

POCAN® T 7391 POS151 900044

Polybutylene Terephthalate + PET

LANXESS GmbH

Message:

PBT+PET, 45 % glass fibers, injection molding, improved surface finish, increased temperature peak load, UV-stabilized

General Information			
Filler / Reinforcement	Glass Fiber,45% Filler by Weight		
Features	Good Surface Finish		
	Good UV Resistance		
	Medium Heat Resistance		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.69	g/cm ³	ISO 1183
Apparent Density	0.80	g/cm ³	ISO 60
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	30.0	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 2577
Across Flow : 270°C, 2.00 mm ¹	0.80	%	
Across Flow : 120°C, 4 hr, 2.00 mm ²	0.10	%	
Flow : 270°C, 2.00 mm ³	0.20	%	
Flow : 120°C, 4 hr, 2.00 mm ⁴	0.10	%	
Water Absorption			ISO 62
Saturation, 23°C	0.30	%	
Equilibrium, 23°C, 50% RH	0.10	%	
Viscosity Number (Reduced Viscosity)	80.0	ml/g	ISO 1628
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness	250	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	16000	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	160	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	1.9	%	ISO 527-2/5
Tensile Creep Modulus			ISO 899-1
1 hr	16500	MPa	
1000 hr	15000	MPa	
Flexural Modulus ⁵ (23°C)	15500	MPa	ISO 178/A
Flexural Stress ⁶ (23°C)	260	MPa	ISO 178/A
Flexural Strain at Flexural Strength (23°C) ⁷	2.1	%	ISO 178/A
Halving Interval			IEC 60216

Electric Strength	10.2	°C	
Tensile Impact Strength	13.5	°C	
Tensile Strength	10.2	°C	
Temperature Index			IEC 60216
Electric Strength, 20000 hr	155	°C	
Tensile Impact Strength, 20000 hr	150	°C	
Tensile Strength, 20000 hr	155	°C	
Electrolytical Corrosion (23°C)	A 1		IEC 60426
ISO Shortname	PBT+PET, GHLMR, 09-160, GF45		ISO 7792
Residual Moisture Content	0.0 to 0.020	%	Karl Fisher
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	< 10	kJ/m ²	
23°C	< 10	kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	65	kJ/m ²	
23°C	60	kJ/m ²	
Notched Izod Impact Strength			ISO 180/1A
-30°C	< 10	kJ/m ²	
23°C	< 10	kJ/m ²	
	55		
Unnotched Izod Impact Strength (23°C)	60	kJ/m ²	ISO 180/1U
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Unannealed	225	°C	ISO 75-2/B
1.8 MPa, Unannealed	205	°C	ISO 75-2/A
8.0 MPa, Unannealed	150	°C	ISO 75-2/C
Vicat Softening Temperature	210	°C	ISO 306/B120
Ball Pressure Test (220°C)	Pass		IEC 60695-10-2
Melting Temperature ⁸	225 to 250	°C	ISO 11357-3
CLTE			ISO 11359-2
Flow : 23 to 55°C	2.0E-5	cm/cm/°C	
Transverse : 23 to 55°C	8.0E-5	cm/cm/°C	
Thermal Conductivity (23°C)	0.27	W/m/K	ISO 8302
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity (23°C)	> 1.0E+15	ohms · cm	IEC 60093
Electric Strength (23°C, 1.00 mm)	28	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
23°C, 100 Hz	4.30		

23°C, 1 MHz	4.20		
Dissipation Factor			IEC 60250
23°C, 100 Hz	2.0E-3		
23°C, 1 MHz	0.014		
Comparative Tracking Index (Solution A)	250	V	IEC 60112
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 ⁹	21	%	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	260 to 280	°C	
Mold Temperature	80.0 to 100	°C	
NOTE			
1.	60x60x2mm, 90°C MT, 600 bar		
2.	60x60x2mm		
3.	60x60x2mm, 90°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		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

