

POCAN® S 7926 000000

Polybutylene Terephthalate

LANXESS GmbH

Message:

PBT, non-reinforced, injection molding, extrusion, flame retardant, improved impact strength

General Information			
UL YellowCard	E245249-474060		
Additive	Flame retardancy		
Features	Impact resistance, good		
	Flame retardancy		
Agency Ratings	EC 1907/2006 (REACH)		
Processing Method	Extrusion		
	Injection molding		
Resin ID (ISO 1043)	PBT FR (17)		
Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.37	g/cm³	ISO 1183
Apparent Density	0.80	g/cm³	ISO 60
Melt Volume-Flow Rate (MVR) (270°C/5.0 kg)	40.0	cm³/10min	ISO 1133
Molding Shrinkage			ISO 2577
Vertical flow direction: 250°C, 2.00mm ¹	2.0	%	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
Water Absorption			ISO 62
Saturated, 23°C	0.40	%	ISO 62
Equilibrium, 23°C, 50% RH	0.20	%	ISO 62
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness	120	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	2400	MPa	ISO 527-2/1
Tensile Stress (Yield, 23°C)	40.0	MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	3.0	%	ISO 527-2/50
Nominal Tensile Strain at Break (23°C)	> 10	%	ISO 527-2/50
Tensile Creep Modulus			ISO 899-1
1 hr	2300	MPa	ISO 899-1
1000 hr	1500	MPa	ISO 899-1

Flexural Modulus ⁵ (23°C)	2300	MPa	ISO 178/A
Flexural Stress			ISO 178/A
3.5% strain, 23°C	65.0	MPa	ISO 178/A
23°C ⁶	70.0	MPa	ISO 178/A
Flexural Strain at Flexural Strength (23°C) ⁷	5.0	%	ISO 178/A
Halving Interval			IEC 60216
Electric Strength	13.0	°C	IEC 60216
Tensile Impact Strength	5.5	°C	IEC 60216
Tensile Strength	13.0	°C	IEC 60216
Temperature index			IEC 60216
Electric Strength, 20000 hr	140	°C	IEC 60216
Tensile Impact Strength, 20000 hr	110	°C	IEC 60216
Tensile Strength, 20000 hr	140	°C	IEC 60216
Electrolytical Corrosion (23°C)	A 1		IEC 60426
ISO Shortname	PBT, GFHMPPR, 11-020		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	12	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	No Break		ISO 179/1eU
23°C	No Break		ISO 179/1eU
Notched Izod Impact			ISO 180/1A
-40°C	< 10	kJ/m ²	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	110	kJ/m ²	ISO 180/1U
23°C	No Break		ISO 180/1U
Multi-Axial Instrumented Impact Energy (23°C, Energy to Peak Force)	80.0	J	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, not annealed	130	°C	ISO 75-2/B
1.8 MPa, not annealed	60.0	°C	ISO 75-2/A
8.0 MPa, not annealed	47.0	°C	ISO 75-2/C
Vicat Softening Temperature	160	°C	ISO 306/B120
Ball Pressure Test (190°C)	Pass		IEC 60695-10-2
Melting Temperature ⁸	225	°C	ISO 11357-3
Linear thermal expansion coefficient			ISO 11359-2
Flow: 23 to 55°C	1.1E-4	cm/cm/°C	ISO 11359-2

Lateral: 23 to 55°C	1.2E-4	cm/cm/°C	ISO 11359-2
Thermal Conductivity (23°C)	0.25	W/m/K	ISO 8302
RTI Elec	125	°C	UL 746
RTI Imp	110	°C	UL 746
RTI	125	°C	UL 746
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
Dielectric Strength (23°C, 1.00 mm)	30	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
23°C, 100 Hz	3.20		IEC 60250
23°C, 1 MHz	3.10		IEC 60250
Dissipation Factor			IEC 60250
23°C, 100 Hz	1.5E-3		IEC 60250
23°C, 1 MHz	0.015		IEC 60250
Comparative Tracking Index (Solution A)	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.400 mm)	V-0		UL 94
Glow Wire Flammability Index (0.800 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			IEC 60695-2-13
0.800 mm	700	°C	IEC 60695-2-13
1.60 mm	700	°C	IEC 60695-2-13
3.00 mm	700	°C	IEC 60695-2-13
Oxygen Index ⁹	30	%	ISO 4589-2
Injection	Nominal Value	Unit	Test Method
Drying Temperature - Circulation Dryer	120	°C	
Drying Time - Circulation Dryer	4.0 - 8.0	hr	
Processing (Melt) Temp	240 - 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.	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



WECHAT