Product Information

Aug 2017

# Ultradur® B 2550 FC
## PBT (Polybutylene Terephthalate)

We create chemistry

### Product Description

Ultradur B 2550 FC is an unfilled, easy flow PBT offering good heat resistance. This grade is a food contact grade.

### 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 | ISO Test Method | Property Value |
|---|---|---|
| Density, g/cm³ | 1183 | 1.30 |
| Viscosity Number, cm³/g | 1628 | 107 |
| **RHEOLOGICAL** | **ISO Test Method** | **Property Value** |
| Melt Volume Rate (250 C/2.16 Kg), cc/10min. | 1133 | 40 |
| **MECHANICAL** | **ISO Test Method** | **Property Value** |
| Tensile Modulus, MPa | 527 | |
| 23C | | 2,500 |
| Tensile stress at yield, MPa | 527 | |
| 23C | | 57 |
| Tensile strain at yield, % | 527 | |
| 23C | | 3.7 |
| Nominal strain at break, % | 527 | |
| 23C | | 35 |
| Ball Indentation, MPa | 2039-1 | 130 |
| Tensile Creep Modulus (1000h), MPa | 899 | 1,100 |
| **IMPACT** | **ISO Test Method** | **Property Value** |
| Charpy Notched, kJ/m² | 179 | |
| 23C | | 6 |
| Charpy Unnotched, kJ/m² | 179 | |
| 23C | | 250 |
| **THERMAL** | **ISO Test Method** | **Property Value** |
| Melting Point, C | 3146 | 223 |
| HDT A, C | 75 | 65 |
| HDT B, C | 75 | 165 |
| **ELECTRICAL** | **ISO Test Method** | **Property Value** |
| Comparative Tracking Index | IEC 60112 | 500 |
| Volume Resistivity (Ohm-m) | IEC 60093 | 1E14 |
| Surface Resistivity (Ohm) | IEC 60093 | 1E13 |
| Dielectric Constant (100 Hz) | IEC 60250 | 3.3 |
| Dielectric Constant (1 MHz) | IEC 60250 | 3.3 |
| Dissipation Factor (100 Hz), E-4 | IEC 60250 | 13 |
| Dissipation Factor (1 MHz), E-4 | IEC 60250 | 200 |
| **UL RATINGS** | **UL Test Method** | **Property Value** |

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General Information: 800-BC-RESIN
Technical Assistance: 800-527-TECH (734-324-5150)
Web address: http://www.plasticsportal.com/usa

| | | |
|---|---|---|
| Flammability Rating, 1.5mm | UL94 | HB |

## 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 100-120C (212-248F) at 4 hours drying time is recommended. Further information concerning safe handling procedures can be obtained from the Safety Data Sheet. Alternatively, please contact your BASF representative.

**Typical Profile**
Melt Temperature 260-270C (500-518F)

Typical Temperature Profile:
Zone 1: 260-265C (500-509F)
Zone 2: 265-275C (509-527F)
Zone 3: 260-270C (500-518F)
Zone 4: 255-265C (491-509F)
Head: 260-270C (500-518F)
Pump: 260-270C (500-518F)
Die Zones: 260-270C (500-518F)

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: 45-60C (113-140F)

## Note



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