

SUMIKASUPER® LCP E7006L

Liquid Crystal Polymer
Sumitomo Chemical Co., Ltd.

Message:

SUMIKASUPER LCP is a thermotropic liquid crystalline polyester, showing the highest heat resistance among engineering plastics.

General Information			
UL YellowCard	E54705-100988648	E249884-100962048	
Filler / Reinforcement	Long Glass Fiber		
Features	Good Adhesion		
	Good Chemical Resistance		
	Good Dimensional Stability		
	Good Flow		
	Good Heat Aging Resistance		
	Good Moldability		
	High Heat Resistance		
	High Temperature Strength		
	Low Viscosity		
	Weldable		
Uses	Appliances		
	Automotive Applications		
	Electrical/Electronic Applications		
	Engineering Parts		
	Food Containers		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.64	g/cm³	ASTM D792
Molding Shrinkage			Internal Method
Flow	0.14	%	
Across Flow	0.79	%	
Water Absorption (Saturation)	0.020	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	107		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	133	MPa	ASTM D638
Tensile Elongation (Break)	4.5	%	ASTM D638
Flexural Modulus			ASTM D790

23°C	11200	MPa	
200°C	3140	MPa	
Flexural Strength			ASTM D790
Yield, 23°C	140	MPa	
Yield, 200°C	21.0	MPa	
Shear Strength	48.0	MPa	ASTM D732
Poisson's Ratio	0.45		ASTM E132
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (6.40 mm)	78	J/m	ASTM D256
Unnotched Izod Impact (6.40 mm)	260	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	242	°C	ASTM D648
CLTE			Internal Method
Flow : 150°C	8.0E-6	cm/cm/°C	
Transverse : 150°C	8.4E-5	cm/cm/°C	
Thermal Conductivity	0.55	W/m/K	JIS R2618
RTI Elec (3.20 mm)	130	°C	UL 746
RTI Imp (3.20 mm)	130	°C	UL 746
RTI Str (3.20 mm)	130	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms · cm	ASTM D257
Dielectric Constant			ASTM D150
1 kHz	4.60		
1 MHz	3.90		
Dissipation Factor			ASTM D150
1 kHz	0.026		
1 MHz	0.032		
Arc Resistance	125	sec	ASTM D495
Comparative Tracking Index	155	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.380 mm)	V-0		UL 94
Oxygen Index	48	%	JIS K7201
Additional Information	Nominal Value	Unit	Test Method
Soldering Resistance	275	°C	Internal Method
Injection	Nominal Value	Unit	
Drying Temperature	120 to 150	°C	
Drying Time	3.0	hr	
Suggested Max Regrind	30	%	
Rear Temperature	280 to 300	°C	
Middle Temperature	300 to 320	°C	
Front Temperature	320 to 340	°C	

Nozzle Temperature	320 to 340	°C
Processing (Melt) Temp	320	°C
Mold Temperature	70.0 to 160	°C
Injection Pressure	78.0 to 157	MPa
Injection Rate	Moderate-Fast	
Holding Pressure	20.0 to 39.0	MPa
Back Pressure	0.980 to 4.90	MPa
Screw Speed	50 to 100	rpm

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

