

Edgetek™ PK-10GF/000

Polyetheretherketone

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	• North America
Filler / Reinforcement	• Glass Fiber, 10% 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	1.39	1.39	ASTM D792
Molding Shrinkage - Flow	4.0E-3 to 5.0E-3 in/in	0.40 to 0.50 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.20 %	0.20 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	800000 psi	5520 MPa	ASTM D638
Tensile Strength ² (Yield)	18000 psi	124 MPa	ASTM D638
Tensile Elongation ² (Break)	4.0 to 5.0 %	4.0 to 5.0 %	ASTM D638
Flexural Modulus	750000 psi	5170 MPa	ASTM D790
Flexural Strength	28000 psi	193 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.4 ft·lb/in	75 J/m	ASTM D256A
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	410 °F	210 °C	ASTM D648

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	710 to 730 °F	377 to 388 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)