

Ultradur® B 6550 L

PBT (Polybutylene Terephthalate)



Product Description

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

Applications

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

PHYSICAL	ASTM Test Method	Property Value
Specific Gravity	D-792	1.3
Mold Shrinkage (1/8" bar, in/in)		0.015
Moisture, %	D-570	
(50% RH)		0.25
(Saturation)		0.5
MECHANICAL	ASTM Test Method	Property Value
Tensile Strength, Yield, MPa (psi)	D-638	
23C (73F)		50 (7,250)
Elongation, Yield, %	D-638	
23C (73F)		3.5
IMPACT	ASTM Test Method	Property Value
Notched Izod Impact, J/M (ft-lbs/in)	D-256	
23C (73F)		53 (1.0)
THERMAL	ASTM Test Method	Property Value
Melting Point, C(F)	D-3418	223 (433)
Heat Deflection @ 264 psi (1.8 MPa) C(F)	D-648	52 (125)
Heat Deflection @ 66 psi (.45 MPa) C(F)	D-648	132 (269)
ELECTRICAL	ASTM Test Method	Property Value
Volume Resistivity, 1.5 mm	D-257	>1E13
Surface Resistivity, 1.5 mm	D-257	>1E15

Processing Guidelines

Material Handling

Max. Water content: 0.04%

To ensure optimum part performance, this product must be dried prior to molding and maintained at a moisture level of less than 0.04%. Dehumidifying or desiccant dryers operating at 100-120 degC (212-248 degF) at 4 hours drying time is recommended. Further information concerning safe handling procedures can be obtained from the Material Safety Data Sheet. Alternatively, please contact your BASF representative.

Typical Profile

Melt Temperature 230-290 degC (446-554 degF)

Temperature Settings (degC):

Extruder 250/240/230 degC (482/464/446 degF)



Adaptor 225 deg C (437 deg F)
Die 215 deg C (419 deg F)

Screw Parameters

Metering Section	45%
Transition Section	3 to 4 flights
Feed Section	balance of screw length
Compression Ratio	3:1
L/D Ratio	20:1

Tooling & Sizing

Die to Finished Tube dia. 2.0-2.5:1 Die Gap 3-4 times the desired wall thickness

The vacuum water calibration method is recommended when producing tube diameters 8 mm and below. Water temperature should be 20 deg C (68 deg F).

Note

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