Pocan T7331 700226 POS151

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

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

Property	Test Condition	Unit	Standard	guide value [1]
Rheological properties				
C Melt volume-flow rate	260 °C; 5 kg	cm³/(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 Tensile creep modulus	1 h	MPa	ISO 899-1	10000
C Tensile creep modulus	1000 h	MPa	ISO 899-1	8500
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
Izod notched impact strength	-40 °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
Ball indentation hardness		N/mm²	ISO 2039-1	200
C Puncture energy	23 °C	J	ISO 6603-2	2.1
C Puncture maximum force	23 °C	N	ISO 6603-2	650
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	0.6
C Burning behavior UL 94	1.5 mm	Class	UL 94	HB
C Burning behavior UL 94	0.75 mm	Class	UL 94	HB
C Oxygen index	Method A	%	ISO 4589-2	21
Thermal conductivity	23 °C	W/(m·K)	ISO 8302	0.27
Resistance to heat (ball pressure test)		°C	IEC 60695-10-2	220
Temperature index (Tensile strength)	20000 h	°C	IEC 60216-1	155

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Property	Test Condition	Unit	Standard	guide value [1]
Halving interval (Tensile strength)		°C	IEC 60216-1	10.2
Relative temperature index (Tensile strength)		°C	UL 746B	140
Temperature index (Tensile impact strength)	20000 h	°C	IEC 60216-1	140
Halving interval (Tensile impact strength)		°C	IEC 60216-1	13.5
Relative temperature index (Tensile impact strength)		°C	UL 746B	125
Temperature index (Electric strength)	20000 h	°C	IEC 60216-1	155
Halving interval (Electric strength)		°C	IEC 60216-1	10.2
Relative temperature index (Electric strength)		°C	UL 746B	140
Glow wire test (GWFI)	2.0 mm	°C	IEC 60695-2-12	750
Electrical properties (23 °C/50 % r. h.)				
C Relative permittivity	100 Hz	-	IEC 60250	4.0
C Relative permittivity	1 MHz	-	IEC 60250	3.8
C Electric strength	1 mm	kV/mm	IEC 60243-1	27
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
C Density		kg/m³	ISO 1183	1550
Bulk density		kg/m³	ISO 60	800
Material specific properties				
C Viscosity number		cm³/g	ISO 1628-5	91
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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Standard Disclaimer

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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.

Health and Safety

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling LANXESS products mentioned in this publication. Before working with these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets (MSDS) and product labels. Consult your LANXESS Corporation representative or contact the Product Safety and Regulatory Affairs Department at LANXESS. For materials that are not LANXESS products, appropriate industrial hygiene and other safety precautions recommended by their manufacturer(s) must be followed.

Regulatory Compliance

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Color and Visual Effects

Type and quantity of pigments or additives used to obtain certain colors and special visual effects can affect mechanical properties.