



**Product Data Sheet &  
General Processing Conditions**

**RTP 3400 M-350  
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	1.86	1.86	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0002 in/in	0.02 %	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	1.1 ft-lbs/in	59 J/m	D 256
unnotched 1/8 in (3.2 mm) section	10.0 ft-lbs/in	534 J/m	D 4812
Tensile Strength	13000 psi	90 MPa	D 638
Tensile Elongation	2.0 - 3.0 %	2.0 - 3.0 %	D 638
Tensile Modulus	1.80 x 10 <sup>6</sup> psi	12411 MPa	D 638
Flexural Strength	16000 psi	110 MPa	D 790
Flexural Modulus	1.50 x 10 <sup>6</sup> psi	10342 MPa	D 790
Compressive Strength	7500 psi	52 MPa	D 695

**ELECTRICAL**

Dielectric Strength, S/T, in oil	900 VPM	35.4 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	3.5	3.5	D 150
Dissipation Factor, 1 MHz, Dry	0.0340	0.0340	D 150

**THERMAL**

Deflection Temperature @ 264 psi (1820 kPa)	470 °F	243 °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	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.

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complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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