



**Product Data Sheet &
General Processing Conditions**

**RTP 3400-3
Liquid Crystal Polymer (LCP)**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.38	1.38	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0010 in/in	0.10 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	7.5 ft-lbs/in	400 J/m	D 256
unnotched 1/8 in (3.2 mm) section	22.0 ft-lbs/in	1175 J/m	D 4812
Tensile Strength	18500 psi	128 MPa	D 638
Tensile Elongation	2.0 %	2.0 %	D 638
Tensile Modulus	1.90 x 10 ⁶ psi	13100 MPa	D 638
Flexural Strength	21500 psi	148 MPa	D 790
Flexural Modulus	1.60 x 10 ⁶ psi	11032 MPa	D 790

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	470 °F	243 °C	D 648
--	--------	--------	-------

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.

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.