

LAPEROS® S471

Polyplastics - Liquid Crystal Polymer

General Information

Product Description

High Heat Resistance, High-temperature Stiffness

Low Warpage

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber/Mineral, 45% Filler by Weight		
Features	• High Heat Resistance	• High Stiffness	• Low Warpage
UL File Number	• E106764		
Part Marking Code (ISO 11469)	• >LCP-(MD+GF)45<		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.77	g/cm ³	ISO 1183
Molding Shrinkage ²			Internal Method
Across Flow : 0.0394 in	0.33	%	
Flow : 0.0394 in	0.10	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.010	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	18900	psi	ASTM D638
Tensile Elongation (Break)	2.0	%	ASTM D638
Flexural Modulus	1.84E+6	psi	ISO 178
Flexural Stress	26100	psi	ISO 178
Flexural Strain	2.0	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	2.9	ft·lb/in ²	ISO 179/1eA
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	75		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	635	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	599	°F	ISO 75-2/A
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
0.0394 in	1000	V/mil	
0.118 in	510	V/mil	
Relative Permittivity			IEC 60250
1 kHz	4.10		
1 MHz	4.00		
Dissipation Factor			IEC 60250
1 kHz	0.010		
1 MHz	0.010		
Arc Resistance	183	sec	ASTM D495
Comparative Tracking Index	150	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method

