

Edgetek™ PF-1000 HF 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
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	1.24	1.24	ASTM D792
Molding Shrinkage - Flow	0.0070 to in/in 0.0080	0.70 to 0.80 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.30 %	0.30 %	ASTM D570
Mechanical Property of the Control o	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	360000 psi	2480 MPa	ASTM D638
Tensile Strength ² (Yield)	10200 psi	70.3 MPa	ASTM D638
Tensile Elongation ² (Break)	50 to 100 %	50 to 100 %	ASTM D638
Flexural Modulus	380000 psi	2620 MPa	ASTM D790
Flexural Strength	14000 psi	96.5 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	1.30 ft·lb/in	69.4 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)	345 °F	174 °C	

Processing Information

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Injection	Typical Value (English)	Typical Value (SI)	
Processing (Melt) Temp	640 to 680 °F	338 to 360 °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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