

Solvay Specialty Polymers Xydar® G-930 Liquid Crystal Polymer (LCP) (Unverified Data**)

Category : Polymer , Thermoplastic , Liquid Crystal Polymer (LCP) , Liquid Crystal Polymer (LCP), 30% Glass Fiber Filled

Material Notes:

Xydar G-930 Liquid Crystal Polymer (LCP) is a glass reinforced injection molding grade developed specifically for electrical/electronic applications utilizing surface mount technology. The moldability of this resin is exceptional. Xydar G-930 can fill very thin walls over long flow lengths with little or no flash, even at mold temperatures below 200°F (93°C). In addition, it has low warpage in molded products and exceptional weld line strength. This material exhibits high strength and stiffness (even at elevated temperatures), low coefficient of thermal expansion, high deflection temperature, inherent flame resistance, and outstanding resistance to most chemicals, weathering, and radiation. Information provided by Solvay Specialty Polymers.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Xydar-G-930-Liquid-Crystal-Polymer-LCP-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.60 g/cc	1.60 g/cc	ASTM D792
Filler Content	30 %	30 %	Glass Fiber Reinforcement
Water Absorption	<= 0.10 % @Time 86400 sec	<= 0.10 % @Time 24.0 hour	ASTM D570

Mechanical Properties	Metric	English	Comments
Tensile Strength	135 MPa	19600 psi	ASTM D638
Elongation at Break	1.6 %	1.6 %	ASTM D638
Tensile Modulus	15.9 GPa	2310 ksi	ASTM D638
Flexural Strength	172 MPa	24900 psi	ASTM D790
Flexural Modulus	13.4 GPa	1940 ksi	ASTM D790
Izod Impact, Notched	0.960 J/cm	1.80 ft-lb/in	ASTM D256
	4.30 J/cm	8.06 ft-lb/in	ASTM D4812

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	3.60 - 7.20 µm/m-°C	2.00 - 4.00 µin/in-°F	ASTM D696
CTE, linear, Transverse to Flow	40.0 - 79.0 µm/m-°C	22.2 - 43.9 µin/in-°F	ASTM D696
Deflection Temperature at 1.8 MPa (264 psi)	271 °C	520 °F	Unannealed; ASTM D648
	220 °C	428 °F	

UL RTI Electrical Thermal Properties	Metric @ Thickness 0.750 mm	English @ Thickness 0.0295 in	UL 746 Comments
UL RTI, Mechanical with Impact	200 °C @Thickness 0.750 mm	392 °F @Thickness 0.0295 in	UL 746
UL RTI, Mechanical without Impact	220 °C @Thickness 0.750 mm	428 °F @Thickness 0.0295 in	UL 746
Flammability, UL94	V-0 @Thickness 0.400 mm	V-0 @Thickness 0.0157 in	BK; UL 94

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+16 ohm-cm	1.00e+16 ohm-cm	ASTM D257
Dielectric Constant	3.9 @Frequency 1.00e+6 Hz	3.9 @Frequency 1.00e+6 Hz	ASTM D150
	4.2 @Frequency 60.0 Hz	4.2 @Frequency 60.0 Hz	ASTM D150
Dielectric Strength	39.0 kV/mm @Thickness 1.57 mm	991 kV/in @Thickness 0.0618 in	ASTM D149
High Voltage Arc Resistance to Ignition (HVAR)	>= 300 sec	>= 300 sec	UL 746
Comparative Tracking Index	185 V	185 V	ASTM D3638

Processing Properties	Metric	English	Comments
Melt Temperature	321 - 360 °C	610 - 680 °F	
Mold Temperature	65.6 - 93.3 °C	150 - 200 °F	
Drying Temperature	149 °C	300 °F	
Dry Time	6.00 - 8.00 hour	6.00 - 8.00 hour	

Descriptive Properties	Value	Comments
Appearance	Black	
	Natural Color	
Automotive Specifications	ASTM D5138 LCP0110 G30 B00000	
	DELPHI M-5282 M5282 Color: BK Black	

Descriptive Properties	Value	Comments
	Europe	
	North America	
Clamp Tonnage	2.8 to 5.5 kN/cm ²	
Features	Flame Retardant	
	Good Chemical Resistance	
	Good Moldability	
	Good Weather Resistance	
	High Stiffness	
	High Strength	
	Low Warpage	
	Radiation (Gamma) Resistant	
Forms	Pellets	
Generic	LCP	
Processing Method	Injection Molding	
RoHS Compliance	RoHS Compliant	
Screw Compression Ratio	2.5:1.0 to 3.0:1.0	
Screw L/D Ratio	20.0:1.0 to 24.0:1.0	
Uses	Automotive Applications	
	Automotive Electronics	
	Bobbins	
	Electrical Parts	
	Electrical/Electronic Applications	
	Industrial Applications	
	Industrial Parts	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China