



# Bergamid™ B70 G40 Black

## Polyamide 6

### Key Characteristics

Product Description		
PA6 filled with 40% glass fiber.		
General		
Material Status	• Commercial: Active	
Regional Availability	• Europe	
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight	
Features	• Good Processability • Good Stiffness	• Good Strength • High Impact Resistance
Uses	• Automotive Applications • Consumer Applications	• General Purpose • Industrial Applications
Appearance	• Black	
Forms	• Pellets	
Processing Method	• Injection Molding	

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.45 g/cm <sup>3</sup>	1.45 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (235°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (235°C/2.16 kg)	2.00 cm <sup>3</sup> /10min	2.00 cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	0.90 %	0.90 %	
Flow	0.45 %	0.45 %	
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	1.60E+6 psi	11000 MPa	ISO 527-2/1
Tensile Stress (Yield)	26100 psi	180 MPa	ISO 527-2/5
Tensile Strain (Break)	> 2.0 %	> 2.0 %	ISO 527-2/5
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	6.2 ft·lb/in <sup>2</sup>	13 kJ/m <sup>2</sup>	ISO 179
Charpy Unnotched Impact Strength 73°F (23°C)	38 ft·lb/in <sup>2</sup>	80 kJ/m <sup>2</sup>	ISO 179
Thermal	Typical Value (English)	Typical Value (SI)	
Melting Temperature	428 to 437 °F	220 to 225 °C	
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.06 in (1.6 mm))	HB	HB	UL 94

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Rear Temperature	446 to 464 °F	230 to 240 °C
Middle Temperature	455 to 473 °F	235 to 245 °C
Front Temperature	464 to 482 °F	240 to 250 °C

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Injection	Typical Value (English)	Typical Value (SI)
Nozzle Temperature	482 to 500 °F	250 to 260 °C
Mold Temperature	176 °F	80 °C

**Notes**

<sup>1</sup> Typical values are not to be construed as specifications.

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