

Datasheet Pocan ECOT3230 000000

PBT+PET, 30% glass fibers, injection molding, improved surface finish, increased temperature peak load

ISO Shortname: ISO 20028-PBT+PET,GF30 REC,GHMR,09-100

Property	Test Condition	Unit	Standard	guide value ¹
Rheological properties				
C Melt volume-flow rate	260 °C; 5 kg	cm ³ /(10 min)	ISO 1133-1	30
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	0.9
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	10400
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	145
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	2.8
C Charpy impact strength	23 °C	kJ/m²	ISO 179-1eU	65
C Charpy impact strength	-30 °C	kJ/m²	ISO 179-1eU	55
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	55
Izod impact strength	-30 °C	kJ/m²	ISO 180-1U	55
Izod notched impact strength	23 °C	kJ/m²	ISO 180-1A	<10
Izod notched impact strength	-30 °C	kJ/m²	ISO 180-1A	<10
Flexural modulus	2 mm/min	MPa	ISO 178-A	10300
Flexural strength	2 mm/min	MPa	ISO 178-A	230
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	3.0
Thermal properties				
C Melting temperature	10 °C/min	°C	ISO 11357-1,-3	225-250
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	200
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	220
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	205
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
Electrical properties (23 °C/50 % r. h.)				
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	250
Other properties (23 °C)				
C Water absorption (Saturation value)	Water at 23 °C	%	ISO 62	0.3
C Water absorption (Equilibrium value)	23 °C; 50 % RH	%	ISO 62	0.1



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C Density		kg/m³	ISO 1183	1550
Bulk density		kg/m³	ISO 60	800
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	0.00-0.02
			Fischer	
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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Edition 22.12.2023