

Data sheet

Pocan B3225 000000

PBT, 20 % glass fibers, injection molding

ISO/ ASTM

ISO Shortname: ISO 20028-PBT,GF20,GHMR,09-070

Property	Test Condition	Unit	Standard	guide value
Rheological properties				
C Melt volume-flow rate	260 °C; 2.16 kg	cm ³ /(10 min)	ISO 1133-1	20
C Molding shrinkage, parallel	60x60x2, 260 °C / MT 80 % °C; 600 bar		ISO 294-4	0.5
C Molding shrinkage, transverse	60x60x2; 260 °C / MT 80 % °C; 600 bar		ISO 294-4	1.4
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.1
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.1
Mechanical properties (23 °C/50 % r. h.)				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	7100
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	120
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	3.4
C Tensile creep modulus	1 h	MPa	ISO 899-1	6900
C Tensile creep modulus	1000 h	MPa	ISO 899-1	6300
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	50
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	45
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	< 10
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	< 10
Izod impact strength	23 °C	kJ/m ²	ISO 180-1U	45
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	40
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	< 10
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	< 10
Izod notched impact strength	-40 °C	kJ/m ²	ISO 180-1A	< 10
Flexural modulus	2 mm/min	MPa	ISO 178-A	7000
Flexural strength	2 mm/min	MPa	ISO 178-A	195
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	4.0
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	190
Ball indentation hardness		N/mm ²	ISO 2039-1	180
Thermal properties				
C Melting temperature	10 °C/min	°C	ISO 11357-1,-3	225
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	205
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	220
C Temperature of deflection under load	8.00 MPa	°C	ISO 75-1,-2	140
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	215
C Coefficient of linear thermal expansion, 23 to 55 °C parallel		10-4/K	ISO 11359-1,-2	0.3
C Coefficient of linear thermal expansion, 23 to 55 °C		10-4/K	ISO 11359-1,-2	1.1