POCAN® B 1300 000000

Polybutylene Terephthalate

LANXESS Corporation

Message:

PBT, non-reinforced, injection molding,Extrusion

General Information	
Agency Ratings	EC 1907/2006 (REACH)
Processing Method	Extrusion Injection Molding
Multi-Point Data	Creep Modulus vs. Time (ISO 11403-1) Isochronous Stress vs. Strain (ISO 11403-1) Isothermal Stress vs. Strain (ISO 11403-1) Secant Modulus vs. Strain (ISO 11403-1) Shear Modulus vs. Temperature (ISO 11403-1) Specific Volume vs Temperature (ISO 11403-2)

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.30	g/cm³	ISO 1183
Apparent Density	0.80	g/cm³	ISO 60
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	45.0	cm³/10min	ISO 1133
Molding Shrinkage			
Across Flow : 260°C, 3.00 mm [1]	1.9	%	ISO 2577
Across Flow : 150°C, 48 hr, 3.00 mm [2]	0.50	%	ISO 294-4
Flow : 260°C, 3.00 mm [3]	1.9	%	ISO 2577
Flow : 150°C, 48 hr, 3.00 mm [4]	0.50	%	ISO 2577
Water Absorption			ISO 62
Saturation, 23°C	0.50	%	
Equilibrium, 23°C, 50% RH	0.20	%	
Viscosity Number (Reduced Viscosity)	105.0	ml/g	ISO 1628
Hardness	**Nominal Value**	**Unit**	**Test Method**
Ball Indentation Hardness	120	MPa	ISO 2039-1
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (23°C)	2700	MPa	ISO 527-2/1
Tensile Stress (Yield, 23°C)	55.0	MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	8.0	%	ISO 527-2/50
Nominal Tensile Strain at Break (23°C)	> 20	%	ISO 527-2/50
Tensile Creep Modulus			ISO 899-1

1 hr	2400	MPa	
1000 hr	1400	MPa	
Flexural Modulus [5] (23°C)	2700	MPa	ISO 178/A
Flexural Stress [6]			
3.5% Strain	75.0	MPa	ISO 178/A
23°C	90.0	MPa	ISO 178
Flexural Strain at Flexural Strength [7] (23°C)	6.0	%	
Electrolytical Corrosion	A 1		IEC 60426
ISO Shortname	PBT, GN, 10-030		ISO 7792
Residual Moisture Content	0.0 to 0.020	%	Karl Fisher
Films	**Nominal Value**	**Unit**	**Test Method**
Film Puncture Energy			ISO 6603-2
-- [8]	15.0	J	
-- [9]	40.0	J	
Film Puncture Force [10]	3860	N	ISO 6603-2
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	< 10	kJ/m²	
23°C	< 10	kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	150	kJ/m²	
23°C	220	kJ/m²	
Notched Izod Impact Strength			ISO 180/1A
-40°C	< 10	kJ/m²	
-30°C	< 10	kJ/m²	
23°C	< 10	kJ/m²	
Unnotched Izod Impact Strength			ISO 180/1U
-30°C	150	kJ/m²	
23°C	150	kJ/m²	
Multi-Axial Instrumented Impact Peak Force (23°C)	110	N	ISO 6603-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
0.45 MPa, Unannealed	160	°C	ISO 75-2/B
1.8 MPa, Unannealed	60.0	°C	ISO 75-2/A
8.0 MPa, Unannealed	45.0	°C	ISO 75-2/C
Vicat Softening Temperature	180	°C	ISO 306/B50
Ball Pressure Test (190°C)	Pass		IEC 60695-10-2
Melting Temperature [11]	225	°C	ISO 11357-3
CLTE			ISO 11359-2
Flow : 23 to 55°C	1.2E-4	cm/cm/°C	
Transverse : 23 to 55°C	1.3E-4	cm/cm/°C	

Thermal Conductivity (23°C)	0.25	W/m/K	ISO 8302
Electrical	**Nominal Value**	**Unit**	**Test Method**
Electric Strength (23°C, 1.00 mm)	28	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
23°C, 100 Hz	3.40		
23°C, 1 MHz	3.20		
Comparative Tracking Index			IEC 60112
Solution A	600	V	
Solution B	300	V	
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.800 mm	HB		
1.60 mm	HB		
Glow Wire Flammability Index (2.00 mm)	750	°C	IEC 60695-2-12
Oxygen Index [12]	24	%	ISO 4589-2
Injection	**Nominal Value**	**Unit**	**Test Method**
Drying Temperature - Circulation Dryer	120	°C	
Drying Time - Circulation Dryer	4.0 to 8.0	hr	
NOTE			
1.	150x150x3; MT 80°C; 600 Bar		
2.	150x105x3		
3.	150x150x3; MT 80°C; 600 Bar		
4.	150x150x3		
5.	2.0 mm/min		
6.	2.0 mm/min		
7.	Pull Rate: 2 mm/min; 50% RH		
8.	-30°C		
9.	23°C		
10.	-30°C		
11.	10°C/min		
12.	Procedure A		

Recommended distributors for this material

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