

LUPOY GP5100

Injection Molding Grade, PC/ABS+GF10%

Description

General Purpose, GF Reinforced

Application

Electrical Appliance Housing, Automotive I/P

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.16~1.20
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.3 ~ 0.4
Melt Flow Rate	250 °C/2.16kg	ASTM D1238	g/10min	4
Mechanical				
Tensile Strength, 3.2mm @ Break	5mm/min	ASTM D638	kg/cm ²	900
Tensile Elongation, 3.2mm @ Break	5mm/min	ASTM D638	%	3
Flexural Strength, 3.2mm	1.3mm/min	ASTM D790	kg/cm ²	1,400
Flexural Modulus, 3.2mm	1.3mm/min	ASTM D790	kg/cm ²	49,000
IZOD Impact Strength, 3.2mm (Notched)	23 °C -30 °C	ASTM D256	kg·cm/cm	10
Rockwell Hardness	R-Scale	ASTM D785	-	
Thermal				
Heat Deflection Temperature, 6.4mm (Unannealed)	18.6kg 4.6kg	ASTM D648	°C	125
Vicat Softening Temperature	5kg, 50 °C/h	ASTM D1525	°C	
Ball Pressure Temperature		IEC 60695-10-2	°C	
Flammability		UL94	class	
0.7mm			class	
1.2mm			class	
1.7mm			class	
3.0mm			class	
Relative Temperature Index Electrical		UL 746B	°C	
Mechanical with Impact			°C	
Mechanical without Impact			°C	

Note) Typical values are only for material selection purpose, and variation within normal tolerances are for various colors.

Values given should not be interpreted as specification and not be used for part or tool design.

All properties, except melt flow rate are measured on injection moludled specimens and after 48 hours storage at 23 °C, 50% relative humidity.

Updated : Jul-09, 2014

The information contained herein, including, but not limited to, data, statements and typical values, are given in good faith. LG Chem makes no warranty or guarantee, expressed or implied, (i) that the result described herein will be obtained under end - use conditions, or (ii) as to the effectiveness or safety of any design incorporating LG Chem materials, products, recommendations or advice. Further, any information contained herein shall not be construed as a part of legally binding offer. Especially, the typical values should be regarded as reference values only and not as binding minimum values. Each user bear full responsibility for making its own determination as to the suitability of LG Chem's materials, products, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating LG Chem material or products will be safe and suitable for use under end - use conditions. The data contained herein can be changed without notice as a result of the quality improvement of the products.

LUPOY GP5100

Injection Molding Grade, PC/ABS+GF10%

Description

General Purpose, GF Reinforced

Application

Electrical Appliance Housing, Automotive I/P

Electrical

Comparative Tracking Index(CTI)	Solution A	IEC 60112	Volts
Surface Resistivity		IEC 60093	Ohm
Volume Resistivity	23 °C	ASTM D257	Ohm·m
Arc Resistance	23 °C	ASTM D495	Ohm·cm
Dielectric Strength, 1mm	23 °C	ASTM D149	kV/mm
Dielectric Constant (10^6 Hz)	23 °C	ASTM D150	sec

Note) Typical values are only for material selection purpose, and variation within normal tolerances are for various colors.

Values given should not be interpreted as specification and not be used for part or tool design.

All properties, except melt flow rate are measured on injection moulded specimens and after 48 hours storage at 23 °C, 50% relative humidity.

Processing Guide (Injection Molding)

Processing Parameters	Unit	Value
Drying Temperature	°C	85 ~ 95
Drying Time	hrs	3 ~ 5
Maximum Moisture Content	%	0.02
Melt Temperature	°C	235 ~ 265
Cylinder Temperature	Front	220 ~ 240
	Middle	235 ~ 255
	Rear	250 ~ 265
Nozzle Temperature	°C	250 ~ 265
Mold Temperature	°C	50 ~ 80
Back Pressure	kg/cm ²	
Screw Speed	rpm	40 ~ 70

Note) Back Pressure & Screw Speed are only mentioned as general guidelines.

These may not apply or need adjustment in specific situations such as low shot sizes, thin wall molding and gas-assist molding.

Updated : Jul-09, 2014

The information contained herein, including, but not limited to, data, statements and typical values, are given in good faith. LG Chem makes no warranty or guarantee, expressed or implied, (i) that the result described herein will be obtained under end - use conditions, or (ii) as to the effectiveness or safety of any design incorporating LG Chem materials, products, recommendations or advice. Further, any information contained herein shall not be construed as a part of legally binding offer. Especially, the typical values should be regarded as reference values only and not as binding minimum values. Each user bear full responsibility for making its own determination as to the suitability of LG Chem's materials, products, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating LG Chem material or products will be safe and suitable for use under end - use conditions. The data contained herein can be changed without notice as a result of the quality improvement of the products.