

## HiFill FR® PBT GF15 FR X

Techmer Polymer Modifiers - *Polybutylene Terephthalate*

### General Information

#### General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber
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	1.54		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 (Break)	13000	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	900000	psi	ASTM D790
Flexural Strength	18000	psi	ASTM D790
<b>Impact</b>			
Notched Izod Impact (73°F, 0.125 in)	1.0	ft·lb/in	ASTM D256
<b>Hardness</b>			
Rockwell Hardness (R-Scale)	119		ASTM D785
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	390	°F	ASTM D648
CLTE - Flow	2.0E-5	in/in/°F	ASTM D696
<b>Electrical</b>			
Surface Resistivity	1.0E+13	ohms	ASTM D257
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	460	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	450 to 525	°F
Middle Temperature	450 to 525	°F
Front Temperature	450 to 525	°F
Processing (Melt) Temp	440 to 500	°F
Mold Temperature	140 to 180	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

