Datasheet

Pocan B1503 000000

PBT, non-reinforced, injection molding, extrusion

ISO Shortname: ISO 20028-PBT,,GHMR,11-030

	Property	Test Condition	Unit	Standard	guide value [1]
	Rheological properties				
C	Melt volume-flow rate	260 °C; 2.16 kg	cm³/(10 min)	ISO 1133-1	18
	Molding shrinkage, parallel	150x105x3; 260 °C / MT 80 °C; 600 bar	%	acc. ISO 294-4	1.9
	Molding shrinkage, transverse	150x105x3; 260 °C / MT 80 °C; 600 bar	%	acc. ISO 294-4	1.9
	Post- shrinkage, parallel	150x105x3; 150 °C; 1 h	%	acc. ISO 294-4	0.5
	Post- shrinkage, transverse	150x105x3; 150 °C; 1 h	%	acc. ISO 294-4	0.5
	Mechanical properties (23 °C/50 % r. h.)				
C	Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2600
C	Yield stress	50 mm/min	MPa	ISO 527-1,-2	55
C	Yield strain	50 mm/min	%	ISO 527-1,-2	8.0
C	Nominal strain at break	50 mm/min	%	ISO 527-1,-2	>20
C	Charpy impact strength	23 °C	kJ/m²	ISO 179-1eU	N
C	Charpy impact strength	-30 °C	kJ/m²	ISO 179-1eU	180
C	Charpy notched impact strength	23 °C	kJ/m²	ISO 179-1eA	< 10
C	Charpy notched impact strength	-30 °C	kJ/m²	ISO 179-1eA	< 10
	Izod impact strength	23 °C	kJ/m²	ISO 180-1U	N
	Izod impact strength	-30 °C	kJ/m²	ISO 180-1U	150
	Izod notched impact strength	23 °C	kJ/m²	ISO 180-1A	< 10
	Izod notched impact strength	-30 °C	kJ/m²	ISO 180-1A	< 10
	Izod notched impact strength	-40 °C	kJ/m²	ISO 180-1A	< 10
	Flexural modulus	2 mm/min	MPa	ISO 178-A	2650
	Flexural strength	2 mm/min	MPa	ISO 178-A	90
	Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	6.0
	Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	80
	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	60
C	Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	160
C	Coefficient of linear thermal expansion, parallel	23 to 55 °C	10^{-4}/K	ISO 11359-1,-2	1.2
C	Coefficient of linear thermal expansion, transverse	23 to 55 °C	10^{-4}/K	ISO 11359-1,-2	1.2
	Burning behavior US-FMVSS302			ISO 3795	passed
C	Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	180
	Other properties (23 °C)				
C	Water absorption (Saturation value)	Water at 23 °C	%	ISO 62	0.5

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Property	Test Condition	Unit	Standard	guide value [1]
C Water absorption (Equilibrium value)	23 °C; 50 % RH	%	ISO 62	0.2
C Density		kg/m³	ISO 1183	1300
Bulk density		kg/m³	ISO 60	800
Processing conditions for test specimens				
C Injection molding-Melt temperature		°C	ISO 294	260
C Injection molding-Mold temperature		°C	ISO 294	80
Processing recommendations				
Drying temperature circulating air dryer		°C	-	120
Drying time circulating air dryer		h	-	4-8
Residual moisture content		%	Acc. to Karl Fischer	0.00-0.02
Melt temperature (Tmin - Tmax)		°C	-	250-270
Mold temperature		°C	-	80-100

Notes

1 Typical properties: these are not to be construed as specifications

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

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Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

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