

LUPOY GP1006FL

Injection Molding, PC

Description

Flame Retardant, High Flow

Application

IT/OA, E&E Housing and Components

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.21
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.5~0.7
Melt Flow Rate	300 °C/1.2kg	ASTM D1238	g/10min	22
Mechanical				
Tensile Strength, 3.2mm @ Yield	50mm/min	ASTM D638	kg/cm ²	630
Tensile Elongation, 3.2mm @ Yield @ Break	50mm/min 50mm/min	ASTM D638	% %	>150
Flexural Strength, 3.2mm	10mm/min	ASTM D790	kg/cm ²	1,050
Flexural Modulus, 3.2mm	10mm/min	ASTM D790	kg/cm ²	23,000
IZOD Impact Strength, 3.2mm (Notched)	23 °C -30 °C	ASTM D256	kg·cm/cm kg·cm/cm	70
Rockwell Hardness	R-Scale	ASTM D785	-	118
Thermal				
Heat Deflection Temperature, 6.4mm (Unannealed)	18.6kg 4.6kg	ASTM D648	°C °C	130
Vicat Softening Temperature	5kg, 50 °C/h	ASTM D1525	°C	141
Flammability		UL94		
1.0mm 1.5mm 2.5mm 3.0mm			class	V-0 V-0 V-0, 5VA V-0, 5VA
Relative Temperature Index (RTI)		UL 746B		
Electrical			°C	120
Mechanical with Impact			°C	110
Mechanical without Impact			°C	120

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 molulded specimens and after 48 hours storage at 23 °C, 50% relative humidity.

Updated : Aug-01, 2014

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Electrical

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

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Processing Guide (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	Front	260 ~ 280
	Middle	280 ~ 300
	Rear	300 ~ 320
Nozzle Temperature	°C	300 ~ 320
Mold Temperature	°C	80 ~ 120
Back Pressure	kg/cm ²	10 ~ 40
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.

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