

LAPEROS® S475

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 • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber\Mineral, 30% Filler by Weight
Features	• High Flow • High Stiffness • High Heat Resistance • Low Warpage
UL File Number	• E106764
Part Marking Code (ISO 11469)	• >LCP-(MD+GF)30<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.65	g/cm ³	ISO 1183
Molding Shrinkage ²			Internal Method
Across Flow : 0.0394 in	0.39	%	
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	20300	psi	ASTM D638
Tensile Elongation (Break)	1.8	%	ASTM D638
Flexural Modulus	1.81E+6	psi	ISO 178
Flexural Stress	26100	psi	ISO 178
Flexural Strain	2.5	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.9	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)	581	°F	ISO 75-2/A
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	2.0E+16	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
0.0394 in	1000	V/mil	
0.118 in	480	V/mil	
Relative Permittivity			IEC 60250
1 kHz	3.90		
1 MHz	3.70		
Dissipation Factor			IEC 60250
1 kHz	0.010		
1 MHz	0.010		
Arc Resistance	100	sec	ASTM D495
Comparative Tracking Index	150	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-0		UL 94

