



Edgetek™ SF-40GF/000 RS BK001

Polyphenylene Sulfide

Key Characteristics

Product Description	
40% Glass Fiber Reinforced PPS Compound	
General	
Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.66	1.66	ASTM D792
Molding Shrinkage - Flow	2.5E-3 to 5.5E-3 in/in	0.25 to 0.55 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ²	27600 psi	190 MPa	ASTM D638
Tensile Elongation ² (Break)	3.0 %	3.0 %	ASTM D638
Flexural Modulus ³	2.18E+6 psi	15000 MPa	ASTM D790
Flexural Strength ³	39900 psi	275 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°F (23°C), 0.126 in (3.20 mm)	2.1 ft-lb/in	110 J/m	
Unnotched Izod Impact			ASTM D256
73°F (23°C), 0.126 in (3.20 mm)	13 ft-lb/in	700 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm)	525 °F	274 °C	
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+15 ohms	1.0E+15 ohms	ASTM D257
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.0295 in (0.750 mm))	V-0	V-0	Internal Method

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	284 to 302 °F	140 to 150 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Rear Temperature	572 to 608 °F	300 to 320 °C
Middle Temperature	572 to 608 °F	300 to 320 °C
Front Temperature	572 to 608 °F	300 to 320 °C
Mold Temperature	284 to 320 °F	140 to 160 °C

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Injection Notes

Injection Pressure: MED-HIGH
Hold Pressure: MED-HIGH
Screw Speed: MODERATE
Back Pressure: LOW

Notes

¹ Typical values are not to be construed as specifications.

² 0.20 in/min (5.0 mm/min)

³ 0.051 in/min (1.3 mm/min)

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