



**Product Data Sheet &  
General Processing Conditions**

**RTP 1482  
Polyethersulfone (PES)  
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	15 %	15 %	
Specific Gravity	1.42	1.42	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	0.420 %	0.420 %	D 570

**MECHANICAL**

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	1.1 ft-lbs/in	59 J/m	D 256
unnotched 1/8 in (3.2 mm) section	8.0 ft-lbs/in	427 J/m	D 4812
Tensile Strength	25000 psi	172 MPa	D 638
Tensile Elongation	1.5 %	1.5 %	D 638
Tensile Modulus	1.70 x 10 <sup>6</sup> psi	11722 MPa	D 638
Flexural Strength	34000 psi	234 MPa	D 790
Flexural Modulus	1.80 x 10 <sup>6</sup> psi	12411 MPa	D 790

**ELECTRICAL**

Volume Resistivity	< 1E5 ohm.cm	< 1E5 ohm.cm	D 257
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**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.