

LUPOY GN1006FM

Injection Molding, PC, Cl/Br Free Flame Retardancy

Description

Transparent

Application

Auto, Electronics, Home Appliances, Industrial Goods

Properties	Condition	Method	Unit	Typical Value
Physical				
Specific Gravity	23°C	ISO 1183		1.20
Shrinkage		ISO 294-4		
Flow	2.0mm		%	0.6~0.8
Cross-flow	2.0mm		%	0.7~0.9
Melt Flow Rate	300°C, 1.2kg	ISO 1133	g/10min	10.0
Water Absorption	23°C, 50% RH	ISO 62	%	0.20
Mechanical				
Tensile Strength		ISO 527		
@Yield	4.0mm, 50mm/min		MPa	60
@Break	4.0mm, 50mm/min		MPa	73
Tensile Elongation		ISO 527		
@Yield	4.0mm, 50mm/min		%	6
@Break	4.0mm, 50mm/min		%	140
Tensile Modulus	4.0mm, 1mm/min	ISO 527	MPa	2,210
Flexural Strength	4.0mm, 2.0mm/min	ISO 178	MPa	90
Flexural Modulus	4.0mm, 2.0mm/min	ISO 178	MPa	2,200
IZOD Impact Strength		ISO 180		
4.0mm, Notched	23°C		kJ/m ²	70.0
	-30°C		kJ/m ²	9.0
	-40°C		kJ/m ²	9.0
Charpy Impact Strength		ISO 179		
4.0mm, Notched	23°C		kJ/m ²	72.0
	-30°C		kJ/m ²	11.0
	-40°C		kJ/m ²	10.0
Rockwell Hardness	R-Scale	ISO 2039		118
Thermal				
Heat Deflection Temperature	4.0mm, Flatwise	ISO 75		
0.45MPa	Unannealed		°C	139
1.8MPa	4.0mm, Flatwise		°C	127
	Unannealed			

Note) Typical values can be used only for the purpose of selecting material, and there can be variation within normal tolerances for various colors.

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

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

Issued Date : 2025-02-10

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 GN1006FM

Injection Molding, PC, Cl/Br Free Flame Retardancy

Description

Transparent

Application

Auto, Electronics, Home Appliances, Industrial Goods

Vicat Softening Temperature	50N, 50°C/hr	ISO 306	°C	142
Coefficient of Linear Thermal Expansion		ISO 11359		
Flow	-30°C ~ 80°C		10 ⁻⁶ m/m·°C	77
Cross-flow	-30°C ~ 80°C		10 ⁻⁶ m/m·°C	79

Flammability

Flammability		UL94	mm, Class	2mm, V-1
Relative Temperature Index(RTI)		UL746B		
Electrical	Min. Thickness		mm	0.80
	Temp		°C	80
	Max. Temp		°C	120
	Thickness		mm	1.50
Mechanical With Impact	Min. Thickness		mm	0.80
	Temp		°C	80
	Max. Temp		°C	110
	Thickness		mm	1.50
Mechanical Without Impact	Min. Thickness		mm	0.80
	Temp		°C	80
	Max. Temp		°C	120
	Thickness		mm	1.50

Electrical

Comparative Tracking Index(CTI)	Solution A	UL746A	PLC	3
Dielectric Constant	23°C	ASTM D150		2.8
Dielectric Strength	23°C, 2.0mm	ASTM D149	kV/mm	19

Note) Typical values can be used only for the purpose of selecting material, and there can be variation within normal tolerances for various colors.

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

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

Issued Date : 2025-02-10

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 GN1006FM

Injection Molding, PC, Cl/Br Free Flame Retardancy

Description

Transparent

Application

Auto, Electronics, Home Appliances, Industrial Goods

Processing Conditions (Injection Molding)

Processing Parameters	Unit	Value
Drying Temperature	°C	100~120
Drying Time	hrs	3~5
Maximum Moisture Content	%	0.02
Melt Temperature	°C	300~320
Cylinder Temperature	Rear	°C 260~280
	Middle	°C 280~300
	Front	°C 300~320
Nozzle Temperature	°C	300~320
Mold Temperature	°C	80~120

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

Note) Typical values can be used only for the purpose of selecting material, and there can be variation within normal tolerances for various colors.

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

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

Issued Date : 2025-02-10

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.