

LAPEROS® A150

Polyplastics - Liquid Crystal Polymer

General Information

Product Description

High Strength, High Toughness

High Stiffness

General

Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Features	• High Stiffness	• High Strength	• High Toughness
UL File Number	• E106764		
Part Marking Code (ISO 11469)	• >LCP-GF50<		

Properties¹

Physical	Nominal Value	Unit	Test Method
Density	1.81	g/cm ³	ISO 1183
Molding Shrinkage ²			Internal Method
Across Flow : 0.0394 in	0.40	%	
Flow : 0.0394 in	0.11	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.020	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	26100	psi	ASTM D638
Tensile Elongation (Break)	1.5	%	ASTM D638
Flexural Modulus	2.97E+6	psi	ISO 178
Flexural Stress	37700	psi	ISO 178
Flexural Strain	1.8	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	5.7	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	464	°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	1100	V/mil	
0.118 in	710	V/mil	
Relative Permittivity			IEC 60250
1 kHz	4.50		
1 MHz	4.10		
Dissipation Factor			IEC 60250
1 kHz	0.020		
1 MHz	0.020		
Arc Resistance	180	sec	ASTM D495

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Electrical	Nominal Value	Unit	Test Method
Comparative Tracking Index	200	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-0		UL 94
Additional Information	Nominal Value	Unit	
Color Number	VF2001		

Notes

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

² 80x80x1 mm, 60 MPa Injection Pressure