

LUPOY EF1006F

Injection Molding, PC, Cl/Br Free Flame Retardancy

Description

General Purpose
UL746C f1

Application

Electronics, Home Appliances, Industrial Goods

Properties	Condition	Method	Unit	Typical Value
Physical				
Specific Gravity	23°C	ISO 1183		1.21
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	10.1
Water Absorption	23°C, 50% RH	ISO 62	%	0.20
Mechanical				
Tensile Strength		ISO 527		
@Yield	4.0mm, 50mm/min		MPa	61
@Break	4.0mm, 50mm/min		MPa	64
Tensile Elongation		ISO 527		
@Yield	4.0mm, 50mm/min		%	6
@Break	4.0mm, 50mm/min		%	120
Tensile Modulus	4.0mm, 1mm/min	ISO 527	MPa	2,080
Flexural Strength	4.0mm, 2.0mm/min	ISO 178	MPa	88
Flexural Modulus	4.0mm, 2.0mm/min	ISO 178	MPa	2,170
IZOD Impact Strength		ISO 180		
4.0mm, Notched	23°C		kJ/m ²	14.0
	-30°C		kJ/m ²	9.0
	-40°C		kJ/m ²	8.0
Charpy Impact Strength		ISO 179		
4.0mm, Notched	23°C		kJ/m ²	15.0
	-30°C		kJ/m ²	10.0
	-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	140
1.8MPa	4.0mm, Flatwise		°C	124
	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 : 2025-12-16

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Vicat Softening Temperature	50N, 50°C/hr	ISO 306	°C	146
Coefficient of Linear Thermal Expansion		ISO 11359		
Flow	-30°C ~ 80°C		10 ⁻⁶ m/m·°C	74
Cross-flow	-30°C ~ 80°C		10 ⁻⁶ m/m·°C	72

Flammability

Flammability		UL94	mm, Class	2.5mm, 5VA
Relative Temperature Index(RTI)		UL746B		
Electrical	Min. Thickness		mm	1.00
	Temp		°C	125
	Max. Temp		°C	125
	Thickness		mm	1.00
Mechanical With Impact	Min. Thickness		mm	1.00
	Temp		°C	120
	Max. Temp		°C	120
	Thickness		mm	1.00
Mechanical Without Impact	Min. Thickness		mm	1.00
	Temp		°C	125
	Max. Temp		°C	125
	Thickness		mm	1.00

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	20

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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.

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