

HiFill® PES GF10

 Techmer Polymer Modifiers - *Polyethersulfone*
General Information
General

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

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.43		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.18	%	ASTM D570
Mechanical			
Tensile Strength (Break)	16500	psi	ASTM D638
Tensile Elongation (Break)	7.0	%	ASTM D638
Flexural Modulus	600000	psi	ASTM D790
Flexural Strength	23200	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	1.4	ft·lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	123		ASTM D785
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	405	°F	ASTM D648
CLTE - Flow	2.8E-5	in/in/°F	ASTM D696
Electrical			
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	550	V/mil	ASTM D149

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	290	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	650 to 735	°F
Middle Temperature	650 to 735	°F
Front Temperature	650 to 735	°F
Processing (Melt) Temp	630 to 730	°F
Mold Temperature	280 to 325	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 100	rpm

