

Ultradur® B 2550

PBT (Polybutylene Terephthalate)



Product Description

Ultradur B 2550 is an unfilled, easy flow PBT offering good heat resistance.

Applications

Applications include monofilament, bristles and heat-resistant coatings on paper and board used for packaging frozen foods and oven-ready meals. Also for injection molding applications that call for high flowability.

PHYSICAL	ASTM Test Method	Property Value
Specific Gravity	D-792	1.3
Mold Shrinkage (1/8" bar, in/in)		0.014
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)		60 (8,700)
Elongation, Yield, %	D-638	
23C (73F)		3.7
Flexural Modulus, MPa (psi)	D-790	
23C (73F)		2,210 (320,000)
IMPACT	ASTM Test Method	Property Value
Notched Izod Impact, J/M (ft-lbs/in)	D-256	
-40C (-40F)		37 (0.7)
23C (73F)		43 (0.8)
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	67 (152)
Heat Deflection @ 66 psi (.45 MPa) C(F)	D-648	164 (327)
Coef. of Linear Thermal Expansion, mm/mm C (in/in F)	E-831	0.2 X10-4
ELECTRICAL	ASTM Test Method	Property Value
Volume Resistivity, 1.5 mm	D-257	>1E13
Surface Resistivity, 1.5 mm	D-257	1E13

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



BASF Corporation
Engineering Plastics
609 Biddle Avenue
Yandotte, MI 48192



Melt Temperature 260-270 degC (500-518 degF)

Typical Temperature Profile:

Zone 1: 260-265 degC (500-509 degF)
Zone 2: 265-275 degC (509-527 degF)
Zone 3: 260-270 degC (500-518 degF)
Zone 4: 255-265 degC (491-509 degF)
Head: 260-270 degC (500-518 degF)
Pump: 260-270 degC (500-518 degF)
Die Zones: 260-270 degC (500-518 degF)

Recommended Screw:

Three section screw: 6D/7D/9D + 3D
Compression Ratio: 3.5:1 to 4:1
L/D Ratio: 25:1 minimum

Water Bath Temperature: 45-60 degC (113-140 degF)

Note

Although all statements and information in this publication are believed to be accurate and reliable, they are presented gratis and for guidance only, and risks and liability for results obtained by use of the products or application of the suggestions described are assumed by the user. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH. Statements or suggestions concerning possible use of the products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that toxicity data and safety measures are indicated or that other measures may not be required.



BASF Corporation
Engineering Plastics
609 Biddle Avenue
Yandotte, MI 48192

