



**Product Data Sheet &  
General Processing Conditions**

**RTP 1083  
Polybutylene Terephthalate (PBT)  
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	1.37	1.37	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0010 - 0.0020 in/in	0.10 - 0.20 %	D 955

**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	9.0 ft-lbs/in	481 J/m	D 4812
Tensile Strength	20000 psi	138 MPa	D 638
Tensile Elongation	1.0 - 3.0 %	1.0 - 3.0 %	D 638
Tensile Modulus	2.00 x 10 <sup>6</sup> psi	13790 MPa	D 638
Flexural Strength	28500 psi	197 MPa	D 790
Flexural Modulus	1.80 x 10 <sup>6</sup> psi	12411 MPa	D 790

**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	400 °F	204 °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 - 15000 psi	69 - 103 MPa
Melt Temperature	460 - 520 °F	238 - 271 °C
Mold Temperature	175 - 225 °F	79 - 107 °C
Drying	4 hrs @ 250 °F	4 hrs @ 121 °C
Moisture Content	0.03 %	0.03 %
Dew Point	-20 °F	-29 °C

**PROCESSING NOTES**

Desiccant Type Dryer Required.