

LONGLITE® LCP 300 B5TL

Chang Chun Plastics Co., Ltd. (CCP Group) - Liquid Crystal Polymer

General Information

Product Description

LCP-300/ LCP-270 is a high heat-resistance and anisotropic, Type I/ Type II grade Liquid Crystalline Polymer Compound
LCP-300/LCP-270 appears low viscosity and high fluidity while operating temperature is higher than its melting point.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber\Inorganic, 50% Filler by Weight
Features	• High Flow • Low Viscosity • High Heat Resistance • Low Warpage
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.80	g/cm ³	ISO 1183
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield, 73°F)	16700	psi	ISO 527-2
Tensile Strain (Break, 73°F)	1.3	%	ISO 527-2
Flexural Modulus (73°F)	1.81E+6	psi	ISO 178
Flexural Stress (73°F)	25400	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength	8.6	ft-lb/in ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	545	°F	ISO 75-2/A
Electrical	Nominal Value	Unit	Test Method
Dielectric Strength (0.0787 in)	> 330	V/mil	ASTM D149
Arc Resistance	150	sec	ASTM D495
Comparative Tracking Index	175	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-0		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	284	°F
Drying Time	4.0	hr
Rear Temperature	626 to 662	°F
Middle Temperature	662 to 698	°F
Front Temperature	680 to 734	°F
Nozzle Temperature	680 to 734	°F
Mold Temperature	104 to 248	°F
Injection Pressure	14200 to 19900	psi
Holding Pressure	4270 to 9960	psi
Back Pressure	116 to 145	psi
Screw Speed	40 to 120	rpm

