

InLube® LCPTF20

Americhem - Liquid Crystal Polymer

General Information

Product Description

20% PTFE LUBRICATED, LIQUID CRYSTAL POLYMER (LCP)

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• PTFE Lubricant: 20%		
Features	• Chemical Resistant • Good Mold Release	• Low Friction • Lubricated	• Wear Resistant
Uses	• Aerospace Applications • Battery Cases • Connectors	• Electrical/Electronic Applications • Engineering Parts • Industrial Applications	• Metal Replacement • Military/Defense Applications • Semiconductor Applications
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.49		ASTM D792
Molding Shrinkage - Flow	0.0 to 1.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.70E+6	psi	ASTM D638
Tensile Strength	14000	psi	ASTM D638
Tensile Elongation (Yield)	1.0 to 1.5	%	ASTM D638
Flexural Modulus	1.40E+6	psi	ASTM D790
Flexural Strength	17500	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.6	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	490	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	300	°F
Drying Time	6.0 to 8.0	hr
Suggested Max Moisture	0.010	%
Processing (Melt) Temp	635 to 680	°F
Mold Temperature	200 to 325	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

