

**HiFill® PEEK GF20 A MIL**

 Techmer Polymer Modifiers - *Polyetheretherketone*
**General Information**
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Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Uses	• Military/Defense Applications
Processing Method	• Injection Molding

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

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.43		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.07E+6	psi	ASTM D638
Tensile Strength (Yield)	20200	psi	ASTM D638
Tensile Strength (Break)	20000	psi	ASTM D638
Tensile Elongation (Break)	4.5	%	ASTM D638
Flexural Modulus	1.06E+6	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.2	ft·lb/in	ASTM D256

**Processing Information**

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	640 to 700	°F
Middle Temperature	650 to 710	°F
Front Temperature	655 to 715	°F
Nozzle Temperature	660 to 720	°F
Processing (Melt) Temp	650 to 725	°F
Mold Temperature	275 to 350	°F
Injection Rate	Slow-Moderate	
Back Pressure	50.0 to 100	psi
Screw Speed	Slow	

