

HiFill FR® PBT GF30 FR-S AS

 Techmer Polymer Modifiers - *Polybutylene Terephthalate*
General Information

General			
Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber		
Additive	• Antistatic		
Features	• Antistatic	• Flame Retardant	• Non-Blooming
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	15700	psi	ASTM D638
Tensile Elongation (Yield)	3.0	%	ASTM D638
Flexural Modulus	1.00E+6	psi	ASTM D790
Flexural Strength (Yield)	24000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	1.1	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)	380	°F	ASTM D648
CLTE - Flow	1.5E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+8 to 1.0E+11	ohms	ASTM D257
Volume Resistivity	1.0E+8 to 1.0E+11	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)	V-0		UL 94

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

