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Ponciplastics.com



**Product Data Sheet &
General Processing Conditions**

**RTP 3499-3 X 113393 A
Liquid Crystal Polymer (LCP)
Glass Fiber
LDS Platable**

Dielectric Constant K: 4.18 at 1 GHz, 4.02 at 3 GHz, 4.04 at 5 GHz Dissipation factor DF: 0.0067 at 1 GHz, 0.0059 at 3 GHz, 0.0056 at 5 GHz

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.76	1.76	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	3.9 ft-lbs/in	208 J/m	D 256
unnotched 1/8 in (3.2 mm) section	14.0 ft-lbs/in	747 J/m	D 4812
Tensile Strength	17900 psi	123 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	24000 psi	165 MPa	D 790
Flexural Modulus	1.80 x 10 ⁶ psi	12411 MPa	D 790

ELECTRICAL

Dielectric Constant, 1 MHz, Dry	3.8	3.8	D 150
Dissipation Factor, 1 MHz, Dry	0.0300	0.0300	D 150

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	455 °F	235 °C	D 648
@ 66 psi (455 kPa)	530 °F	277 °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	0.3 x 10 ⁻⁵ /°F	0.6 x 10 ⁻⁵ /°C	E 831
Transverse Direction	3.6 x 10 ⁻⁵ /°F	6.5 x 10 ⁻⁵ /°C	E 831

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	620 - 680 °F	327 - 360 °C
Mold Temperature	150 - 250 °F	66 - 121 °C
Drying	8 hrs @ 300 °F	8 hrs @ 149 °C
Dew Point	-20 °F	-29 °C