



# **LUPOY GN2503FT**

Injection Molding Grade, PC + Glass fiber Reinforced

### **Description**

## Application

High Stiffness Halogen Free Flame Retardent IT/OA(Notebook PC Housing)

Properties	<b>Test Condition</b>	<b>Test Method</b>	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.65
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.1 ~ 0.15
Melt Flow Rate	260℃, 5kg	ASTM D1238	g/10min	10
Mechanical				
Tensile Strength, 3.2mm		ASTM D638		
@ Yield	5mm/min		kg/cm <sup>2</sup>	1,400
Flexural Strength, 3.2mm	1.3mm/min	ASTM D790	kg/cm <sup>2</sup>	2,150
Flexural Modulus, 3.2mm	1.3mm/min	ASTM D790	kg/cm <sup>2</sup>	140,000
IZOD Impact Strength, 3.2mm		ASTM D256		
(Notched)	<b>23</b> ℃		kg·cm/cm	11
	-30℃		kg·cm/cm	
Thermal Heat Deflection Temperature, 6.4mm		ASTM D648		
(Unannealed)	18.6kg		${\mathbb C}$	92
	4.6kg		${\mathbb C}$	
Vicat Softening Temperature		ASTM D1525		
	5kg, 50℃/h		${\mathbb C}$	
Flammability		UL94		
0.8mm			class	V0
1.0mm			class	V0
2.5mm			class	
3.0mm			class	V0
Relative Temperature Index		UL 746B		
Electrical			${\mathbb C}$	80
Mechanical with Impact			$^{\circ}$	80
Mechanical without Impact			$^{\circ}$	80

Note) Typical values are only for material selection purpose, and variation within normal tolerances are for various colors.

Updated : Aug-1, 2014

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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 humidty.





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#### **Electrical**

Comparative Tracking Index(CTI)	Solution A	IEC 60112	Volts	
Surface Resistivity		IEC 60093	Ohm	
Volume Resistivity	<b>23</b> ℃	ASTM D257	Ohm∙m	
Arc Resistance	<b>23</b> ℃	ASTM D495	Ohm·cm	
Dielectric Strength, 1mm	<b>23</b> ℃	ASTM D149	kV/mm	
Dielectric Constant (10 <sup>6</sup> Hz)	<b>23</b> ℃	ASTM D150	sec	

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### Processing Guide (Injection Molding)

Processii	ng Parameters	Unit	Value
Drying Temperature		${\mathbb C}$	85 ~ 90
Drying Time		hrs	3 ~ 5
Minimum Moisture Content		%	0.04
Melt Temperature		${\mathbb C}$	270 ~ 320
Cylinder Temperature	Rear	$^{\circ}$ C	270 ~ 290
	Middle	$^{\circ}$ C	280 ~ 310
	Front	$^{\circ}$ C	290 ~ 320
Nozzle Temperature		$^{\circ}$	290 ~ 320
Mold Temperature		$^{\circ}$	60 ~ 100
Back Pressure		kg/cm <sup>2</sup>	10 ~ 20
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 : May-1, 2012

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