

**HiFill FR® PA6 GF20 FR HS L**

 Techmer Polymer Modifiers - *Polyamide 6*
**General Information**

<b>General</b>			
Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber, 20% 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>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density / Specific Gravity	1.49		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.92	%	ASTM D570
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength (Break)	17000	psi	ASTM D638
Tensile Elongation (Break)	4.2	%	ASTM D638
Flexural Modulus	850000	psi	ASTM D790
Flexural Strength	23000	psi	ASTM D790
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact (73°F, 0.125 in)	2.1	ft-lb/in	ASTM D256
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Rockwell Hardness (R-Scale)	120		ASTM D785
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (264 psi, Unannealed)	420	°F	ASTM D648
CLTE - Flow	2.0E-5	in/in/°F	ASTM D696
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Surface Resistivity	1.0E+13	ohms	ASTM D257
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	400	V/mil	ASTM D149
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating (0.06 in)	V-0		UL 94

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	450 to 495	°F
Middle Temperature	450 to 495	°F
Front Temperature	450 to 495	°F
Processing (Melt) Temp	460 to 510	°F
Mold Temperature	150 to 200	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

