LANXESS
Energizing Chemistry

Pocan B1205XHR 000000

PBT, non-reinforced, injection molding, hydrolysis stabilized

ISO Shortname: ISO 20028-PBT,,GHMRW,09-020

Property	Test Condition	Unit	Standard	guide value [1]
Rheological properties				
C Melt volume-flow rate	260 °C; 2.16 kg	cm³/(10 min)	ISO 1133-1	60
C Molding shrinkage, parallel	60x60x2; 600 bar	%	ISO 294-4	2.2
C Molding shrinkage, transverse	60x60x2; 600 bar	%	ISO 294-4	2.2
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.3
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.3
Mechanical properties (23 °C/50 % r. h.)				
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	2100
C Yield stress	50 mm/min	MPa	ISO 527-1,-2	50
C Yield strain	50 mm/min	%	ISO 527-1,-2	5
C Nominal strain at break	50 mm/min	%	ISO 527-1,-2	15
C Charpy impact strength	23 °C	kJ/m²	ISO 179-1eU	140
C Charpy impact strength	-30 °C	kJ/m²	ISO 179-1eU	80
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	100
Izod notched impact strength	23 °C	kJ/m²	ISO 180-1A	<10
Flexural modulus	2 mm/min	MPa	ISO 178-A	2200
Flexural strength	2 mm/min	MPa	ISO 178-A	75
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	6.7
Flexural stress at 3.5 % strain	2 mm/min	MPa	ISO 178-A	65
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	140
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	170
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
Electrical properties (23 °C/50 % r. h.)				
C Comparative tracking index CTI	Solution A	Rating	IEC 60112	600
Other properties (23 °C)				
C Density		kg/m³	ISO 1183	1290
Bulk density		kg/m³	ISO 60	720
Processing conditions for test specimens				
C Injection molding-Melt temperature		°C	ISO 294	250
C Injection molding-Mold temperature		°C	ISO 294	80
Processing recommendations				
Drying temperature dry air dryer		°C	-	120
Drying time dry air dryer		h	-	4-8
Residual moisture content		%		0.00 - 0.02

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Property	Test Condition	Unit	Standard Acc. to Karl Fischer	guide value [1]
Melt temperature (Tmin - Tmax)		°C	-	250 - 260
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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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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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.

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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.

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