



**Product Data Sheet &  
General Processing Conditions**

**RTP 2183  
Polyetherimide (PEI)  
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	20 %	20 %	
Specific Gravity	1.35	1.35	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0005 in/in	0.05 %	D 955
Water Absorption, 24 hrs @ 23°C	0.200 %	0.200 %	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	12.0 ft-lbs/in	641 J/m	D 4812
Tensile Strength	32000 psi	221 MPa	D 638
Tensile Elongation	< 2.0 %	< 2.0 %	D 638
Tensile Modulus	2.40 x 10 <sup>6</sup> psi	16548 MPa	D 638
Flexural Strength	39000 psi	269 MPa	D 790
Flexural Modulus	2.10 x 10 <sup>6</sup> psi	14480 MPa	D 790

**ELECTRICAL**

Volume Resistivity	< 1E4 ohm.cm	< 1E4 ohm.cm	D 257
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**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	405 °F	207 °C	D 648
@ 66 psi (455 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	12000 - 18000 psi	83 - 124 MPa
Melt Temperature	670 - 750 °F	354 - 399 °C
Mold Temperature	275 - 350 °F	135 - 177 °C
Drying	4 hrs @ 300 °F	4 hrs @ 149 °C
Moisture Content	0.04 %	0.04 %
Dew Point	-20 °F	-29 °C

**PROCESSING NOTES**

Desiccant Type Dryer Required.