

Edgetek™ PK-30GF/000 FCR BK

Polyetheretherketone

Key Characteristics

Product Description	
30% Glass Fiber Reinforced PEEK Compound with Ultra-High Flowability	
General	
Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Features	• General Purpose • High Heat Resistance
Uses	• Automotive Applications • General Purpose • Consumer Applications • Industrial Applications
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.50	1.50	ASTM D792
Melt Mass-Flow Rate (MFR) (400°C/2.16 kg)	11 g/10 min	11 g/10 min	ASTM D1238
Molding Shrinkage - Flow	2.0E-3 to 5.0E-3 in/in	0.20 to 0.50 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	1.60E+6 psi	11000 MPa	ASTM D638
Tensile Strength ² (Yield)	24700 psi	170 MPa	ASTM D638
Tensile Elongation ² (Break)	3.0 to 4.0 %	3.0 to 4.0 %	ASTM D638
Flexural Modulus	1.45E+6 psi	10000 MPa	ASTM D790
Flexural Strength	39200 psi	270 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	1.9 ft·lb/in	100 J/m	ASTM D256A
Unnotched Izod Impact 73°F (23°C), 0.125 in (3.18 mm)	17 ft·lb/in	900 J/m	ASTM D4812
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)	617 °F	325 °C	ASTM D648
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+14 ohms	1.0E+14 ohms	ASTM D257
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.06 in (1.6 mm))	V-0	V-0	Internal Method

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	302 to 320 °F	150 to 160 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Processing (Melt) Temp	680 to 734 °F	360 to 390 °C
Mold Temperature	338 to 374 °F	170 to 190 °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 Type I, 0.20 in/min (5.1 mm/min)

