

InStruc® PEEKCF30

Americhem - Polyetheretherketone

General Information
Product Description

30% CARBON FIBER REINFORCED POLYETHERETHERKETONE

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight
Features	• Filled • Good Dimensional Stability • High Stiffness • High Strength
Uses	• Aerospace Applications • Connectors • Electrical/Electronic Applications • Engineering Parts • Housings • Industrial Applications • Industrial Parts • Metal Replacement • Military/Defense Applications • Oil/Gas Applications • Outdoor Applications • Semiconductor Applications
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.41		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-4 to 1.5E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.060	%	ASTM D570
Mechanical			
Tensile Modulus	3.60E+6	psi	ASTM D638
Tensile Strength	34000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	3.50E+6	psi	ASTM D790
Flexural Strength	48000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	1.5	ft·lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	600	°F	ASTM D648
Electrical			
Surface Resistivity	< 1.0E+5	ohms	ASTM D257

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	300	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.10	%
Processing (Melt) Temp	700 to 750	°F
Mold Temperature	350 to 400	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

