

HiFill® PEI/C GF10

Techmer Polymer Modifiers - *Polyetherimide*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Features	• Copolymer
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.35		ASTM D792
Molding Shrinkage - Flow (0.125 in)	6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.24	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break)	16900	psi	ASTM D638
Tensile Elongation (Break)	6.0	%	ASTM D638
Flexural Modulus	760000	psi	ASTM D790
Flexural Strength	27600	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.0	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	24	ft-lb/in	ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	121		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	433	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	430	°F	ASTM D648
CLTE - Flow	3.0E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	500	V/mil	ASTM D149

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	285	°F
Drying Time	3.0	hr
Rear Temperature	675 to 735	°F
Middle Temperature	675 to 735	°F
Front Temperature	675 to 735	°F
Processing (Melt) Temp	670 to 730	°F
Mold Temperature	275 to 325	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 100	rpm

