

Ultradur® B 6550

Polybutylene Terephthalate

BASF Corporation

Message:

High viscosity extrusion grade for semi-finished products, profile and hollow rods.

General Information			
Features	High Viscosity		
Uses	Profiles		
	Rods		
Agency Ratings	EC 1907/2006 (REACH)		
RoHS Compliance	RoHS Compliant		
Appearance	Natural Color		
Forms	Pellets		
Processing Method	Extrusion		
Multi-Point Data	Creep Modulus vs. Time (ISO 11403-1)		
	Isochronous Stress vs. Strain (ISO 11403-1)		
	Isothermal Stress vs. Strain (ISO 11403-1)		
	Secant Modulus vs. Strain (ISO 11403-1)		
	Specific Volume vs Temperature (ISO 11403-2)		
	Viscosity vs. Shear Rate (ISO 11403-2)		
Resin ID (ISO 1043)	PBT		
Physical	Nominal Value	Unit	Test Method
Density	1.30	g/cm ³	ISO 1183
Apparent Density	0.70 to 0.80	g/cm ³	
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	9.50	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	2.1	%	
Flow	1.7	%	
Water Absorption			ISO 62
Saturation, 23°C	0.50	%	
Equilibrium, 23°C, 50% RH	0.25	%	
Viscosity Number ¹	160	cm ³ /g	ISO 307
Mold Shrinkage ²			
free, longitudinal	1.5	%	
free, transverse	1.5	%	
Maximum Service Temperature - short cycle operation	200	°C	

Temperature Index - at 50% loss of tensile strength			IEC 60216
-- ³	140	°C	
-- ⁴	120	°C	
Automotive Materials (> 1.00 mm)	Passed		FMVSS 302
ISO Type	PBT, EGHLN, 15-020		ISO 7792
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness (H 358/30)	130	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2400	MPa	ISO 527-2
Tensile Stress (Yield)	54.0	MPa	ISO 527-2/50
Tensile Strain (Yield)	3.5	%	ISO 527-2/50
Nominal Tensile Strain at Break	> 50	%	ISO 527-2/50
Tensile Creep Modulus ⁵ (1000 hr)	1100	MPa	ISO 899-1
Flexural Modulus	2500	MPa	ISO 178
Flexural Stress	85.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	6.1	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	No Break		ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Unannealed	135	°C	ISO 75-2/B
1.8 MPa, Unannealed	55.0	°C	ISO 75-2/A
Melting Temperature	223	°C	ISO 11357-3
CLTE - Flow (23 to 80°C)	1.3E-4 to 1.6E-4	cm/cm/°C	ISO 11359-2
Specific Heat	1500	J/kg/°C	
Thermal Conductivity	0.27	W/m/K	DIN 52612
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+13	ohms	IEC 60093
Volume Resistivity	1.0E+16	ohms · cm	IEC 60093
Relative Permittivity			IEC 60250
100 Hz	3.30		
1 MHz	3.30		
Dissipation Factor			IEC 60250
100 Hz	1.0E-3		
1 MHz	0.020		
Comparative Tracking Index (Solution A)	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flammability Classification			IEC 60695-11-10, -20
0.400 mm	HB		
1.60 mm	HB		
Extrusion	Nominal Value	Unit	

Melt Temperature	250 to 275	°C
NOTE		
1.	solution 0,005 g/ml Phenole/1,2 Dichlorbenzol 1:1	
2.	plate with film gate 150*150*3 mm ³	
3.	5000 h	
4.	20000 h	
5.	strain <= 0.5%, 23°C	

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

