



**Product Data Sheet &
General Processing Conditions**

**RTP 3499-3 X 102947 B
Liquid Crystal Polymer (LCP)
Thermally Conductive
Electrically Insulative**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	2.70	2.70	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0040 in/in	0.40 %	D 955
MECHANICAL			
Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.6 ft-lbs/in	32 J/m	D 256
unnotched 1/8 in (3.2 mm) section	2.5 ft-lbs/in	133 J/m	D 4812
Tensile Strength	9000 psi	62 MPa	D 638
Tensile Elongation	0.7 %	0.7 %	D 638
Tensile Modulus	1.80 x 10 ⁶ psi	12411 MPa	D 638
Flexural Strength	13000 psi	90 MPa	D 790
Flexural Modulus	1.85 x 10 ⁶ psi	12756 MPa	D 790
ELECTRICAL			
Volume Resistivity	> 1E12 ohm.cm	> 1E12 ohm.cm	D 257
THERMAL			
Deflection Temperature @ 264 psi (1820 kPa)	465 °F	241 °C	D 648
Ignition Resistance* Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801
Coefficient of Linear Thermal Expansion Flow Direction	1.0 x 10 ⁻⁵ /°F	1.7 x 10 ⁻⁵ /°C	E 831
Transverse Direction	3.8 x 10 ⁻⁵ /°F	6.9 x 10 ⁻⁵ /°C	E 831
Thermal Conductivity Through-plane	11.10 (BTU.in)/(hr.ft ² .°F)	1.60 W/(m.K)	E 1530

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.