



Ultradur® B 6550 LN

BASF Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Ultradur B 6550 LN is a high viscosity PBT extrusion grade.

Applications

Typical applications include semi-finished products, profile and hollow rods.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Features	• High Viscosity
Uses	• Profiles • Rods
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Extrusion

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.30	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	9.00	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	2.2	%	
Flow	1.9	%	
Water Absorption (Saturation, 73°F)	0.40	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.25	%	ISO 62
Viscosity Number (Reduced Viscosity)	160.0	ml/g	ISO 1628
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	377000	psi	ISO 527-2
Tensile Stress (Yield, 73°F)	8120	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	3.5	%	ISO 527-2
Nominal Tensile Strain at Break (73°F)	> 50	%	ISO 527-2
Flexural Stress (73°F)	11000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.9	ft-lb/in ²	ISO 179
Charpy Unnotched Impact Strength			ISO 179
-22°F	100	ft-lb/in ²	
73°F	No Break		
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	275	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	122	°F	ISO 75-2/A
Melting Temperature (DSC)	433	°F	ISO 3146

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Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	5.0E+15	ohms·cm	IEC 60093
Dielectric Constant			IEC 60250
100 Hz	3.40		
1 MHz	3.20		
Dissipation Factor			IEC 60250
100 Hz	1.9E-3		
1 MHz	0.022		
Comparative Tracking Index	475	V	IEC 60112

Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	212 to 248	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.040	%
Cylinder Zone 1 Temp.	482	°F
Cylinder Zone 3 Temp.	464	°F
Cylinder Zone 5 Temp.	446	°F
Adapter Temperature	437	°F
Melt Temperature	446 to 554	°F
Die Temperature	419	°F
Extruder Screw L/D Ratio	20.0:1.0	
Extruder Screw Compression Ratio	3.0:1.0	

Extrusion Notes

Screw Parameters

- Metering Section : 45%
- Transition Section : 3 to 4 flights
- Feed Section : balance of screw length

Notes

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