



**Product Data Sheet &  
General Processing Conditions**

**RTP 3487-3  
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	40 %	40 %	
Specific Gravity	1.51	1.51	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0001 in/in	0.01 %	D 955

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.0 ft-lbs/in	53 J/m	D 256
unnotched 1/8 in (3.2 mm) section	5.0 ft-lbs/in	267 J/m	D 4812
Tensile Strength	17000 psi	117 MPa	D 638
Tensile Elongation	0.5 %	0.5 %	D 638
Tensile Modulus	5.00 x 10 <sup>6</sup> psi	34475 MPa	D 638
Flexural Strength	25000 psi	172 MPa	D 790
Flexural Modulus	4.00 x 10 <sup>6</sup> psi	27580 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)	545 °F	285 °C	D 648
Ignition Resistance* Flammability**	V-0 @ 1/8 in	V-0 @ 3.0 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	630 - 690 °F	332 - 366 °C
Mold Temperature	150 - 250 °F	66 - 121 °C
Drying	8 hrs @ 300 °F	8 hrs @ 149 °C
Dew Point	-20 °F	-29 °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.