Aug 2017

Ultradur[®] B 2550 FC PBT (Polybutylene Terephthalate)



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, cm ³ /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/m ² | 179 | |
| 23C | | 6 |
| Charpy Unnotched, kJ/m ² | 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 |

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

Ultradur® B 2550 FC

Processing Guidelines

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We create chemistry

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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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