

**HiFill FR® PC 1001 FR-NR**

 Techmer Polymer Modifiers - *Polycarbonate*
**General Information**
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Material Status	• Commercial: Active
Availability	• North America
Features	• Flame Retardant
Appearance	• Colors Available      • Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density / Specific Gravity	1.19		ASTM D792
Molding Shrinkage - Flow (0.125 in)	6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.14	%	ASTM D570
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength (Yield)	8400	psi	ASTM D638
Tensile Elongation (Yield)	5.0	%	ASTM D638
Flexural Modulus	300000	psi	ASTM D790
Flexural Strength	12000	psi	ASTM D790
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact			ASTM D256
-40°F, 0.125 in	8.0	ft·lb/in	
73°F, 0.125 in	12	ft·lb/in	
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Rockwell Hardness (R-Scale)	114		ASTM D785
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (66 psi, Unannealed)	270	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	250	°F	ASTM D648
CLTE - Flow	3.8E-5	in/in/°F	ASTM D696
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Volume Resistivity	1.0E+17	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	380	V/mil	ASTM D149
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating (0.06 in)	V-0		UL 94

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
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

