

BASF Ultradur B 6550 PBT

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT) , Polybutylene Terephthalate (PBT), Unreinforced, Molded

Material Notes:

Ultradur B 6550 is a high viscosity PBT extrusion grade. Applications; Used for loose buffer tubes for optical fibers, semi-finished products for machining, profiles and pipes.

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Ultradur-B-6550-PBT.php

Physical Properties	Metric	English	Comments
Density	1.30 g/cc	0.0470 lb/in ³	ISO 1183
Water Absorption	0.50 %	0.50 %	DIN 53495/1L
Moisture Absorption at Equilibrium	0.25 %	0.25 %	23°C/50% R.H.
Viscosity Test	160 cm ³ /g	160 cm ³ /g	Viscosity number
Linear Mold Shrinkage, Flow	0.015 cm/cm	0.015 in/in	Sheet
	0.017 cm/cm	0.017 in/in	60x60x2mm; ISO 294
Linear Mold Shrinkage, Transverse	0.015 cm/cm	0.015 in/in	Sheet
	0.021 cm/cm	0.021 in/in	60x60x2mm; ISO 294
Melt Flow	11.7 g/10 min	11.7 g/10 min	ISO 1133
	@Load 2.16 kg, Temperature 250 °C	@Load 4.76 lb, Temperature 482 °F	

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	130 MPa	18900 psi	ISO 2039-1
Tensile Strength, Yield	54.0 MPa	7830 psi	50mm/min; ISO 527-2
Elongation at Break	>= 100 %	>= 100 %	50mm/min; ISO 527-2
Elongation at Yield	3.5 %	3.5 %	50mm/min; ISO 527-2
Modulus of Elasticity	2.40 GPa	348 ksi	ISO 527-2
Flexural Strength	85.0 MPa	12300 psi	ISO 178
Charpy Impact Unnotched	NB	NB	ISO 179/1eU
Charpy Impact, Notched	0.600 J/cm ²	2.86 ft-lb/in ²	ISO 179/1eA
Dart Drop, Total Energy	>= 140 J	>= 103 ft-lb	ISO 6603-1

Tensile Creep Modulus, 1000 hours Mechanical Properties	1100 MPa Metric	160000 psi English	elongation -0.5%, 23°C; ISO 899 Comments
--	--------------------	-----------------------	---

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	13.0 - 16.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ @Temperature 23.0 - 80.0 $^\circ\text{C}$	7.22 - 8.89 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$ @Temperature 73.4 - 176 $^\circ\text{F}$	
Specific Heat Capacity	1.50 J/g- $^\circ\text{C}$	0.359 BTU/lb- $^\circ\text{F}$	IEC 1006
Thermal Conductivity	0.270 W/m-K	1.87 BTU-in/hr-ft 2 - $^\circ\text{F}$	DIN 52612
Melting Point	220 - 225 $^\circ\text{C}$	428 - 437 $^\circ\text{F}$	10 K/min
Maximum Service Temperature, Air	120 $^\circ\text{C}$	248 $^\circ\text{F}$	at 50% loss of tensile strength after 20000h; IEC 216-1
	140 $^\circ\text{C}$	284 $^\circ\text{F}$	
	200 $^\circ\text{C}$	392 $^\circ\text{F}$	
Deflection Temperature at 0.46 MPa (66 psi)	135 $^\circ\text{C}$	275 $^\circ\text{F}$	ISO 75-2
Deflection Temperature at 1.8 MPa (264 psi)	55.0 $^\circ\text{C}$	131 $^\circ\text{F}$	ISO 75-2
Flammability, UL94	HB @Thickness 0.800 mm	HB @Thickness 0.0315 in	
	HB @Thickness 1.60 mm	HB @Thickness 0.0630 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+16 ohm-cm	1.00e+16 ohm-cm	IEC 60093
Surface Resistance	1.00e+13 ohm	1.00e+13 ohm	IEC 60093
Dielectric Constant	3.3 @Frequency 100 Hz	3.3 @Frequency 100 Hz	IEC 60250
	3.3 @Frequency 1.00e+6 Hz	3.3 @Frequency 1.00e+6 Hz	IEC 60250
Dielectric Strength	140 kV/mm	3560 kV/in	IEC 243/1
Dissipation Factor	0.0010 @Frequency 100 Hz	0.0010 @Frequency 100 Hz	IEC 60250
	0.020	0.020	

Electrical Properties	Metric @Frequency 1.00e+6 Hz	English @Frequency 1.00e+6 Hz	Comments IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	250 - 270 °C	482 - 518 °F	Pipe Extrusion
	260 °C	500 °F	for shrinkage test
	250 - 275 °C	482 - 527 °F	Injection molding
Mold Temperature	40.0 - 80.0 °C	104 - 176 °F	
	60.0 °C	140 °F	for shrinkage test

Descriptive Properties	Value	Comments
Color	Natural	
Commercial Status	North America and Europe	
FDA	21 CFR 177.1660	
Form	Pellets	
Impact Modified	No	
Primary Processing Technique	Extrusion	
Processing	Film Extrusion	
	Injection Molding	
	Other Extrusion	
	Profile Extrusion	
	Sheet Extrusion	
Special characteristic	Heat stabilized or stable to heat	
	Light stabilized or stable to light	
	U.V. stabilized or stable to weather	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China