

InStruc® PEEKGF20HF

Americhem - Polyetheretherketone

General Information
Product Description

20% GLASS FIBER REINFORCED, HIGH FLOW POLYETHERETHERKETONE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 20% 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	1.44		ASTM D792
Molding Shrinkage - Flow	3.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.30	%	ASTM D570
Mechanical			
Tensile Modulus	1.30E+6	psi	ASTM D638
Tensile Strength	22000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.20E+6	psi	ASTM D790
Flexural Strength	36000	psi	ASTM D790
Impact			
Notched Izod Impact (0.125 in)	1.2	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	12	ft·lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	550	°F	ASTM D648
Electrical			
Surface Resistivity	1.0E+17	ohms	ASTM D257
Flammability			
Flame Rating (0.06 in)	V-0		Internal Method

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

