

POCAN® B 1205 XF 000000

Polybutylene Terephthalate

LANXESS Asia/Pacific

Message:

PBT, non-reinforced, injection molding, improved flowability, improved impact strength

General Information			
Features	Impact resistance, good		
	Good liquidity		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.29	g/cm ³	ISO 1183
Apparent Density	0.80	g/cm ³	ISO 60
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	50.0	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 2577
Vertical flow direction: 250°C, 2.00mm ¹	2.1	%	ISO 2577
Vertical flow direction: 120°C, 4 hours, 2.00mm ²	0.30	%	ISO 2577
Flow direction: 250°C, 2.00mm ³	2.1	%	ISO 2577
Flow direction: 120°C, 4 hours, 2.00mm ⁴	0.30	%	ISO 2577
Viscosity Number (Reduced Viscosity)	100.0	ml/g	ISO 1628
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	2500	MPa	ISO 527-2/1
Tensile Stress (Yield, 23°C)	55.0	MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	5.0	%	ISO 527-2/50
Nominal Tensile Strain at Break (23°C)	10	%	ISO 527-2/50
Flexural Modulus ⁵ (23°C)	2500	MPa	ISO 178/A
Flexural Stress			ISO 178/A
3.5% strain, 23°C	75.0	MPa	ISO 178/A
23°C ⁶	85.0	MPa	ISO 178/A
Flexural Strain at Flexural Strength ⁷ (23°C)	5.9	%	ISO 178/A
Burning Behavior ⁸	passed		ISO 3795
ISO Shortname	PBT, GHMPR, 09-020		ISO 7792
Residual Moisture Content	0.0 - 0.020	%	Karl Fisher
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	< 10	kJ/m ²	ISO 179/1eA
23°C	< 10	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU

-30°C	120	kJ/m ²	ISO 179/1eU
23°C	140	kJ/m ²	ISO 179/1eU
Notched Izod Impact			ISO 180/1A
-30°C	< 10	kJ/m ²	ISO 180/1A
23°C	< 10	kJ/m ²	ISO 180/1A
Unnotched Izod Impact Strength			ISO 180/1U
-30°C	90	kJ/m ²	ISO 180/1U
23°C	110	kJ/m ²	ISO 180/1U
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, not annealed	150	°C	ISO 75-2/B
1.8 MPa, not annealed	60.0	°C	ISO 75-2/A
Vicat Softening Temperature	180	°C	ISO 306/B120
Melting Temperature ⁹	225	°C	ISO 11357-3
Linear thermal expansion coefficient			ISO 11359-2
Flow: 23 to 55°C	1.2E-4	cm/cm/°C	ISO 11359-2
Lateral: 23 to 55°C	1.2E-4	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Comparative Tracking Index (Solution A)	600	V	IEC 60112
Injection	Nominal Value	Unit	Test Method
Drying Temperature - Circulation Dryer	120	°C	
Drying Time - Circulation Dryer	4.0 - 8.0	hr	
Processing (Melt) Temp	250 - 260	°C	
Mold Temperature	80.0 - 100	°C	
NOTE			
1.	60x60x2mm, 80°C MT, 600 bar		
2.	60x60x2mm		
3.	60x60x2mm, 80°C MT, 600 bar		
4.	60x60x2mm		
5.	2.0 mm/min		
6.	2.0 mm/min		
7.	2 mm/min		
8.	US-FMVSS302		
9.	10°C/min		

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