

Datasheet

Pocan A3121 000000

PBT+ASA, 20% glass fibers, injection molding, low tendency to warp, improved surface finish

ISO Shortname: ISO 20028-PBT+PET+ASA,GF20,GHMR,07-070

Property	Test Condition	Unit	Standard	guide value ¹
Rheological properties				
C Melt volume-flow rate	270 °C; 2.16 kg	cm ³ /(10 min)	ISO 1133-1	20
C Molding shrinkage, parallel	60x60x2; 270 °C / MT 90°C; 600 bar	%	ISO 294-4	0.3
C Molding shrinkage, transverse	60x60x2; 270 °C / MT 90°C; 600 bar	%	ISO 294-4	0.7
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.1
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.2
Mechanical properties (23 °C/50 % r. h.)				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	7000
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	110
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	2.9
C Charpy impact strength	23 °C	kJ/m ²	ISO 179-1eU	55
C Charpy impact strength	-30 °C	kJ/m ²	ISO 179-1eU	40
Izod impact strength	23 °C	kJ/m ²	ISO 180-1U	50
Izod impact strength	-30 °C	kJ/m ²	ISO 180-1U	45
Izod notched impact strength	23 °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	170
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	3.2
Ball indentation hardness		N/mm ²	ISO 2039-1	157
C Puncture energy	23 °C	J	ISO 6603-2	2.2
Thermal properties				
C Melting temperature	10 °C/min	°C	ISO 11357-1,-3	225-260
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	175
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	215
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	165
C Coefficient of linear thermal expansion, parallel	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.3
C Coefficient of linear thermal expansion, transverse	23 to 55 °C	10 ⁻⁴ /K	ISO 11359-1,-2	0.9
C Burning behavior UL 94	1.5 mm	Class	UL 94	HB
C Burning behavior UL 94	0.75 mm	Class	UL 94	HB
Burning behavior US-FMVSS302			ISO 3795	passed
Electrical properties (23 °C/50 % r. h.)				
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	250

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Property	Test Condition	Unit	Standard	guide value ¹
Other properties (23 °C)				
C Water absorption (Saturation value)	Water at 23 °C	%	ISO 62	0.4
C Water absorption (Equilibrium value)	23 °C; 50 % RH	%	ISO 62	0.1
C Density		kg/m ³	ISO 1183	1430
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	90
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	-	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.

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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