

Datasheet

Pocan C5211 000000

PBT+PC, 10% mineral, injection molding, low tendency to warp, improved surface finish, improved impact strength

ISO Shortname: ISO 20028-PBT+PC,MD10,GHMPCR,09-030

Property	Test Condition	Unit	Standard	guide value ¹
Rheological properties				
C Melt volume-flow rate	270 °C; 5 kg	cm ³ /(10 min)	ISO 1133-1	45
C Molding shrinkage, parallel	60x60x2	%	ISO 294-4	0.7
C Molding shrinkage, transverse	60x60x2	%	ISO 294-4	0.7
Post- shrinkage, parallel	60x60x2	%	ISO 294-4	0.5
Post- shrinkage, transverse	60x60x2	%	ISO 294-4	0.4
Mechanical properties (23 °C/50 % r. h.)				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	3300
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	50
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	12
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	200
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	150
C Charpy notched impact strength	23 °C	kJ/m ²	ISO 179-1eA	7
C Charpy notched impact strength	-30 °C	kJ/m ²	ISO 179-1eA	7
Izod impact strength	23 °C	kJ/m ²	ISO 180-1U	140
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	100
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-1A	7
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-1A	7
Flexural modulus	2 mm/min	MPa	ISO 178-A	3550
Flexural strength	2 mm/min	MPa	ISO 178-A	95
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	5.2
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	90
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	100
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	120
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	130
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.8
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.7
Other properties (23 °C)				
C Density		kg/m ³	ISO 1183	1290
Bulk density		kg/m ³	ISO 60	700
Processing conditions for test specimens				
C Injection molding-Melt temperature		°C	ISO 294	270
C Injection molding-Mold temperature		°C	ISO 294	80

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Property	Test Condition	Unit	Standard	guide value ¹
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	-	260-280
Mold temperature		°C	-	70-100

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.

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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