

**HiFill FR® PET GF15 FR**

 Techmer Polymer Modifiers - *Polyethylene Terephthalate*
**General Information**
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Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight
Features	• Flame Retardant
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

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

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.55		ASTM D792
Molding Shrinkage - Flow (0.125 in)	7.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.080	%	ASTM D570
<b>Mechanical</b>			
Tensile Strength (Yield)	5500	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	350000	psi	ASTM D790
Flexural Strength (Yield)	10500	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (0.125 in)	1.2	ft-lb/in	ASTM D256
<b>Hardness</b>			
Rockwell Hardness (R-Scale)	120		ASTM D785
<b>Thermal</b>			
Deflection Temperature Under Load (66 psi, Unannealed)	470	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	420	°F	ASTM D648
Melting Temperature	489	°F	
CLTE - Flow	7.0E-6	in/in/°F	ASTM D696
<b>Electrical</b>			
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	420	V/mil	ASTM D149
<b>Flammability</b>			
Flame Rating (0.06 in)	V-0		UL 94

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	250	°F
Drying Time	4.0	hr
Rear Temperature	520 to 550	°F
Middle Temperature	520 to 550	°F
Front Temperature	520 to 550	°F
Processing (Melt) Temp	525	°F
Mold Temperature	200 to 230	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

