Crastin® HR5330HF BK503
THERMOPLASTIC POLYESTER RESIN

Product Description

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.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific • Central America	• Europe • Latin America • North America	• South America
Filler / Reinforcement	• Glass Fiber Reinforcement, 30% Filler by Weight		
Additive	• Hydrolysis Resistant	• Lubricant	
Features	• Good Chemical Resistance • Good Dimensional Stability • Good Processability	• High Flow • Hydrolysis Resistant • Low Moisture Absorption	• Low Viscosity • Lubricated
Uses	• Automotive Applications • Connectors • Electrical/Electronic Applications	• Engineering Parts • Industrial Applications • Industrial Parts	• Machine/Mechanical Parts
RoHS Compliance	• Contact Manufacturer		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Part Marking Code (ISO 11469)	• >PBT-IGF30<		
Resin ID (ISO 1043)	• PBT-IGF30		
Product Category	• Glass Reinforced Resins	• Hydrolysis Resistant Resins	

Physical	Nominal Value Unit	Test Method
Density	1.50 g/cm³	ISO 1183
Molding Shrinkage		ISO 294-4
Across Flow : 2.00 mm	1.0 %	
Flow : 2.00 mm	0.30 %	
Mechanical	**Nominal Value Unit**	**Test Method**
Tensile Modulus (23°C)	8400 MPa	ISO 527-2
Tensile Stress (Break, 23°C)	120 MPa	ISO 527-2
Tensile Strain (Break, 23°C)	3.5 %	ISO 527-2
Flexural Modulus (23°C)	7500 MPa	ISO 178
Impact	**Nominal Value Unit**	**Test Method**
Charpy Notched Impact Strength		ISO 179/1eA
-30°C	9.0 kJ/m²	
23°C	11 kJ/m²	
Charpy Unnotched Impact Strength (23°C)	65 kJ/m²	ISO 179/1eU
Notched Izod Impact Strength		ISO 180/1A
-40°C	8.0 kJ/m²	
23°C	12 kJ/m²	
Unnotched Izod Impact Strength (23°C)	50 kJ/m²	ISO 180/1U
Thermal	**Nominal Value Unit**	**Test Method**
Heat Deflection Temperature		
0.45 MPa, Unannealed	221 °C	ISO 75-2/B
1.8 MPa, Unannealed	207 °C	ISO 75-2/A
Melting Temperature [2]	225 °C	ISO 11357-3

To find out more, visit DuPont Performance Polymers or contact the nearest DuPont location.

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Flammability	Nominal Value Unit	Test Method
Flame Rating (0.750 mm)	HB	UL 94 IEC 60695-11-10, -20

Injection	Nominal Value Unit
Drying Temperature	110 to 130 °C
Drying Time	2.0 to 4.0 hr
Suggested Max Moisture	< 0.040 %
Processing (Melt) Temp	240 to 260 °C
Melt Temperature, Optimum	250 °C
Mold Temperature	30.0 to 130 °C
Mold Temperature, Optimum	80 °C
Drying Recommended	Yes

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 10°C/min

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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