

HiFill FR® PC GF10 FR BK

 Techmer Polymer Modifiers - *Polycarbonate*
General Information
General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Features	• Flame Retardant
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.25		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.5E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.12	%	ASTM D570
Mechanical			
Tensile Strength (Break)	9700	psi	ASTM D638
Tensile Elongation (Break)	8.0	%	ASTM D638
Flexural Modulus	500000	psi	ASTM D790
Flexural Strength	16000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	2.0	ft-lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	124		ASTM D785
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	295	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	290	°F	ASTM D648
CLTE - Flow	1.8E-5	in/in/°F	ASTM D696
Electrical			
Volume Resistivity	1.0E+17	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	450	V/mil	ASTM D149
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	540 to 560	°F
Middle Temperature	540 to 560	°F
Front Temperature	540 to 560	°F
Processing (Melt) Temp	510 to 560	°F
Mold Temperature	180 to 250	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

