



**Product Data Sheet &
General Processing Conditions**

**RTP 3499-3 X 92886
Liquid Crystal Polymer (LCP)
Thermally Conductive
Electrically Conductive
Sloughing**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.70	1.70	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0015 in/in	0.15 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.4 ft-lbs/in	21 J/m	D 256
unnotched 1/8 in (3.2 mm) section	1.1 ft-lbs/in	59 J/m	D 4812
Tensile Strength	6500 psi	45 MPa	D 638
Tensile Elongation	0.4 %	0.4 %	D 638
Tensile Modulus	3.50 x 10 ⁶ psi	24132 MPa	D 638
Flexural Strength	10000 psi	69 MPa	D 790
Flexural Modulus	2.60 x 10 ⁶ psi	17927 MPa	D 790

ELECTRICAL

Volume Resistivity	< 1E1 ohm.cm	< 1E1 ohm.cm	D 257
Surface Resistivity	< 1E5 ohm/sq	< 1E5 ohm/sq	D 257

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	450 °F	232 °C	D 648
Ignition Resistance* Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 mm	D 3801
Thermal Conductivity Through-plane	20.80 (BTU.in)/(hr.ft ² .°F)	3.00 W/(m.K)	E 1530
In-plane	125.00 (BTU.in)/(hr.ft ² .°F)	18.01 W/(m.K)	E 1461-92

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.