

**HiFill® PBT GF/M40 BK**

 Techmer Polymer Modifiers - *Polybutylene Terephthalate*
**General Information**
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Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber\Mineral, 40% Filler by Weight
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

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

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.61		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.070	%	ASTM D570
<b>Mechanical</b>			
Tensile Strength (Yield)	11000	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	1.15E+6	psi	ASTM D790
Flexural Strength (Yield)	18000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (0.125 in)	1.4	ft·lb/in	ASTM D256
<b>Hardness</b>			
Rockwell Hardness (R-Scale)	109		ASTM D785
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	390	°F	ASTM D648
CLTE - Flow	1.4E-5	in/in/°F	ASTM D696
<b>Electrical</b>			
Volume Resistivity	3.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	590	V/mil	ASTM D149
<b>Flammability</b>			
Flame Rating (0.031 in)	HB		UL 94

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	250	°F
Drying Time	4.0	hr
Rear Temperature	450 to 525	°F
Middle Temperature	450 to 525	°F
Front Temperature	450 to 525	°F
Processing (Melt) Temp	450 to 475	°F
Mold Temperature	150 to 180	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

