

InStruc® PEEKGF30HFMD

Americhem - Polyetheretherketone

General Information
Product Description

30% GLASS FIBER REINFORCED HIGH FLOW POLYETHERETHERKEYTONE LOCKED FORMULATION FOR MEDICAL USAGE

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Autoclave Sterilizable	• Good Dimensional Stability	• High Strength
	• E-beam Sterilizable	• Heat Sterilizable	• Radiation Sterilizable
	• Ethylene Oxide Sterilizable	• High Flow	• Steam Sterilizable
	• Filled	• High Stiffness	
Uses	• Connectors	• Housings	• Metal Replacement
	• Electrical/Electronic Applications	• Industrial Parts	• Semiconductor Applications
	• Engineering Parts	• Medical/Healthcare Applications	• Surgical Instruments
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.53		ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.50E+6	psi	ASTM D638
Tensile Strength	23000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.50E+6	psi	ASTM D790
Flexural Strength	40000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.0	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	18	ft-lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	600	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	4.0	hr
Processing (Melt) Temp	680 to 750	°F
Mold Temperature	350 to 400	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm
Vent Depth	1.5E-3 to 3.0E-3	in

