

HiFill® PPSU GF40

 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	1.63		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.13	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	25000	psi	ASTM D638
Tensile Elongation (Yield)	2.5	%	ASTM D638
Flexural Modulus	1.60E+6	psi	ASTM D790
Flexural Strength	32300	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.4	ft·lb/in	ASTM D256
Unnotched Izod Impact (73°F, 0.125 in)	15	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)	420	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	415	°F	ASTM D648
CLTE - Flow	8.0E-6	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	630	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
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

