

# LG Chemical LUPOY® GN5007FL

Description: Injection Molding, PC/ABS, Halogen Free Flame Retardant, Heat Resistance, High Flow  
Application: IT/OA, Electric & Electronic Housing and Components  
CAS: 103598-77-2, 9003-56-9 and 181028-79-5

Physical Properties	Metric	English	Comments
Specific Gravity	1.19 g/cc	1.19 g/cc	ASTM D792
Maximum Moisture Content	0.020	0.020	Injection Molding
Linear Mold Shrinkage, Flow	0.0050 - 0.0080 cm/cm @Thickness 3.20 mm	0.0050 - 0.0080 in/in @Thickness 0.126 in	ASTM D955
Melt Flow	30 g/10 min @Load 5.00 kg, Temperature 250 °C	30 g/10 min @Load 11.0 lb, Temperature 482 °F	ASTM D1238
Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	61.8 MPa @Thickness 3.20 mm	8960 psi @Thickness 0.126 in	50mm/min; ASTM D638
Elongation at Break	100 % @Thickness 3.20 mm	100 % @Thickness 0.126 in	50mm/min; ASTM D638
Flexural Yield Strength	100 MPa @Thickness 3.20 mm	14500 psi @Thickness 0.126 in	10mm/min; ASTM D790
Flexural Modulus	2.30 GPa @Thickness 3.20 mm	334 ksi @Thickness 0.126 in	10mm/min; ASTM D790
Izod Impact, Notched	7.35 J/cm @Thickness 3.20 mm, Temperature 23.0 °C	13.8 ft-lb/in @Thickness 0.126 in, Temperature 73.4 °F	ASTM D256
Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	119 °C @Thickness 6.40 mm	246 °F @Thickness 0.252 in	Unannealed; ASTM D648
Vicat Softening Point	134 °C @Load 5.00 kg	273 °F @Load 11.0 lb	120°C/h; ASTM D1525
UL RTI, Electrical	95.0 °C @Thickness >=1.50 mm	203 °F @Thickness >=0.0591 in	
UL RTI, Mechanical with Impact	90.0 °C @Thickness >=1.50 mm	194 °F @Thickness >=0.0591 in	

UL RTI, Mechanical without Impact

95.0 °C  
@Thickness >=1.50 mm

203 °F  
@Thickness >=0.0591 in

Flammability, UL94

HB  
@Thickness >=1.50 mm

HB  
@Thickness >=0.0591 in

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	260 - 300 °C	500 - 572 °F	Injection Molding
Middle Barrel Temperature	250 - 290 °C	482 - 554 °F	Injection Molding
Front Barrel Temperature	250 - 270 °C	482 - 518 °F	Injection Molding
Nozzle Temperature	260 - 290 °C	500 - 554 °F	Injection Molding
Melt Temperature	270 - 300 °C	518 - 572 °F	Injection Molding
Mold Temperature	60.0 - 90.0 °C	140 - 194 °F	Injection Molding
Drying Temperature	90.0 - 100 °C	194 - 212 °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