

InStruc® PEEKGF40HF

Americhem - Polyetheretherketone

General Information
Product Description

40% GLASS FIBER REINFORCED, HIGH FLOW POLYETHERETHERKETONE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight		
Features	• Filled	• High Flow	• High Strength
	• Good Dimensional Stability	• High Stiffness	
Uses	• Aerospace Applications	• Housings	• Military/Defense Applications
	• Connectors	• Industrial Applications	• Oil/Gas Applications
	• Electrical/Electronic Applications	• Industrial Parts	• Outdoor Applications
	• Engineering Parts	• Metal Replacement	• Semiconductor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.62		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical			
Tensile Strength	28000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 4.0	%	ASTM D638
Flexural Modulus	1.80E+6	psi	ASTM D790
Flexural Strength	40000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	1.8	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	16	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	600	°F	ASTM D648
Electrical			
Surface Resistivity	1.0E+17	ohms	ASTM D257
Flammability			
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	300	°F
Drying Time	4.0	hr
Processing (Melt) Temp	660 to 740	°F
Mold Temperature	350 to 400	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

