

Edgetek™ PF-30GF/000 Polysulfone

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.

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General			
Material Status	Commercial: Active		
Regional Availability	 Africa & Middle East Asia Pacific	EuropeNorth America	South America
Filler / Reinforcement	 Glass Fiber Reinforcemer 	nt, 30% Filler by Weight	
Features	 General Purpose 	 High Heat Resistance 	
Uses	Automotive ApplicationsConsumer Applications	General PurposeIndustrial Applications	
Forms	 Pellets 		
Processing Method	Injection Molding		

Technical Properties 1

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Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.46	1.46	ASTM D792
Molding Shrinkage - Flow	0.0020 to in/in 0.0030	0.20 to 0.30 %	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	1.30E+6 psi	8960 MPa	ASTM D638
Tensile Strength ² (Yield)	17500 psi	121 MPa	ASTM D638
Tensile Elongation ² (Break)	3.0 to 4.0 %	3.0 to 4.0 %	ASTM D638
Flexural Modulus	1.10E+6 psi	7580 MPa	ASTM D790
Flexural Strength	24000 psi	165 MPa	ASTM D790
mpact	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	1.40 ft·lb/in	74.7 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)	360 °F	182 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)	
Processing (Melt) Temp	630 to 700 °F	332 to 371 °C	

Notes

¹ Typical values are not to be construed as specifications.

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² Type I, 0.20 in/min (5.1 mm/min)

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