Wednesday, May 13, 2026

HiFill® PPSU GF40

Techmer Polymer Modifiers - *Polyphenylsulfone*

Units SI

Action **Legend (Open)**

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	g/cm³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.20	%	ASTM D955
Water Absorption (24 hr)	0.13	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength	172	MPa	ASTM D638
Tensile Elongation (Yield)	2.5	%	ASTM D638
Flexural Modulus	11000	MPa	ASTM D790
Flexural Strength	223	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C, 3.18 mm)	130	J/m	ASTM D256
Unnotched Izod Impact (23°C, 3.18 mm)	800	J/m	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 (0.45 MPa, Unannealed)	216	°C	ASTM D648
Deflection Temperature Under Load (1.8 MPa, Unannealed)	213	°C	ASTM D648
CLTE - Flow	1.4E-5	cm/cm/°C	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	25	kV/mm	ASTM D149
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.6 mm)	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	160	°C
Drying Time	3.0	hr
Rear Temperature	357 to 391	°C
Middle Temperature	357 to 391	°C
Front Temperature	357 to 391	°C
Processing (Melt) Temp	343 to 399	°C
Mold Temperature	110 to 149	°C
Back Pressure	0.345 to 0.689	MPa
Screw Speed	50 to 100	rpm

Notes

[1] Typical properties: these are not to be construed as specifications.

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