

Datasheet Pocan B1100 000000

PBT, non-reinforced, extrusion, injection molding, improved flowability, suitable for food-contact

ISO Shortname: ISO 20028-PBT,,G,07-030

Property	Test Condition	Unit	Standard	guide value ¹
Rheological properties				
C Melt volume-flow rate	250 °C; 2.16 kg	cm ³ /(10 min)	ISO 1133-1	80
Mechanical properties (23 °C/50 % r. h.)				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2700
C Charpy impact strength	23 °C	kJ/m²	ISO 179-1eU	130
C Charpy impact strength	-30 °C	kJ/m²	ISO 179-1eU	90
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	90
Izod impact strength	-30 °C	kJ/m²	ISO 180-1U	75
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	2750
Flexural strength	2 mm/min	MPa	ISO 178-A	85
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	75
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	1.3
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	1.3
C Burning behavior UL 94	1.5 mm	Class	UL 94	НВ
C Burning behavior UL 94	0.75 mm	Class	UL 94	НВ
C Oxygen index	Method A	%	ISO 4589-2	24
Thermal conductivity	23 °C	W/(m·K)	ISO 8302	0.25
Resistance to heat (ball pressure test)		°C	IEC 60695-10-2	190
C Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	170
Electrical properties (23 °C/50 % r. h.)				-
C Relative permittivity	100 Hz	-	IEC 60250	3.4
C Relative permittivity	1 MHz	-	IEC 60250	3.2
C Dissipation factor	100 Hz	10 ⁻⁴	IEC 60250	20
C Dissipation factor	1 MHz	10 ⁻⁴	IEC 60250	190
C Volume resistivity	,	Ohm-m	IEC 62631-3	>1E13



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Property	Test Condition	Unit	Standard	guide value ¹
C Surface resistivity		Ohm	IEC 62631-3	>1E15
Other properties (23 °C)				
C Water absorption (Saturation value)	Water at 23 °C	%	ISO 62	0.5
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

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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Typical Properties

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

Flammability

Flammability results are based on small-scale laboratory tests for purposes of relative comparison and are not intended to reflect the hazards presented by this or any other material under actual fire conditions.

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Edition 20.12.2023