

**HiFill® PEEK LCF40 2000**

 Techmer Polymer Modifiers - *Polyetheretherketone*
**General Information**
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Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Long Carbon Fiber, 40% Filler by Weight
Features	• Good Flow
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

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

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.45		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.12	%	ASTM D570
<b>Mechanical</b>			
Tensile Modulus	5.90E+6	psi	ASTM D638
Tensile Strength (Break)	40000	psi	ASTM D638
Tensile Elongation (Break)	0.80	%	ASTM D638
Flexural Modulus	4.40E+6	psi	ASTM D790
Flexural Strength	60000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (73°F, 0.125 in)	2.0	ft·lb/in	ASTM D256
Unnotched Izod Impact	15	ft·lb/in	ASTM D4812
<b>Hardness</b>			
Rockwell Hardness (R-Scale)	118		ASTM D785
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	550	°F	ASTM D648
CLTE - Flow	6.0E-6	in/in/°F	ASTM D696
<b>Electrical</b>			
Volume Resistivity	< 1.0E+6	ohms·cm	ASTM D257

**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

