



## Edgetek™ PK-30CF/000 FCR BK

### Polyetheretherketone

#### Key Characteristics

##### Product Description

30% Carbon Fiber Reinforced PEEK Compound with Ultra-High Flowability for Injection Molding Application

##### General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight		
Features	• General Purpose	• High Heat Resistance	
Uses	• Automotive Applications • Consumer Applications	• General Purpose • Industrial Applications	
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

#### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.40	1.40	ASTM D792
Molding Shrinkage - Flow	5.0E-4 to 2.0E-3 in/in	0.050 to 0.20 %	ASTM D955
Water Absorption (24 hr, 0.125 in (3.18 mm))	0.050 %	0.050 %	ASTM D570
Water Absorption (Saturation)	0.13 %	0.13 %	ASTM D570
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus <sup>2</sup> (73°F (23°C))	3.63E+6 psi	25000 MPa	ASTM D638
Tensile Strength <sup>2</sup> (Break, 73°F (23°C))	34800 psi	240 MPa	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	1.0 to 2.0 %	1.0 to 2.0 %	ASTM D638
Flexural Modulus (73°F (23°C))	3.19E+6 psi	22000 MPa	ASTM D790
Flexural Strength	52200 psi	360 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	1.5 ft-lb/in	80 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)	617 °F	325 °C	ASTM D648
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	1.0E+4 to 1.0E+5 ohms	1.0E+4 to 1.0E+5 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	302 °F	150 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr

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Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	662 to 734 °F	350 to 390 °C
Mold Temperature	338 to 374 °F	170 to 190 °C
<b>Injection Notes</b>		
Injection Pressure: MED-HIGH		
Hold Pressure: MED-HIGH		
Screw Speed: MODERATE		
Back Pressure: LOW		

**Notes**

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Type I, 0.20 in/min (5.1 mm/min)

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