



Edgetek™ SF-40CF/000

Polyphenylene Sulfide

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 • Europe • Asia Pacific • Latin America • North America
Filler / Reinforcement	• Carbon Fiber, 40% Filler by Weight
Features	• General Purpose • High Heat Resistance
Uses	• Automotive Applications • General Purpose • Consumer Applications • 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	5.0E-4 to 1.0E-3 in/in	0.050 to 0.10 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.030 %	0.030 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	4.50E+6 psi	31000 MPa	ASTM D638
Tensile Strength ² (Yield)	29000 psi	200 MPa	ASTM D638
Tensile Elongation ² (Break)	2.0 to 3.0 %	2.0 to 3.0 %	ASTM D638
Flexural Modulus	4.00E+6 psi	27600 MPa	ASTM D790
Flexural Strength	43000 psi	296 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)	505 °F	263 °C	ASTM D648

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	580 to 630 °F	304 to 332 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)