

HiFill FR® PBT GF30 FR X

 Techmer Polymer Modifiers - *Polybutylene Terephthalate*
General Information

General	
Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
UL File Number	• E157318
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.62		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.060	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	16700	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.10E+6	psi	ASTM D790
Flexural Strength	25000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	1.4	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	119		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	395	°F	ASTM D648
CLTE - Flow	1.5E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+14	ohms	ASTM D257
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	490	V/mil	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in, natural, black, colors)	V-0		UL 94
Additional Information	Nominal Value	Unit	Test Method
TPCI #	1006011		

Processing Information

Injection	Nominal Value	Unit
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

