

HiFill® PBT G/CF30

Techmer Polymer Modifiers - *Polybutylene Terephthalate*

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber/Carbon Fiber, 15% Filler by Weight
Appearance	• Colors Available • Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.50		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.070	%	ASTM D570
Mechanical			
Tensile Strength (Break)	22500	psi	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	1.90E+6	psi	ASTM D790
Flexural Strength	31000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	2.0	ft·lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	118		ASTM D785
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	438	°F	ASTM D648
CLTE - Flow	9.5E-6	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+7	ohms	ASTM D257
Flammability			
Flame Rating (0.06 in)	HB		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	450 to 475	°F
Mold Temperature	150 to 180	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

