

Durethan® B 1701 00000

Polybutylene Terephthalate

LANXESS GmbH

Message:

PBT, non-reinforced, extrusion, food contact

General Information			
Features	Food Contact Acceptable		
Processing Method	Extrusion		
Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.31	g/cm ³	ISO 1183
Apparent Density	0.80	g/cm ³	ISO 60
Melt Volume-Flow Rate (MVR) (260°C/2.16 kg)	12.0	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 2577
Across Flow : 260°C, 2.00 mm ¹	2.0	%	
Across Flow : 120°C, 4 hr, 2.00 mm ²	0.20	%	
Flow : 260°C, 2.00 mm ³	2.0	%	
Flow : 120°C, 4 hr, 2.00 mm ⁴	0.20	%	
Water Absorption			ISO 62
Saturation, 23°C	0.50	%	
Equilibrium, 23°C, 50% RH	0.20	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	2700	MPa	ISO 527-2/1
Tensile Stress (Yield, 23°C)	60.0	MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	9.0	%	ISO 527-2/50
Nominal Tensile Strain at Break (23°C)	> 20	%	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	
23°C ⁶	85.0	MPa	
Flexural Strain at Flexural Strength ⁷ (23°C)	6.0	%	ISO 178/A
ISO Shortname	PBT, GM, 13-030		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	200	kJ/m ²	

23°C	No Break		
Notched Izod Impact Strength			ISO 180/1A
-30°C	< 10	kJ/m ²	
23°C	< 10	kJ/m ²	
Unnotched Izod Impact Strength			ISO 180/1U
-30°C	No Break		
23°C	No Break		
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Unannealed	140	°C	ISO 75-2/B
1.8 MPa, Unannealed	55.0	°C	ISO 75-2/A
Vicat Softening Temperature	180	°C	ISO 306/B120
Melting Temperature ⁸	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	1.2E-4	cm/cm/°C	
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)	30	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
23°C, 100 Hz	3.40		
23°C, 1 MHz	3.20		
Dissipation Factor			IEC 60250
23°C, 100 Hz	1.5E-3		
23°C, 1 MHz	0.020		
Comparative Tracking Index (Solution A)	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.800 mm	HB		
1.60 mm	HB		
Injection	Nominal Value	Unit	Test Method
Drying Temperature - Circulation Dryer	120	°C	
Drying Time - Circulation Dryer	4.0 to 8.0	hr	
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		

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

