

HiFill FR® PBT GF30 CF10 FR

 Techmer Polymer Modifiers - *Polybutylene Terephthalate*
General Information
General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber\Carbon Fiber
Features	• Flame Retardant
UL File Number	• E157318
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.75		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.015	in/in	ASTM D955
Water Absorption (24 hr)	0.020	%	ASTM D570
Mechanical			
Tensile Strength	18500	psi	ASTM D638
Tensile Elongation (Yield)	2.0	%	ASTM D638
Flexural Modulus	1.55E+6	psi	ASTM D790
Flexural Strength (Yield)	29000	psi	ASTM D790
Impact			
Notched Izod Impact	0.90	ft·lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	121		ASTM D785
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	400	°F	ASTM D648
CLTE - Flow	1.1E-5	in/in/°F	ASTM D696
Flammability			
Flame Rating (0.06 in)	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
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

