

**HiFill® PEEK GF10**

 Techmer Polymer Modifiers - *Polyetheretherketone*
**General Information**
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Material Status	<ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>
Availability	<ul style="list-style-type: none"> <li>North America</li> </ul>
Filler / Reinforcement	<ul style="list-style-type: none"> <li>Glass Fiber, 10% Filler by Weight</li> </ul>
Appearance	<ul style="list-style-type: none"> <li>Colors Available</li> </ul>
Forms	<ul style="list-style-type: none"> <li>Pellets</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>Injection Molding</li> </ul>

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

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.39		ASTM D792
Molding Shrinkage - Flow (0.125 in)	8.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
<b>Mechanical</b>			
Tensile Strength (Break)	18000	psi	ASTM D638
Tensile Elongation (Break)	4.5	%	ASTM D638
Flexural Modulus	770000	psi	ASTM D790
Flexural Strength	22200	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (73°F, 0.125 in)	1.6	ft-lb/in	ASTM D256
<b>Hardness</b>			
Rockwell Hardness (R-Scale)	118		ASTM D785
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
CLTE - Flow	1.6E-5	in/in/°F	ASTM D696
<b>Electrical</b>			
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	V/mil	ASTM D149

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	300	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	680 to 730	°F
Middle Temperature	680 to 730	°F
Front Temperature	680 to 730	°F
Processing (Melt) Temp	680 to 720	°F
Mold Temperature	350 to 425	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 100	rpm

