HiFill® PPSU GF10

Techmer Polymer Modifiers - *Polyphenylsulfone*

General Information

General	
Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber
Appearance	• Colors Available
Processing Method	• Injection Molding

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.36		ASTM D792
Molding Shrinkage - Flow (0.125 in)	6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.20	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	12100	psi	ASTM D638
Tensile Elongation (Yield)	2.0	%	ASTM D638
Flexural Modulus	580000	psi	ASTM D790
Flexural Strength	15900	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	1.8	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	122		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	415	°F	ASTM D648
CLTE - Flow	4.0E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	470	V/mil	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	320	°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	650 to 750	°F
Mold Temperature	230 to 300	°F
Back Pressure	50.0 to 100	psi
Screw Speed	50 to 100	rpm