

## LG Chemical Lupoy 1301EP30 Polycarbonate Resin

Category : Polymer , Thermoplastic , Polycarbonate (PC)

### Material Notes:

Description: LUPOY PC 1301EP-30 resin is designed for extrusion and injection molding products. It exhibits an excellent physical property balance of heat resistance, transparency and impact strength. Main Characteristics: Very low viscosity and Good mold release Applications: DVD security boxes, Mobile phone keypads, DVD security boxes and Thin components CAS: 103598-77-2 Information provided by LG Chemical

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_LG-Chemical-Lupoy-1301EP30-Polycarbonate-Resin.php](http://www.lookpolymers.com/polymer_LG-Chemical-Lupoy-1301EP30-Polycarbonate-Resin.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	ASTM D792
Water Absorption	0.32 %	0.32 %	equilibrium, 50% RH; ASTM D570
	@Temperature 23.0 Å°C	@Temperature 73.4 Å°F	
	0.15 %	0.15 %	ASTM D570
	@Temperature 23.0 Å°C, Time 86400 sec	@Temperature 73.4 Å°F, Time 24.0 hour	
Linear Mold Shrinkage, Flow	0.00050 - 0.00070 cm/cm	0.00050 - 0.00070 in/in	ASTM D955
Melt Flow	30 g/10 min	30 g/10 min	ASTM D1238
	@Load 1.20 kg, Temperature 300 Å°C	@Load 2.65 lb, Temperature 572 Å°F	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	61.0 MPa	8850 psi	ASTM D638
Tensile Strength, Yield	60.0 MPa	8700 psi	50mm/min; ASTM D638
Elongation at Break	150 %	150 %	ASTM D638
Elongation at Yield	6.0 %	6.0 %	ASTM D638
Tensile Modulus	2.34 GPa	340 ksi	ASTM D638
Flexural Yield Strength	96.0 MPa	13900 psi	ASTM D790
Flexural Modulus	2.41 GPa	350 ksi	ASTM D790
Izod Impact, Notched	6.939 J/cm	13.00 ft-lb/in	0.25 mm notch; ASTM D256
	@Thickness 3.20 mm,	@Thickness 0.126 in,	

Mechanical Properties	Temperature 23.0 Â°C Metric	Temperature 73.4 Â°F English	Comments
Izod Impact, Unnotched	NB  @Temperature 23.0 Â°C	NB  @Temperature 73.4 Â°F	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	68.0 Âµm/m-Â°C  @Temperature -40.0 - 82.0 Â°C	37.8 Âµin/in-Â°F  @Temperature -40.0 - 180 Â°F	ASTM D696
Hot Ball Pressure Test	>= 125 Â°C	>= 257 Â°F	IEC 598-1
Deflection Temperature at 0.46 MPa (66 psi)	139 Â°C  @Thickness 4.00 mm	282 Â°F  @Thickness 0.157 in	Annealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	122 Â°C  @Thickness 4.00 mm	252 Â°F  @Thickness 0.157 in	Unannealed; ASTM D648
	136 Â°C  @Thickness 4.00 mm	277 Â°F  @Thickness 0.157 in	Annealed; ASTM D648
Vicat Softening Point	144 Â°C  @Load 5.10 kg	291 Â°F  @Load 11.2 lb	50Â°C/hr; ASTM D1525
Softening Point	150 - 200 Â°C	302 - 392 Â°F	melting point per MSDS
UL RTI, Electrical	125 Â°C  @Thickness >=1.50 mm	257 Â°F  @Thickness >=0.0591 in	
	125 Â°C  @Thickness >=3.00 mm	257 Â°F  @Thickness >=0.118 in	
UL RTI, Mechanical with Impact	115 Â°C  @Thickness >=1.50 mm	239 Â°F  @Thickness >=0.0591 in	
	115 Â°C  @Thickness >=3.00 mm	239 Â°F  @Thickness >=0.118 in	
UL RTI, Mechanical without Impact	125 Â°C  @Thickness >=1.50 mm	257 Â°F  @Thickness >=0.0591 in	
	125 Â°C  @Thickness >=3.00 mm	257 Â°F  @Thickness >=0.118 in	

Thermal Properties Flammability, UL94	V-2 Metric	V-2 English	Comments ASTM D635
	@Thickness 0.500 mm	@Thickness 0.0197 in	
	V-2	V-2	ASTM D635
	@Thickness 1.60 mm	@Thickness 0.0630 in	
	V-2	V-2	ASTM D635
	@Thickness 2.50 mm	@Thickness 0.0984 in	
	V-2	V-2	ASTM D635
	@Thickness 3.00 mm	@Thickness 0.118 in	
Flash Point	>= 450 Â°C	>= 842 Â°F	
Oxygen Index	26 %	26 %	ASTM D2863
Glow Wire Test	850 Â°C	1560 Â°F	IEC 695-2-1
	@Thickness 2.00 mm, Time 5.00 sec	@Thickness 0.0787 in, Time 0.00139 hour	

Optical Properties	Metric	English	Comments
Refractive Index	1.586	1.586	ASTM D542
Haze	0.70 - 1.5 %	0.70 - 1.5 %	ASTM D1003
Transmission, Visible	89 %	89 %	ASTM D1003

Electrical Properties	Metric	English	Comments
Volume Resistivity	2.00e+17 ohm-cm	2.00e+17 ohm-cm	ASTM D257
Dielectric Constant	3.0	3.0	ASTM D150
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	
Dielectric Strength	17.0 kV/mm	432 kV/in	ASTM D149
Dissipation Factor	0.0010	0.0010	ASTM D150
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	
Arc Resistance	120 - 180 sec	120 - 180 sec	ASTM D495
Comparative Tracking Index	250 V	250 V	IEC 112
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Hot Wire Ignition, HWI	30 - 60 sec	30 - 60 sec	
	@Thickness >=1.50 mm	@Thickness >=0.0591 in	

Electrical Properties	60 - 120 sec Metric	60 - 120 sec English	Comments
	@Thickness >=3.00 mm	@Thickness >=0.118 in	
High Amp Arc Ignition, HAI	60 - 120 arcs	60 - 120 arcs	
	@Thickness 1.50 mm	@Thickness 0.0591 in	
High Voltage Arc-Tracking Rate, HVTR	60 - 120 arcs	60 - 120 arcs	
	@Thickness 3.00 mm	@Thickness 0.118 in	

Descriptive Properties	Value	Comments
Autoignition Temperature	>450Å°C	
Average Extent of Burning	ASTM D635	

## Contact Songhan Plastic Technology Co.,Ltd.

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