISO 527
Notch toughness	n.sp.	kJ/m <sup>2</sup>	ISO 179
Rochwellhardness	130	MPa	DIN EN ISO 2039

Thermal properties	Standard term/Specification*	Unit	Testing method
Thermal conductivity	0.27	W/(m·K)	DIN 52612
Linear thermal expansion coefficient based on a fixed initial length	1.45	K <sup>-1</sup> · 10 <sup>-4</sup>	DIN 11359
	2.90	mm	At initial length of 1.000 mm and a temperature difference of 20 °C.
Max. operating temperature, long-term	120	°C	
Max. operating temperature, short-term	150	°C	
Min. operating temperature, long-term	- 30	°C	

Electrical properties	Standard term/Specification*	Unit	Testing method
Resistance	10 <sup>16</sup>	Ω·cm	DIN IEC 60093
Outer surface coefficient	10 <sup>13</sup>	Ω	DIN IEC 60093
Puncture resistance	n.sp.	kV/mm	DIN EN 60243

<b>Legend</b>
n.sp. = not specified

Should you require binding and exact values, please ask for the appropriate factory certificate. This may incur additional costs. Please note that all specifications are standard values only, which are subject to production-related fluctuations.

\*Higher specification on request.

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