



**Product Data Sheet &  
General Processing Conditions**

**RTP 3483-1  
Liquid Crystal Polymer (LCP)  
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	1.46	1.46	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0010 in/in	0.10 %	D 955

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	3.5 ft-lbs/in	187 J/m	D 256
unnotched 1/8 in (3.2 mm) section	12.0 ft-lbs/in	641 J/m	D 4812
Tensile Strength	27500 psi	190 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	3.00 x 10 <sup>6</sup> psi	20685 MPa	D 638
Flexural Strength	38000 psi	262 MPa	D 790
Flexural Modulus	2.50 x 10 <sup>6</sup> psi	17238 MPa	D 790

**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	440 °F	227 °C	D 648
--	--------	--------	-------

**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.

**GENERAL PROCESSING FOR INJECTION MOLDING**

	<b>English</b>	<b>SI Metric</b>
Injection Pressure	5000 - 12000 psi	34 - 83 MPa
Melt Temperature	520 - 575 °F	271 - 302 °C
Mold Temperature	100 - 200 °F	38 - 93 °C
Drying	4 hrs @ 300 °F	4 hrs @ 149 °C

**PROCESSING NOTES**

The key to successfully molding this material is to start mold open cycles as soon as the screw reaches its retracted position.