



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 ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|--|-----------------------------|-----------------------------|-------------|
| Density | 1.45 g/cm ³ | 1.45 g/cm ³ | 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 ³ /10min | 2.00 cm ³ /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 ² | 13 kJ/m ² | ISO 179 |
| Charpy Unnotched Impact Strength 73°F (23°C) | 38 ft·lb/in ² | 80 kJ/m ² | 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

¹ Typical values are not to be construed as specifications.

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