



**Product Data Sheet &  
General Processing Conditions**

**RTP 291  
Nylon 6/6 (PA)  
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	60 %	60 %	
Specific Gravity	1.43	1.43	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0005 - 0.0020 in/in	0.05 - 0.20 %	D 955

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.3 ft-lbs/in	69 J/m	D 256
unnotched 1/8 in (3.2 mm) section	12.0 ft-lbs/in	641 J/m	D 4812
Tensile Strength	32000 psi	221 MPa	D 638
Tensile Elongation	1.0 %	1.0 %	D 638
Tensile Modulus	6.00 x 10 <sup>6</sup> psi	41370 MPa	D 638
Flexural Strength	53000 psi	365 MPa	D 790
Flexural Modulus	5.30 x 10 <sup>6</sup> psi	36544 MPa	D 790

**ELECTRICAL**

Volume Resistivity	< 1E1 ohm.cm	< 1E1 ohm.cm	D 257
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**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	485 °F	252 °C	D 648
Ignition Resistance* Flammability**	HB @ 1/16 in	HB @ 1.5 mm	D 635

**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.

\* This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

\*\* Values per RTP Company testing.

**GENERAL PROCESSING FOR INJECTION MOLDING**

	<b>English</b>	<b>SI Metric</b>
Injection Pressure	10000 - 18000 psi	69 - 124 MPa
Melt Temperature	530 - 570 °F	277 - 299 °C
Mold Temperature	150 - 225 °F	66 - 107 °C
Drying	4 hrs @ 175 °F	4 hrs @ 79 °C
Moisture Content	0.20 %	0.20 %
Dew Point	0 °F	-18 °C

**PROCESSING NOTES**

Desiccant Type Dryer Required.