SolutionPartner

LG Chem UPMold

LUPOY GP1006FM

Injection Molding, PC

Description

Flame Retardant

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℃/1.2kg	ASTM D1238	g/10min	11
Mechanical				
Tensile Strength, 3.2mm		ASTM D638		
@ Yield	50mm/min		kg/cm^2	630
Tensile Elongation, 3.2mm		ASTM D638		
@ Yield	50mm/min		%	
@ Break	50mm/min		%	>150
Flexural Strength, 3.2mm	10mm/min	ASTM D790	kg/cm^2	1,000
Flexural Modulus, 3.2mm	10mm/min	ASTM D790	kg/cm^2	23,000
IZOD Impact Strength, 3.2mm		ASTM D256		
(Notched)	23℃		kg·cm/cm	80
	-30℃		kg·cm/cm	
Rockwell Hardness	R-Scale	ASTM D785	-	118
Thermal				
Heat Deflection Temperature, 6.4mm		ASTM D648		
(Unannealed)	18.6kg		℃	130
	4.6kg		℃	
Vicat Softening Temperature		ASTM D1525		
	5kg, 50℃/h		℃	141
Flammability		UL94		
1.0mm			class	V-0
1.5mm			class	V-0
2.5mm			class	V-0, 5VA
3.0mm			class	V-0, 5VA
Relative Temperature Index (RTI)		UL 746B		
Electrical			℃	120
Mechanical with Impact			℃	110
Mechanical without Impact			℃	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℃, 50% relative humidty.

Updated : Nov-09, 2009

SolutionPartner

LG Chem

UPMold

LUPOY GP1006FM

Injection Molding, PC

Description

Flame Retardant

Application

IT/OA, E&E Housing and Components

Electrical

Comparative Tracking Index(CTI)		IEC 60112	Volts
Surface Resistivity		IEC 60093	Ohm
Volume Resistivity	23℃	ASTM D257	Ohm·m
Arc Resistance	23℃	ASTM D495	Ohm·cm
Dielectric Strength, 1mm	23℃	ASTM D149	kV/mm
Dielectric Constant (10^6 Hz)	23℃	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 molulded specimens and after 48 hours storage at 23℃, 50% relative humidty.

Processing Guide (Injection Molding)

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

Updated : Nov-09, 2009