

## LG Chemical LUPOY HI1002ML PC, High Impact

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate, Impact Modified

### Material Notes:

Description: Injection Molding, PC, General Purpose, High Impact, Chemical Resistance  
 Application: Mobile Phone Housing  
 CAS: 103598-77-2 and 9046-16-6  
 Information provided by LG Chemical

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_LG-Chemical-LUPOY-HI1002ML-PC-High-Impact.php](http://www.lookpolymers.com/polymer_LG-Chemical-LUPOY-HI1002ML-PC-High-Impact.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	ASTM D792
Maximum Moisture Content	0.020	0.020	Injection Molding
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm @Thickness 3.20 mm	0.0050 - 0.0070 in/in @Thickness 0.126 in	ASTM D955
Melt Flow	13 g/10 min @Load 1.20 kg, Temperature 300 Å°C	13 g/10 min @Load 2.65 lb, Temperature 572 Å°F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	117	117	ASTM D785
Tensile Strength, Yield	56.9 MPa @Thickness 3.20 mm	8250 psi @Thickness 0.126 in	50mm/min; ASTM D638
Elongation at Break	130 % @Thickness 3.20 mm	130 % @Thickness 0.126 in	50mm/min; ASTM D638
Flexural Yield Strength	88.3 MPa @Thickness 3.20 mm	12800 psi @Thickness 0.126 in	10mm/min; ASTM D790
Flexural Modulus	2.26 GPa @Thickness 3.20 mm	327 ksi @Thickness 0.126 in	10mm/min; ASTM D790
Izod Impact, Notched	>= 1.96 J/cm @Thickness 3.20 mm, Temperature -30.0 Å°C	>= 3.67 ft-lb/in @Thickness 0.126 in, Temperature -22.0 Å°F	ASTM D256
	>= 7.35 J/cm @Thickness 3.20 mm, Temperature 23.0 Å°C	>= 13.8 ft-lb/in @Thickness 0.126 in, Temperature 73.4 Å°F	ASTM D256

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	130 Â°C @Thickness 6.40 mm	266 Â°F @Thickness 0.252 in	Unannealed; ASTM D648
UL RTI, Electrical	80.0 Â°C @Thickness >=1.50 mm	176 Â°F @Thickness >=0.0591 in	
	80.0 Â°C @Thickness >=3.00 mm	176 Â°F @Thickness >=0.118 in	
UL RTI, Mechanical with Impact	80.0 Â°C @Thickness >=1.50 mm	176 Â°F @Thickness >=0.0591 in	
	80.0 Â°C @Thickness >=3.00 mm	176 Â°F @Thickness >=0.118 in	
UL RTI, Mechanical without Impact	80.0 Â°C @Thickness >=1.50 mm	176 Â°F @Thickness >=0.0591 in	
	80.0 Â°C @Thickness >=3.00 mm	176 Â°F @Thickness >=0.118 in	
Flammability, UL94	HB @Thickness >=1.50 mm	HB @Thickness >=0.0591 in	
	V-2 @Thickness >=3.00 mm	V-2 @Thickness >=0.118 in	

Electrical Properties	Metric	English	Comments
Arc Resistance	0.00 - 60 sec	0.00 - 60 sec	ASTM D495
Hot Wire Ignition, HWI	15 - 30 sec @Thickness >=1.50 mm	15 - 30 sec @Thickness >=0.0591 in	
	30 - 60 sec @Thickness >=3.00 mm	30 - 60 sec @Thickness >=0.118 in	
High Amp Arc Ignition, HAI	>= 120 arcs @Thickness 1.50 mm	>= 120 arcs @Thickness 0.0591 in	
	>= 120 arcs	>= 120 arcs	

Electrical Properties	Metric @ Thickness 3.00 mm	English @ Thickness 0.118 in	Comments
High Voltage Arc-Tracking Rate, HVTR	25.4 - 50.0 mm/min	1.00 - 1.97 in/min	

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	275 - 290 Â°C	527 - 554 Â°F	Injection Molding
Middle Barrel Temperature	285 - 305 Â°C	545 - 581 Â°F	Injection Molding
Front Barrel Temperature	290 - 310 Â°C	554 - 590 Â°F	Injection Molding
Nozzle Temperature	285 - 305 Â°C	545 - 581 Â°F	Injection Molding
Melt Temperature	290 - 310 Â°C	554 - 590 Â°F	Injection Molding
Mold Temperature	80.0 - 110 Â°C	176 - 230 Â°F	Injection Molding
Drying Temperature	100 - 110 Â°C	212 - 230 Â°F	Injection Molding
Dry Time	3.00 - 5.00 hour	3.00 - 5.00 hour	Injection Molding
Back Pressure	0.981 - 3.92 MPa	142 - 569 psi	Injection Molding
Screw Speed	40 - 70 rpm	40 - 70 rpm	Injection Molding

## Contact Songhan Plastic Technology Co.,Ltd.

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