

InStruc® PEEKCF40HF
Americhem - Polyetheretherketone
General Information
Product Description

40% CARBON FIBER REINFORCED, HIGH FLOW, POLYETHERETHERKEYTONE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 40% Filler by Weight		
Features	• Filled • Good Dimensional Stability	• High Flow • 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	1.45		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-4 to 1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.060	%	ASTM D570
Mechanical			
Tensile Strength	40000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 2.0	%	ASTM D638
Flexural Modulus	4.20E+6	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	1.8	ft·lb/in	ASTM D256
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	600	°F	ASTM D648
Electrical			
Surface Resistivity	10 to 1.0E+4	ohms	ASTM D257

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	300	°F
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	680 to 710	°F
Mold Temperature	350 to 400	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

