

**Electrafil® PA6 E CF20**

 Techmer Polymer Modifiers - *Polyamide 6*
**General Information**
**General**

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber, 20% Filler by Weight
Features	• Conductive
Appearance	• Colors Available      • Natural Color
Forms	• Pellets
Processing Method	• Extrusion

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

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.22		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.010	in/in	ASTM D955
Water Absorption (24 hr)	0.90	%	ASTM D570
<b>Mechanical</b>			
Tensile Strength (Yield)	27000	psi	ASTM D638
Tensile Elongation (Break)	1.5	%	ASTM D638
Flexural Modulus	2.00E+6	psi	ASTM D790
Flexural Strength	40000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (0.125 in)	2.0	ft·lb/in	ASTM D256
<b>Hardness</b>			
Rockwell Hardness (R-Scale)	115		ASTM D785
<b>Thermal</b>			
Deflection Temperature Under Load (66 psi, Unannealed)	420	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	400	°F	ASTM D648
CLTE - Flow	1.1E-5	in/in/°F	ASTM D696

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	510 to 530	°F
Middle Temperature	530 to 550	°F
Front Temperature	520 to 540	°F
Nozzle Temperature	520 to 540	°F
Processing (Melt) Temp	530 to 550	°F
Mold Temperature	175 to 220	°F
Injection Rate	Slow-Moderate	
Back Pressure	0.00 to 50.0	psi

**Injection Notes**

Screw Speed: Medium  
 Recommendations for Molding and Tool Conditions: Well vented mold  
 Moisture Content, as received: Product is packaged at 0.2% or less.

