

**HiFill® PPS 0199 TC-1**

 Techmer Polymer Modifiers - *Polyphenylene Sulfide*
**General Information**
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Material Status	• Commercial: Active
Availability	• North America
Features	• High Density      • Low Extractables
Agency Ratings	• FDA
Appearance	• Colors Available      • Opaque
Forms	• Pellets
Processing Method	• Injection Molding

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

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density / Specific Gravity	1.99		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.020	%	ASTM D570
<b>Mechanical</b>			
<b>Nominal Value Unit Test Method</b>			
Tensile Strength (Break)	16000	psi	ASTM D638
Tensile Elongation (Break)	1.4	%	ASTM D638
Flexural Modulus	1.80E+6	psi	ASTM D790
Flexural Strength	23000	psi	ASTM D790
<b>Impact</b>			
<b>Nominal Value Unit Test Method</b>			
Notched Izod Impact (73°F, 0.125 in)	0.80	ft-lb/in	ASTM D256
<b>Hardness</b>			
<b>Nominal Value Unit Test Method</b>			
Rockwell Hardness (R-Scale)	110		ASTM D785
<b>Thermal</b>			
<b>Nominal Value Unit Test Method</b>			
Deflection Temperature Under Load (66 psi, Unannealed)	550	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	530	°F	ASTM D648
CLTE - Flow	1.0E-5	in/in/°F	ASTM D696
Thermal Conductivity	10	Btu·in/hr/ft <sup>2</sup> /°F	ASTM C177
RTI Elec (0.06 in)	428	°F	UL 746B
<b>Electrical</b>			
<b>Nominal Value Unit Test Method</b>			
Volume Resistivity	1.0E+14	ohms·cm	ASTM D257
Dielectric Strength (Method A (Short-Time))	530	V/mil	ASTM D149
<b>Flammability</b>			
<b>Nominal Value Unit Test Method</b>			
Flame Rating (0.016 in)	V-0		UL 94

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature	325	°F
Drying Time	4.0	hr
Rear Temperature	550 to 580	°F
Middle Temperature	600 to 650	°F
Front Temperature	590 to 630	°F
Nozzle Temperature	600 to 630	°F
Processing (Melt) Temp	615 to 640	°F
Mold Temperature	265 to 325	°F

