



**Product Data Sheet &  
General Processing Conditions**

**RTP 4687  
Syndiotactic Polystyrene (SPS)  
Carbon Fiber**

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Primary Additive	40 %	40 %	
Specific Gravity	1.24	1.24	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0010 in/in	0.10 %	D 955
Water Absorption, 24 hrs @ 23°C	0.010 %	0.010 %	D 570

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.9 ft-lbs/in	48 J/m	D 256
unnotched 1/8 in (3.2 mm) section	3.5 ft-lbs/in	187 J/m	D 4812
Tensile Strength	19500 psi	134 MPa	D 638
Tensile Elongation	0.6 %	0.6 %	D 638
Tensile Modulus	3.50 x 10 <sup>6</sup> psi	24132 MPa	D 638
Flexural Strength	27000 psi	186 MPa	D 790
Flexural Modulus	3.50 x 10 <sup>6</sup> psi	24132 MPa	D 790

**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	460 °F	238 °C	D 648
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**PROPERTY NOTES**

Data herein is typical and not to be construed as specifications.  
Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

**GENERAL PROCESSING FOR INJECTION MOLDING**

	<b>English</b>	<b>SI Metric</b>
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	560 - 620 °F	293 - 327 °C
Mold Temperature	160 - 300 °F	71 - 149 °C
Drying	2 hrs @ 180 °F	2 hrs @ 82 °C
Moisture Content	0.02 %	0.02 %
Dew Point	-20 °F	-29 °C