

Stat-Tech™ 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 • Europe • Asia Pacific • Latin America • North America
Filler / Reinforcement	• Carbon 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	1.40	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 ² (73°F (23°C))	3.63E+6 psi	25000 MPa	ASTM D638
Tensile Strength ² (Break, 73°F (23°C))	34800 psi	240 MPa	ASTM D638
Tensile Elongation ² (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			ASTM D256A
73°F (23°C), 0.125 in (3.18 mm), Injection Molded	1.5 ft-lb/in	80 J/m	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.125 in (3.18 mm)	617 °F	325 °C	
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
Processing (Melt) Temp	662 to 734 °F	350 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)

