



**Product Data Sheet &
General Processing Conditions**

**RTP 3403-4
Liquid Crystal Polymer (LCP)
Glass Fiber**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
-------------------	----------------	------------------	------------------

Primary Additive	20 %	20 %	
Specific Gravity	1.52	1.52	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	2.2 ft-lbs/in	117 J/m	D 256
unnotched 1/8 in (3.2 mm) section	9.0 ft-lbs/in	481 J/m	D 4812
Tensile Strength	17000 psi	117 MPa	D 638
Tensile Elongation	1.2 %	1.2 %	D 638
Tensile Modulus	2.40 x 10 ⁶ psi	16548 MPa	D 638
Flexural Strength	24000 psi	165 MPa	D 790
Flexural Modulus	2.10 x 10 ⁶ psi	14480 MPa	D 790
Hardness Rockwell, R	105	105	D 785

ELECTRICAL

Dielectric Strength, S/T, in oil	650 VPM	25.6 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	3.1	3.1	D 150
Dissipation Factor, 1 MHz, Dry	0.0300	0.0300	D 150

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	580 °F	304 °C	D 648
Ignition Resistance* Flammability**	V-0 @ 1/8 in	V-0 @ 3.0 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	10000 - 18000 psi	69 - 124 MPa
Melt Temperature	685 - 750 °F	363 - 399 °C
Mold Temperature	150 - 200 °F	66 - 93 °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.