

Technical Datasheet

TechnoDur PBT GF 30 black (9939)

PBT, injection moulding grade with 30% glass-fiber, high stiffness and stability, for indoor applications

Property	Unit	Standard	Value
Ash	%	ISO 1172	30
Density	g/cm ³	ISO 1183	1,52
Tensile modulus +23°C	MPa	ISO 178	8000
Charpy notched impact +23°C	kJ/m ²	ISO 179	6
Charpy notched impact -20°C	kJ/m ²	ISO 179	5
Tensile strength	MPa	ISO 527	140
Elongation at break	%	ISO 527	2,7
Flexural strength	MPa	ISO 178	180
Heat distortion temperature HDT B (120°C/h at 455 kPa)	°C	ISO 75-1	223
Heat distortion temperature HDT A (120°C/h at 1820 kPa)	°C	ISO 75-1	206
Vicat softening temperature, Vicat B (50°C/h @ 49,05 N)	°C	ISO 306	213
Melting temperature	°C	ISO 3146	218-225
Burning behavior GWT / 2 mm	°C	IEC 695-2-1	750
Burning behavior UL 94 / 1,6 mm	Class	UL 94	HB
Shrinkage*	%	---	0,2 - 0,5

*The shrinkage is from us not certified. We only name bench marks. The shrinkage is strongly dependent of processing and part geometry.

Processing recommendations

Predrying

In order to avoid the degradation of the polymer, residual moisture during processing may not exceed 0,02 percent. Therefore predrying is strictly recommended. Dry-air dryer are preferred on this. Drying is recommended 2 to 4 hours at 120 – 140 °C.

Injection moulding

Temperatures	Cylinder	°C	250 - 265
	Dye	°C	260 - 270
	Mass	°C	260 - 270
	Tool	°C	75 - 100
Dwell time		min	
Pressures	Injection	bar	600 - 1000
	Dwell pressure	bar	400 - 800
	Back pressure	bar	10 - 30
Screw speed		U/min	80
Speed of injection			high
Dye			open