POCAN® BFN 4231 000000

Polybutylene Terephthalate

LANXESS GmbH

Message:

PBT, 25 % glass fibers, injection molding, halogen free flame retardant

General Information			
Filler / Reinforcement	Glass Fiber,25% Filler by Weight		
Additive	Flame Retardant		
Features	Flame Retardant Halogen Free		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density (23°C)	1.52	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	40.0	cm³/10min	ISO 1133
Molding Shrinkage			ISO 2577
Across Flow : 260°C, 2.00 mm [1]	1.2	%	
Across Flow : 120°C, 4 hr, 2.00 mm [2]	0.10	%	
Flow : 260°C, 2.00 mm [3]	0.50	%	
Flow : 120°C, 4 hr, 2.00 mm [4]	0.10	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (23°C)	10500	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	100	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	2.2	%	ISO 527-2/5
Flexural Modulus [5] (23°C)	10000	MPa	ISO 178/A
Flexural Stress [6] (23°C)	165	MPa	ISO 178/A
Flexural Strain at Flexural Strength [7] (23°C)	2.4	%	ISO 178/A
ISO Shortname	PBT, GFHMR, 09-110, GF25; ISO 1043-PBT GF FR(30+40)		ISO 7792
Residual Moisture Content	0.020	%	Karl Fisher
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	35	kJ/m²	
23°C	40	kJ/m²	
Unnotched Izod Impact Strength			ISO 180/1U
-30°C	33	kJ/m²	
23°C	36	kJ/m²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			

0.45 MPa, Unannealed	224	°C	ISO 75-2/B
1.8 MPa, Unannealed	210	°C	ISO 75-2/A
Vicat Softening Temperature	206	°C	ISO 306/B50
Ball Pressure Test (214°C)	Pass		IEC 60695-10-2
Melting Temperature [8]	220	°C	ISO 11357-3
CLTE			ISO 11359-2
Flow : 23 to 55°C	3.0E-5	cm/cm/°C	
Transverse : 23 to 55°C	9.0E-5	cm/cm/°C	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	2.0E+16	ohms	IEC 60093
Volume Resistivity (23°C)	2.3E+16	ohms·cm	IEC 60093
Electric Strength (23°C, 1.00 mm)	35	kV/mm	IEC 60243-1
Comparative Tracking Index (CTI)	PLC 0		UL 746
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.400 mm	V-0		
0.750 mm	V-0		
	V-0		
1.50 mm	5VA		
3.00 mm	V-0		
Glow Wire Flammability Index			IEC 60695-2-12
0.400 mm	960	°C	
0.750 mm	960	°C	
1.50 mm	960	°C	
3.00 mm	960	°C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.400 mm	850	°C	
0.750 mm	775	°C	
1.50 mm	825	°C	
3.00 mm	850	°C	
Oxygen Index [9]	44	%	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	
Processing (Melt) Temp	250 to 270	°C	
Mold Temperature	70.0 to 90.0	°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.	10°C/min
9.	Procedure A

Recommended distributors for this material

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