

LAPEROS® A410

Polyplastics - Liquid Crystal Polymer

General Information

Product Description

High Strength, High Toughness

Low Warpage, High Stiffness

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Glass Fiber/Mineral, 50% Filler by Weight		
Features	• High Stiffness	• High Toughness	
	• High Strength	• Low Warpage	
UL File Number	• E106764		
Part Marking Code (ISO 11469)	• >LCP-(GF+MD)50<		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.84	g/cm ³	ISO 1183
Molding Shrinkage ²			Internal Method
Across Flow : 0.0394 in	0.35	%	
Flow : 0.0394 in	0.10	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.020	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	22500	psi	ASTM D638
Tensile Elongation (Break)	1.6	%	ASTM D638
Flexural Modulus	2.68E+6	psi	ISO 178
Flexural Stress	33400	psi	ISO 178
Flexural Strain	2.0	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	3.3	ft·lb/in ²	ISO 179/1eA
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	90		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	455	°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	1700	V/mil	
0.118 in	560	V/mil	
Relative Permittivity			IEC 60250
1 kHz	4.40		
1 MHz	4.00		
Dissipation Factor			IEC 60250
1 kHz	0.020		
1 MHz	0.020		
Arc Resistance	163	sec	ASTM D495
Comparative Tracking Index	175	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-0		UL 94



Additional Information	Nominal Value	Unit	Test Method
Color Number	VF2001/BK010P		

Notes

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

² 80x80x1 mm, 60 MPa Injection Pressure

