InStruc® LCP2GF30

Americhem - *Liquid Crystal Polymer*

General Information

Product Description

InStruc® LCP2GF30 is a 30% glass fiber reinforced injection molding grade of liquid crystal polymer (LCP) with superior mechanical properties, good thermal resistance, and high dimensional stability, It is suitable for a wide range of applications.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Chemical Resistant • Excellent Weather Resistance • Flame Retardant	• Good Thermal Stability • High Dimensional Stability • High Stiffness	• High Strength
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.62		ASTM D792
Molding Shrinkage - Flow	0.0 to 1.0E-3	in/in	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2.20E+6	psi	ASTM D638
Tensile Strength	30000	psi	ASTM D638
Tensile Elongation (Yield)	1.5 to 2.0	%	ASTM D638
Flexural Modulus	2.15E+6	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (0.125 in)	2.5	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	450	°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	540 to 590	°F
Mold Temperature	175 to 250	°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.