

**HiFill FR® PA6/6 GF40 FR HS L**

 Techmer Polymer Modifiers - *Polyamide 66*
**General Information**
**General**

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Additive	• Heat Stabilizer • Lubricant
Features	• Flame Retardant • Heat Stabilized • Lubricated
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

**Properties <sup>1</sup>**

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.70		ASTM D792
Molding Shrinkage - Flow (0.125 in)	4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.60	%	ASTM D570
<b>Mechanical</b>			
<b>Nominal Value Unit Test Method</b>			
Tensile Strength (Break)	28200	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	1.62E+6	psi	ASTM D790
Flexural Strength	49000	psi	ASTM D790
<b>Impact</b>			
<b>Nominal Value Unit Test Method</b>			
Notched Izod Impact (73°F, 0.125 in)	2.5	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	29	ft·lb/in	ASTM D4812
<b>Hardness</b>			
<b>Nominal Value Unit Test Method</b>			
Rockwell Hardness (R-Scale)	122		ASTM D785
<b>Thermal</b>			
<b>Nominal Value Unit Test Method</b>			
Deflection Temperature Under Load (66 psi, Unannealed)	499	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	491	°F	ASTM D648
CLTE - Flow	1.0E-5	in/in/°F	ASTM D696
<b>Electrical</b>			
<b>Nominal Value Unit Test Method</b>			
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	500	V/mil	ASTM D149
<b>Flammability</b>			
<b>Nominal Value Unit Test Method</b>			
Flame Rating (0.06 in)	V-0		UL 94

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	180	°F
Drying Time	> 6.0	hr
Rear Temperature	490 to 530	°F
Middle Temperature	490 to 530	°F
Front Temperature	490 to 530	°F
Processing (Melt) Temp	480 to 520	°F
Mold Temperature	150 to 200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

