

# LAPEROS® S471

## Polyplastics - Liquid Crystal Polymer

### General Information

#### Product Description

High Heat Resistance, High-temperature Stiffness

Low Warpage

#### General

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 <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.77	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>			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 <sup>2</sup>	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		

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Electrical	Nominal Value	Unit	Test Method
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
Flame Rating	V-0		UL 94
Additional Information	Nominal Value	Unit	
Color Number	VF2001/BK010P		

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 80x80x1 mm, 60 MPa Injection Pressure