

PIBITER® NRV10 - PBT

Description

GF10 Polybutylene terephthalate , 10 % glass fibre reinforced, preliminary datasheet.

Physical properties	Value	Unit	Test Standard
Density	1450	kg/m ³	ISO 1183
Melt flow rate, MFR	30	g/10min	ISO 1133
MFR temperature	250	°C	ISO 1133
MFR load	2.16	kg	ISO 1133

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	4500	MPa	ISO 527-2/1A
Tensile stress at break, 5mm/min	65	MPa	ISO 527-2/1A
Tensile strain at break, 5mm/min	2.2	%	ISO 527-2/1A
Flexural strength, 23°C	4200	MPa	ISO 178
Charpy notched impact strength, 23°C	2.8	kJ/m ²	ISO 179/1eA
Izod impact notched, 23°C	3.2	kJ/m ²	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	158	°C	ISO 75-1, -2
Flammability @1.6mm nom. thickn.	HB	class	UL 94

Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Necessary low maximum residual moisture content	0.02	%	-
Drying time	2 - 4	h	-
Drying temperature	120 - 140	°C	-
Temperature	Value	Unit	Test Standard
Hopper temperature	20 - 50	°C	-
Feeding zone temperature	190 - 200	°C	-
Zone1 temperature	250 - 260	°C	-
Zone2 temperature	250 - 260	°C	-
Zone3 temperature	255 - 265	°C	-
Zone4 temperature	255 - 265	°C	-
Nozzle temperature	260 - 270	°C	-
Melt temperature	260 - 270	°C	-
Mold temperature	75 - 100	°C	-
Hot runner temperature	260 - 270	°C	-
Speed	Value	Unit	Test Standard
Injection speed	fast	-	-
Screw Speed	Value	Unit	Test Standard
Screw speed diameter, 25mm	90	RPM	-
Screw speed diameter, 40mm	75	RPM	-
Screw speed diameter, 55mm	60	RPM	-