



InStruc® LCP2GF30

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.

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

PHYSICAL	NOMINAL VALUE	UNIT	TEST METHOD
Density / Specific Gravity	1.62	g/cm ³	ASTM D792
Molding Shrinkage - Flow	0.0 to 0.10	%	ASTM D955
MECHANICAL	NOMINAL VALUE	UNIT	TEST METHOD
Tensile Modulus	15200	MPa	ASTM D638
Tensile Strength	207	MPa	ASTM D638
Tensile Elongation (Yield)	1.5 to 2.0	%	ASTM D638
Flexural Modulus	14800	MPa	ASTM D790
Flexural Strength	193	MPa	ASTM D790
IMPACT	NOMINAL VALUE	UNIT	TEST METHOD
Notched Izod Impact (3.18 mm)	130	J/m	ASTM D256
THERMAL	NOMINAL VALUE	UNIT	TEST METHOD
Deflection Temperature Under Load 1.8 MPa, Unannealed	232	°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	282 to 310	°C	
Mold Temperature	79 to 121	°C	
Back Pressure	0.345 to 0.689	MPa	
Screw Speed	40 to 70	rpm	

NOTES

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

