

LAPEROS® S478

Polyplastics - Liquid Crystal Polymer

General Information

Product Description

High Heat Resistance, High-temperature Stiffness

Low Warpage, Super High Flow

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber/Mineral, 40% Filler by Weight		
Features	• High Flow • High Heat Resistance	• High Stiffness • Low Warpage	
UL File Number	• E106764		
Part Marking Code (ISO 11469)	• >LCP-(MD+GF)40<		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.72	g/cm ³	ISO 1183
Molding Shrinkage ²			Internal Method
Across Flow : 0.0394 in	0.39	%	
Flow : 0.0394 in	0.080	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.010	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	14500	psi	ASTM D638
Tensile Elongation (Break)	1.8	%	ASTM D638
Flexural Modulus	1.45E+6	psi	ISO 178
Flexural Stress	19600	psi	ISO 178
Flexural Strain	2.2	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.4	ft·lb/in ²	ISO 179/1eA
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	554	°F	ISO 75-2/A
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	3.0E+16	ohms·cm	IEC 60093
Electric Strength (0.0394 in)	970	V/mil	IEC 60243-1
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	183	sec	ASTM D495
Comparative Tracking Index	200	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-0		UL 94
Additional Information	Nominal Value	Unit	Test Method
Color Number	VF2201/BK210P		

