Edgetek™ SF-40GF/000 RS NC

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	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / 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 (0.031 in (0.8 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

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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