

Processing Conditions

Liquid Crystal Polymer (LCP) — RTP 3400-3 Series Specialty Compounds

Typical	Injection	Molding
Conditions		

Conditions	English	SI Metric
Temperatures		
Rear zone	635 - 650 °F	335 - 343 ℃
Center zone	645 - 660 °F	341 - 349 ℃
Front zone	655 - 670 °F	346 - 354 ℃
Melt	630 - 690 °F	332 - 366 ℃
Mold	150 - 250 °F	66 - 121 ℃

Pressures		
Injection	12000 - 18000 psi	83 - 124 MPa
Hold	10000 - 15000 psi	69 - 103 MPa
Back	50 - 100 psi	0.34 - 0.69 MPa

Speeds		
Fill	2-3 in/sec	51 - 76 mm/sec
Screw	100 - 200 rpm	100 - 200 rpm

Drying		
Time & Temperature	8 Hrs @ 300 °F	8 Hrs @ 149 ℃
Dew Point	-20 ℉	-29 ℃
Moisture Content	n/a %	n/a %

Notes

- The key to successfully molding this material is to start mold open cycles as soon as the screw reaches its retracted position.
- This information is intended to be used only as a guideline for designers and processors of modified thermoplastics for injection molding. Because injection mold design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.
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