

HiFill® PPS/F GF10

Techmer Polymer Modifiers - Polyphenylene Sulfide

General

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

ASTM & ISO Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.41		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.020	%	ASTM D570
Mechanical			
Tensile Strength (Break)	11000	psi	ASTM D638
Tensile Elongation (Break)	1.5	%	ASTM D638
Flexural Modulus	780000	psi	ASTM D790
Flexural Strength	16300	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	1.0	ft·lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	124		ASTM D785
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	530	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	460	°F	ASTM D648
CLTE - Flow	1.0E-5	in/in/°F	ASTM D696
Electrical			
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	390	V/mil	ASTM D149
Flammability			
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	325	°F
Drying Time	4.0	hr
Rear Temperature	550 to 580	°F
Middle Temperature	600 to 650	°F
Front Temperature	590 to 630	°F
Nozzle Temperature	600 to 630	°F
Processing (Melt) Temp	615 to 640	°F
Mold Temperature	265 to 325	°F

