

**Electrafil® 1105-10819 NAT**

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

30% Carbon Fiber

**General**

Material Status	• Commercial: Active
Availability	• North America
Features	• Conductive
Appearance	• Black • Colors Available
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	1.40		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.040	%	ASTM D570
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength (Yield)	37000	psi	ASTM D638
Tensile Elongation (Yield)	> 1.7	%	ASTM D638
Flexural Modulus	3.20E+6	psi	ASTM D790
Flexural Strength	54000	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)	1.4	ft·lb/in	ASTM D256
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Rockwell Hardness (R-Scale)	118		ASTM D785
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (66 psi, Unannealed)	650	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	635	°F	ASTM D648
CLTE - Flow	6.0E-6	in/in/°F	ASTM D696
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Surface Resistivity	1.0E+2 to 1.0E+4	ohms	ASTM D257
Volume Resistivity	1.0E+2 to 1.0E+4	ohms·cm	ASTM D257
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating (0.03 in)	V-0		UL 94

