



**Product Data Sheet &  
General Processing Conditions**

**RTP 3400 M-450  
Liquid Crystal Polymer (LCP)  
Mineral**

**PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS**

<b>PERMANENCE</b>	<b>English</b>	<b>SI Metric</b>	<b>ASTM TEST</b>
Specific Gravity	1.76	1.76	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0002 - 0.0015 in/in	0.02 - 0.15 %	D 955
Water Absorption, 24 hrs @ 23°C	0.100 %	0.100 %	D 570

**MECHANICAL**

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.3 ft-lbs/in	69 J/m	D 256
unnotched 1/8 in (3.2 mm) section	11.0 ft-lbs/in	587 J/m	D 4812
Tensile Strength	16000 psi	110 MPa	D 638
Tensile Elongation	2.0 %	2.0 %	D 638
Tensile Modulus	1.30 x 10 <sup>6</sup> psi	8964 MPa	D 638
Flexural Strength	21000 psi	145 MPa	D 790
Flexural Modulus	1.60 x 10 <sup>6</sup> psi	11032 MPa	D 790

**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	542 °F	283 °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 - 18000 psi	69 - 124 MPa
Melt Temperature	685 - 750 °F	363 - 399 °C
Mold Temperature	150 - 200 °F	66 - 93 °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.