

HiFill® PEEK CF10 A

 Techmer Polymer Modifiers - *Polyetheretherketone*
General Information
General

Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> North America
Filler / Reinforcement	<ul style="list-style-type: none"> Carbon Fiber
Appearance	<ul style="list-style-type: none"> Black
Processing Method	<ul style="list-style-type: none"> Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.34		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical			
Nominal Value Unit Test Method			
Tensile Strength (Break)	27000	psi	ASTM D638
Tensile Elongation (Break)	2.5	%	ASTM D638
Flexural Modulus	1.50E+6	psi	ASTM D790
Flexural Strength	41000	psi	ASTM D790
Impact			
Nominal Value Unit Test Method			
Notched Izod Impact (73°F, 0.125 in)	1.5	ft·lb/in	ASTM D256
Hardness			
Nominal Value Unit Test Method			
Rockwell Hardness (R-Scale)	120		ASTM D785
Thermal			
Nominal Value Unit Test Method			
Deflection Temperature Under Load (66 psi, Unannealed)	550	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	550	°F	ASTM D648
CLTE - Flow	7.0E-6	in/in/°F	ASTM D696
Electrical			
Nominal Value Unit Test Method			
Volume Resistivity	1.0E+4 to 1.0E+6	ohms·cm	ASTM D257

Processing Information

	Nominal Value	Unit
Injection		
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

