

**InStruc® PEEKGF15HFMD**
*Americhem - Polyetheretherketone*
**General Information**
**Product Description**

15% GLASS FIBER REINFORCED, HIGH FLOW POLYETHERETHERKETONE FOR HEALTHCARE APPLICATIONS.

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight		
Features	• Autoclave Sterilizable • E-beam Sterilizable • Ethylene Oxide Sterilizable • Filled	• Good Dimensional Stability • Heat Sterilizable • High Flow • High Stiffness	• High Strength • Radiation Sterilizable • Steam Sterilizable
Uses	• Connectors • Electrical/Electronic Applications • Engineering Parts	• Housings • Industrial Parts • Medical/Healthcare Applications	• Metal Replacement • Semiconductor Applications • Surgical Instruments
Forms	• Pellets		
Processing Method	• Injection Molding		

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density / Specific Gravity	1.40		ASTM D792
Molding Shrinkage - Flow	4.0E-3 to 5.0E-3	in/in	ASTM D955
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Modulus	1.10E+6	psi	ASTM D638
Tensile Strength	18000	psi	ASTM D638
Tensile Elongation (Yield)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	1.00E+6	psi	ASTM D790
Flexural Strength	31000	psi	ASTM D790
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact (0.125 in)	1.1	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	10	ft·lb/in	ASTM D955
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (264 psi, Unannealed)	480	°F	ASTM D648
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Surface Resistivity	1.0E+17	ohms	ASTM D257
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating (0.06 in)	V-0		Internal Method

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
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

