

**HiFill® PA6 CF20 BK**

 Techmer Polymer Modifiers - *Polyamide 6*
**General Information**
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Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber, 20% Filler by Weight
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

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

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.23		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.90	%	ASTM D570
<b>Mechanical</b>			
<b>Nominal Value Unit Test Method</b>			
Tensile Strength (Break)	27700	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.50E+6	psi	ASTM D790
Flexural Strength	42000	psi	ASTM D790
<b>Impact</b>			
<b>Nominal Value Unit Test Method</b>			
Notched Izod Impact (73°F, 0.125 in)	1.3	ft·lb/in	ASTM D256
<b>Hardness</b>			
<b>Nominal Value Unit Test Method</b>			
Rockwell Hardness (R-Scale)	115		ASTM D785
<b>Thermal</b>			
<b>Nominal Value Unit Test Method</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	415	°F	ASTM D648
CLTE - Flow	1.1E-5	in/in/°F	ASTM D696
<b>Additional Information</b>			
<b>Nominal Value Unit Test Method</b>			
TPCI #	8738102		

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	180	°F
Drying Time	4.0	hr
Rear Temperature	500 to 580	°F
Middle Temperature	500 to 580	°F
Front Temperature	500 to 580	°F
Processing (Melt) Temp	470 to 520	°F
Mold Temperature	150 to 200	°F
Back Pressure	0.00 to 50.0	psi
Screw Speed	30 to 60	rpm

