

SUMIKASUPER® LCP E5002L

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	E54705-100988603	E249884-100962011	
Filler / Reinforcement	Long Glass Fiber		
Features	Good Chemical Resistance		
	Good Wear Resistance		
	High Heat Resistance		
	High Rigidity		
	Low Viscosity		
Uses	Bobbins		
	Electrical/Electronic Applications		
	Optical Data Storage		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.45	g/cm ³	ASTM D792
Molding Shrinkage			Internal Method
Flow	0.070	%	
Across Flow	1.3	%	
Water Absorption (Saturation)	0.020	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	150	MPa	ASTM D638
Tensile Elongation (Break)	4.7	%	ASTM D638
Flexural Modulus (23°C)	9510	MPa	ASTM D790
Flexural Strength (Yield, 23°C)	127	MPa	ASTM D790
Poisson's Ratio	0.51		ASTM E132
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (6.40 mm)	180	J/m	ASTM D256
Unnotched Izod Impact (6.40 mm)	480	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	354	°C	ASTM D648
CLTE			Internal Method

Flow : 150°C	2.0E-6	cm/cm/°C	
Transverse : 150°C	8.1E-5	cm/cm/°C	
Thermal Conductivity	0.44	W/m/K	JIS R2618
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Constant			ASTM D150
1 MHz	3.40		
1.00 GHz	3.10		
Dissipation Factor			ASTM D150
1 MHz	0.023		
1.00 GHz	4.0E-3		
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.300 mm, All colors)	V-0		UL 94
Additional Information	Nominal Value	Unit	Test Method
Soldering Resistance	350	°C	Internal Method
Injection	Nominal Value	Unit	
Drying Temperature	130	°C	
Drying Time	4.0 to 24	hr	
Rear Temperature	350 to 370	°C	
Middle Temperature	370 to 390	°C	
Front Temperature	390 to 410	°C	
Nozzle Temperature	390 to 410	°C	
Processing (Melt) Temp	400	°C	
Mold Temperature	40.0 to 160	°C	
Injection Pressure	120 to 160	MPa	
Injection Rate	Moderate-Fast		
Holding Pressure	40.0 to 60.0	MPa	
Back Pressure	1.00 to 5.00	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



WECHAT