

**HiFill® PP 0123 C**

 Techmer Polymer Modifiers - *Polypropylene Copolymer*
**General Information**
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Material Status	• Commercial: Active
Availability	• North America
Features	• Copolymer • Thermally Conductive
Appearance	• Colors Available
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	1.23		ASTM D792
Molding Shrinkage - Flow (0.125 in)	9.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.050	%	ASTM D570
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength (Yield)	2200	psi	ASTM D638
Tensile Elongation (Break)	30	%	ASTM D638
Flexural Modulus	230000	psi	ASTM D790
Flexural Strength	3000	psi	ASTM D790
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact (73°F, 0.125 in)	1.0	ft·lb/in	ASTM D256
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Rockwell Hardness (R-Scale)	70		ASTM D785
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (66 psi, Unannealed)	175	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	125	°F	ASTM D648
CLTE - Flow	2.2E-5	in/in/°F	ASTM D696
Thermal Conductivity	9.0	Btu·in/hr/ft <sup>2</sup> /°F	ASTM C177
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	300	V/mil	ASTM D149

**Processing Information**

<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
Drying Temperature	170	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	460 to 510	°F
Middle Temperature	460 to 510	°F
Front Temperature	460 to 510	°F
Processing (Melt) Temp	430	°F
Mold Temperature	80 to 120	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

