



**Product Data Sheet &
General Processing Conditions**

**RTP 3400 M-350
Liquid Crystal Polymer (LCP)
Mineral**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
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 ⁶ psi	12411 MPa	D 638
Flexural Strength	16000 psi	110 MPa	D 790
Flexural Modulus	1.50 x 10 ⁶ 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

	English	SI Metric
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.