



**Product Data Sheet &  
General Processing Conditions**

**RTP 1481 N  
Polyethersulfone (PES)  
Carbon Fiber  
High Viscosity**

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

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Primary Additive	10 %	10 %	
Specific Gravity	1.39	1.39	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0020 in/in	0.20 %	D 955
Water Absorption, 24 hrs @ 23°C	0.350 %	0.350 %	D 570

**MECHANICAL**

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	1.4 ft-lbs/in	75 J/m	D 256
unnotched 1/8 in (3.2 mm) section	11.5 ft-lbs/in	614 J/m	D 4812
Tensile Strength	21000 psi	145 MPa	D 638
Tensile Elongation	3.0 %	3.0 %	D 638
Tensile Modulus	1.40 x 10 <sup>6</sup> psi	9653 MPa	D 638
Flexural Strength	31000 psi	214 MPa	D 790
Flexural Modulus	1.20 x 10 <sup>6</sup> psi	8274 MPa	D 790

**THERMAL**

Deflection Temperature			
@ 264 psi (1820 kPa)	410 °F	210 °C	D 648
Ignition Resistance*			
Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801

**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 - 15000 psi	69 - 103 MPa
Melt Temperature	650 - 710 °F	343 - 377 °C
Mold Temperature	275 - 350 °F	135 - 177 °C
Drying	6 hrs @ 300 °F	6 hrs @ 149 °C
Moisture Content	0.04 %	0.04 %
Dew Point	-25 °F	-32 °C

**PROCESSING NOTES**

Desiccant Type Dryer Required.