

**HiFill® PEEK GF30 A 008**

 Techmer Polymer Modifiers - *Polyetheretherketone*
**General Information**
**Product Description**

 1301118  
 Low Spring Formulation for Back up Rings

**General**

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
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	1.50		ASTM D792
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.12	%	ASTM D570
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Modulus	1.10E+6	psi	ASTM D638
Tensile Strength (Yield)	17000	psi	ASTM D638
Tensile Strength (Break)	16500	psi	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	1.47E+6	psi	ASTM D790
Flexural Strength	25000	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)	1.3	ft·lb/in	ASTM D256
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Rockwell Hardness (R-Scale)	115		ASTM D785
Durometer Hardness	87		ASTM D2240
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (264 psi, Unannealed)	600	°F	ASTM D648
Melting Temperature	648	°F	
CLTE - Flow	1.2E-5	in/in/°F	ASTM D696
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	580	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	300	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	< 0.050	%
Rear Temperature	640 to 700	°F
Middle Temperature	650 to 710	°F
Front Temperature	655 to 715	°F
Nozzle Temperature	660 to 720	°F
Processing (Melt) Temp	650 to 725	°F
Mold Temperature	300 to 400	°F
Back Pressure	0.00 to 50.0	psi

