

LUPOY SC3154

Injection Molding, PC+GF15%

Description

General Purpose, Good Toughness
Dimensional Stability, Good Surface, Chemical Resistance

Application

Moible Phone Housing and Components

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.3
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.4 ~ 0.5
Melt Flow Rate	300°C/1.2kg	ASTM D1238	g/10min	11
Mechanical				
Tensile Strength, 3.2mm		ASTM D638		
@ Yield	5mm/min		kg/cm ²	480
Tensile Elongation, 3.2mm		ASTM D638		
@ Yield	50mm/min		%	25
Flexural Strength, 3.2mm	10mm/min	ASTM D790	kg/cm ²	900
Flexural Modulus, 3.2mm	10mm/min	ASTM D790	kg/cm ²	31,000
IZOD Impact Strength, 3.2mm (Notched)		ASTM D256		
	23°C		kg-cm/cm	22
	-30°C		kg-cm/cm	
Rockwell Hardness	R-Scale	ASTM D785	-	123
Thermal				
Heat Deflection Temperature, 6.4mm (Unannealed)		ASTM D648		
	18.6kg		°C	137
	4.6kg		°C	
Vicat Softening Temperature		ASTM D1525		
	5kg, 50°C/h		°C	
Flammability		UL94		
0.75mm			class	
1.7mm			class	HB
2.5mm			class	
3.2mm			class	
Relative Temperature Index		UL 746B		
Electrical			°C	80
Mechanical with Impact			°C	80
Mechanical without Impact			°C	80

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 : Nov-09, 2009

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Electrical

Property	Condition	Standard	Unit
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

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Processing Guide (Injection Molding)

Processing Parameters		Unit	Value
Drying Temperature		°C	100 ~ 120
Drying Time		hrs	3 ~ 5
Minimum Moisture Content		%	0.02
Melt Temperature		°C	295 ~ 310
Cylinder Temperature	Rear	°C	280 ~ 295
	Middle	°C	285 ~ 300
	Front	°C	290 ~ 305
Nozzle Temperature		°C	290 ~ 305
Mold Temperature		°C	90 ~ 110
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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