

HiFill FR® PC GF20 FR

 Techmer Polymer Modifiers - *Polycarbonate*
General Information
General

Material Status	<ul style="list-style-type: none"> Commercial: Active
Availability	<ul style="list-style-type: none"> North America
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber, 20% Filler by Weight
Features	<ul style="list-style-type: none"> Flame Retardant
Appearance	<ul style="list-style-type: none"> Colors Available
Forms	<ul style="list-style-type: none"> Pellets
Processing Method	<ul style="list-style-type: none"> Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.34		ASTM D792
Molding Shrinkage - Flow (0.125 in)	3.5E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.11	%	ASTM D570
Mechanical			
Tensile Strength (Break)	15500	psi	ASTM D638
Tensile Elongation (Break)	9.0	%	ASTM D638
Flexural Modulus	700000	psi	ASTM D790
Flexural Strength	22000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	3.0	ft-lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	122		ASTM D785
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	306	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	300	°F	ASTM D648
CLTE - Flow	1.3E-5	in/in/°F	ASTM D696
Electrical			
Volume Resistivity	1.0E+16	ohms-cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	760	V/mil	ASTM D149
Flammability			
Flame Rating (0.03 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

