Edgetek™ PI-40GF/000 BLACK

Polyetherimide

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Appearance	• Black
Processing Method	• Injection Molding

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.60	1.60	ASTM D792
Molding Shrinkage - Flow	1.0E-3 to 4.0E-3 in/in	0.10 to 0.40 %	ASTM D955
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	1.60E+6 psi	11000 MPa	ASTM D638
Tensile Strength [2]	24900 psi	172 MPa	ASTM D638
Tensile Elongation [2] (Break)	2.5 %	2.5 %	ASTM D638
Flexural Modulus [3]	1.60E+6 psi	11000 MPa	ASTM D790
Flexural Strength [3]	35000 psi	241 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256
73°F (23°C), 0.126 in (3.20 mm)	2.2 ft·lb/in	120 J/m	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm)	408 °F	209 °C	
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating (0.06 in (1.6 mm))	V-0	V-0	UL 94

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	275 to 302 °F	135 to 150 °C
Drying Time	4.0 to 5.0 hr	4.0 to 5.0 hr
Rear Temperature	662 to 752 °F	350 to 400 °C
Middle Temperature	662 to 752 °F	350 to 400 °C
Front Temperature	662 to 752 °F	350 to 400 °C
Mold Temperature	275 to 329 °F	135 to 165 °C

Injection Notes

Injection Pressure: MED-HIGH
Hold Pressure: MED-HIGH
Screw Speed: MODERATE
Back Pressure: LOW

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Notes

[1] Typical values are not to be construed as specifications.

[2] 0.20 in/min (5.0 mm/min)

[3] 0.051 in/min (1.3 mm/min)

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