



## InStruc® LCPGF30

**PRODUCT DESCRIPTION** InStruc® LCPGF30 is a 30% glass fiber reinforced injection molding grade of liquid crystal polymer (LCP) with excellent high temperature resistance, good puncture and cut resistance, and high dimensional stability, stiffness and strength. It is suitable for a wide range of applications.

**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 Flow, Good Thermal Stability, High Dimensional Stability, High Heat Resistance, High Stiffness, High Strength

**PROCESSING METHOD** Injection Molding

PHYSICAL	NOMINAL VALUE	UNIT	TEST METHOD
Density / Specific Gravity	1.61	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow	0.0 to 0.10	%	ASTM D955
MECHANICAL	NOMINAL VALUE	UNIT	TEST METHOD
Tensile Modulus	13100	MPa	ASTM D638
Tensile Strength	128	MPa	ASTM D638
Tensile Elongation (Yield)	1.5 to 2.0	%	ASTM D638
Flexural Modulus	11700	MPa	ASTM D790
Flexural Strength	193	MPa	ASTM D790
IMPACT	NOMINAL VALUE	UNIT	TEST METHOD
Notched Izod Impact (3.18 mm)	96	J/m	ASTM D256
THERMAL	NOMINAL VALUE	UNIT	TEST METHOD
Deflection Temperature Under Load 1.8 MPa, Unannealed	266	°C	ASTM D648
INJECTION	NOMINAL VALUE	UNIT	TEST METHOD
Drying Temperature	149	°C	
Drying Time	6.0 to 8.0	hr	
Suggested Max Moisture	0.010	%	
Processing (Melt) Temp	338 to 360	°C	
Mold Temperature	93 to 163	°C	
Back Pressure	0.345 to 0.689	MPa	
Screw Speed	40 to 70	rpm	

### NOTES

<sup>1</sup> Typical properties: these are not to be construed as specifications.

