

**HiFill® PA6 GF50 HS UV BK**

 Techmer Polymer Modifiers - *Polyamide 6*
**General Information**
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Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Additive	• Heat Stabilizer • Lubricant • UV Stabilizer
Features	• Heat Stabilized • Lubricated • UV Resistant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

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

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.57		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.5E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.75	%	ASTM D570
<b>Mechanical</b>			
Tensile Strength (Yield)	30000	psi	ASTM D638
Tensile Elongation (Break)	2.5	%	ASTM D638
Flexural Modulus	2.05E+6	psi	ASTM D790
Flexural Strength	40000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (0.125 in)	2.8	ft·lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	21	ft·lb/in	ASTM D4812
<b>Hardness</b>			
Rockwell Hardness (R-Scale)	121		ASTM D785
<b>Thermal</b>			
Deflection Temperature Under Load (66 psi, Unannealed)	425	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	420	°F	ASTM D648
CLTE - Flow	8.0E-6	in/in/°F	ASTM D696
<b>Electrical</b>			
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	V/mil	ASTM D149

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	180	°F
Drying Time	4.0	hr
Rear Temperature	500 to 580	°F
Middle Temperature	500 to 580	°F
Front Temperature	500 to 580	°F
Processing (Melt) Temp	470 to 520	°F
Mold Temperature	150 to 200	°F
Back Pressure	0.00 to 50.0	psi
Screw Speed	30 to 60	rpm

