

Ultradur® B 2550

Polybutylene Terephthalate

BASF Corporation

Product Description

Ultradur B 2550 is an unfilled, easy flow PBT offering good heat resistance. It conforms to FDA requirements of 21 CFR 177.1660.

General

Material Status	• Commercial: Active		
Availability	• Europe	• North America	
Features	• Good Flow • High Flow	• High Heat Resistance • Medium Heat Resistance	• Semi Crystalline
Uses	• Coating Applications • Compounding	• Food Packaging • Paper Coatings	
Agency Ratings	• FDA 21 CFR 177.1500	• FDA 21 CFR 177.1660	• ULC Unspecified Rating
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Coating • Compounding	• Extrusion • Film Extrusion	• Injection Molding
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)

Physical

	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.30	g/cm ³	ASTM D792
--	1300	kg/m ³	ISO 1183 ²
Melt volume-flow rate (250°C/2.16 kg)	40.0	cm ³ /10min	ISO 1133 ²
Molding Shrinkage			
Flow: 3.18 mm	1.4	%	ASTM D955
Across Flow	1.6	%	ISO 294-4
Flow	1.9	%	ISO 294-4
Water Absorption			
Saturation	0.50	%	ASTM D570 ISO 62 ²
Equilibrium, 50% RH	0.25	%	ASTM D570
Equilibrium	0.25	%	ISO 62 ²
Viscosity Number	107	cm ³ /g	ISO 1628

Mechanical

	Nominal Value	Unit	Test Method
Tensile modulus	2500	MPa	ISO 527-2 ²
Tensile Strength			
Yield, 23°C	60.0	MPa	ASTM D638
Yield, -40°C	94.0	MPa	ISO 527-2
Yield	60.0	MPa	ISO 527-2 ²
Tensile Elongation			
Yield, 23°C	3.7	%	ASTM D638
Yield	3.7	%	ISO 527-2 ²
Nominal strain at break	35	%	ISO 527-2 ²
Tensile Creep Modulus			ISO 899-1 ²
1 hr	1500	MPa	
1000 hr	1100	MPa	
Flexural Modulus			
23°C	2210	MPa	ASTM D790
23°C	2200	MPa	ISO 178

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 www.kedisujiao.com

备注：以上原料物性数据由厂家发布,我公司仅提供参考！数据如有变动，请联系原料生产厂家获知。我公司不承担任何法律责任！

Ultradur® B 2550
Polybutylene Terephthalate
BASF Corporation

Tuesday, December 08, 2009

Impact	Nominal Value	Unit	Test Method
Charpy notched impact strength			ISO 179/1eA ²
-30°C	4.00	kJ/m ²	
23°C	6.00	kJ/m ²	
Charpy Unnotched Impact Strength (23°C)	250	kJ/m ²	ISO 179
Notched Izod Impact			
-40°C	37.0	J/m	ASTM D256
23°C	43.0	J/m	ASTM D256
23°C	4.00	kJ/m ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	164	°C	ASTM D648
1.8 MPa, Unannealed	67.0	°C	ASTM D648
1.8 MPa	65.0	°C	ISO 75-2 ²
Melting Temperature	223	°C	ASTM D3418 ISO 3146
CLTE - Flow			
--	0.000020	cm/cm/°C	ASTM E831
--	0.00015	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity ³	1.0E+13	ohms	ASTM D257 IEC 60093 ²
Volume Resistivity			
1.50 mm	> 1.0E+15	ohm·cm	ASTM D257
--	> 1.0E+13	ohm·m	IEC 60093 ²
Relative Permittivity			IEC 60250 ²
100 Hz	3.30		
1 MHz	3.30		
Dissipation Factor			IEC 60250 ²
100 Hz	0.0013		
1 MHz	0.020		
Comparative tracking index	500		IEC 60112 ²
Extrusion	Nominal Value	Unit	
Drying Temperature	100 to 120	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.040	%	
Cylinder Zone 1 Temp.	260 to 265	°C	
Cylinder Zone 2 Temp.	265 to 275	°C	
Cylinder Zone 3 Temp.	260 to 270	°C	
Cylinder Zone 4 Temp.	255 to 265	°C	
Adapter Temperature	260 to 270	°C	
Melt Temperature	260 to 270	°C	
Die Temperature	260 to 270	°C	

Extrusion Notes

Pump Temperature: 260 to 270°C

Notes

¹ Typical properties: these are not to be construed as specifications.

² Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

³ 1.5 mm

Dongguan Yi-Ming Plastic Chemical Co., Ltd.

如需要更多物性资料请查阅 www.kedisujiao.com

备注：以上原料物性数据由厂家发布,我公司仅提供参考！数据如有变动，请联系原料生产厂家获知。我公司不承担任何法律责任！