Edgetek™ PI-30GF/000

Polyether Imide

Key Characteristics

Product Description
The Edgetek® Engineering Thermoplastic Compounds portfolio covers a broad range of standard and custom-formulated high performance materials. This portfolio includes high-temperature materials for elevated service temperature environments, high-modulus / structural materials for load-bearing and high-strength applications and flame-retardant products. These compounds are based on select engineering thermoplastic resins that are compounded with reinforcing additives such as carbon fiber, glass fiber and glass beads.

General		
Material Status	• Commercial: Active	
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight	
Features	• General Purpose	• High Heat Resistance
Uses	• Automotive Applications • Consumer Applications	• General Purpose • Industrial Applications
Forms	• Pellets	
Processing Method	• Injection Molding	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.49	1.49	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3 in/in	0.20 to 0.30 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.18 %	0.18 %	ASTM D570
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	1.30E+6 psi	8960 MPa	ASTM D638
Tensile Strength [2] (Yield)	25000 psi	172 MPa	ASTM D638
Tensile Elongation [2] (Break)	4.0 to 5.0 %	4.0 to 5.0 %	ASTM D638
Flexural Modulus	1.30E+6 psi	8960 MPa	ASTM D790
Flexural Strength	32000 psi	221 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.7 ft·lb/in	91 J/m	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	410 °F	210 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	680 to 750 °F	360 to 399 °C

Notes

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

[2] Type I, 0.20 in/min (5.1 mm/min)