

DuPont™ Crastin® PBT

thermoplastic polyester resin

Crastin® HR5330HF NC010

Crastin® HR5330HF is a 30% glass reinforced PBT with high flow (HF), moderately toughened, hydrolysis resistant (HR) resin. Excellent balance of properties between terminal pullout and impact resistance. Developed for USCAR Class 3 and 4 environments.

| Property | Test Method | Units | Value |
|----------------------------------|----------------|-------------------|-------------|
| Identification | | | |
| Resin Identification | ISO 1043 | | PBT-IGF30 |
| Part Marking Code | ISO 11469 | | >PBT-IGF30< |
| Mechanical | | | |
| Stress at Break | ISO 527 | MPa (kpsi) | 132 (19.1) |
| Strain at Break | ISO 527 | % | 3.5 |
| Tensile Modulus | ISO 527 | MPa (kpsi) | 8400 (1220) |
| Flexural Modulus | ISO 178 | MPa (kpsi) | 7700 (1120) |
| Flexural Strength | ISO 178 | MPa (kpsi) | 200 (29.0) |
| Notched Charpy Impact Strength | ISO 179/1eA | kJ/m ² | |
| -30°C (-22°F) | | | 11.5 |
| 23°C (73°F) | | | 13 |
| Unnotched Charpy Impact Strength | ISO 179/1eU | kJ/m ² | 75 |
| Thermal | | | |
| Deflection Temperature | ISO 75-1/-2 | °C (°F) | |
| 0.45MPa | | | 221 (430) |
| 1.80MPa | | | 207 (405) |
| Melting Temperature | ISO 11357-1/-3 | °C (°F) | |
| 10°C/min | | | 225 (437) |

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
 ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.
 Test temperatures are 23°C unless otherwise stated.

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| Property | Test Method | Units | Value |
|---------------------------------|-----------------|--|-------------------|
| Electrical | | | |
| Surface Resistivity | IEC 60093 | ohm | 6E15 |
| Volume Resistivity | IEC 60093 | ohm m | 1E15 |
| Electric Strength | IEC 60243-1 | kV/mm (V/mil) | 31 (790) |
| Dissipation Factor | IEC 60250 | E-4 | |
| 1E3 Hz | | | 70 |
| 1E6 Hz | | | 200 |
| Flammability | | | |
| Flammability Classification | IEC 60695-11-10 | | |
| 0.75mm | | | HB |
| Flammability Classification | UL94 | | |
| 0.75mm | | | HB |
| Other | | | |
| Density | ISO 1183 | kg/m ³ (g/cm ³) | 1500 (1.50) |
| Molding Shrinkage | ISO 294-4 | % | |
| Normal, 2.0mm | | | 1.0 |
| Parallel, 2.0mm | | | 0.3 |
| Processing | | | |
| Melt Temperature Range | | °C (°F) | 240-260 (465-500) |
| Melt Temperature Optimum | | °C (°F) | 250 (480) |
| Mold Temperature Range | | °C (°F) | 30-130 (85-265) |
| Mold Temperature Optimum | | °C (°F) | 80 (175) |
| Drying Time, Dehumidified Dryer | | h | 2-4 |
| Drying Temperature | | °C (°F) | 110-130 (230-265) |
| Processing Moisture Content | | % | <0.04 |

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