

HiFill FR® PC FR X

 Techmer Polymer Modifiers - *Polycarbonate*
General Information
General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Flame Retardant
Features	• Flame Retardant • Good Mold Release
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.21		ASTM D792
Molding Shrinkage - Flow (0.125 in)	6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical			
Tensile Strength (Yield)	9000	psi	ASTM D638
Tensile Elongation (Yield)	88	%	ASTM D638
Flexural Modulus	33000	psi	ASTM D790
Flexural Strength	13000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	12	ft·lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	118		ASTM D785
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	270	°F	ASTM D648
CLTE - Flow	3.8E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+16	ohms	ASTM D257
Volume Resistivity	1.0E+17	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	430	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

