

# LUPOY ER5001RF

Injection Molding , PC/ABS

## Description

Halogen Free Flame Retardant, EPEAT  
PCR material 30%

## Application

IT&OA (All in One PC & Notebook PC housing)

Properties	Test Condition	Test Method	Unit	Typical Value
<b>Physical</b>				
Specific Gravity		ASTM D792	-	1.18
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.4 ~ 0.6
Melt Flow Rate	250 °C/2.16 kg	ASTM D1238	g/10min	18
<b>Mechanical</b>				
Tensile Strength, 3.2mm		ASTM D638		
@ Yield	50mm/min		kg/cm <sup>2</sup>	600
Flexural Strength, 3.2mm	10mm/min	ASTM D790	kg/cm <sup>2</sup>	950
Flexural Modulus, 3.2mm	10mm/min	ASTM D790	kg/cm <sup>2</sup>	26,000
IZOD Impact Strength, 3.2mm (Notched)	23 °C	ASTM D256	kg·cm/cm	40
	-30 °C		kg·cm/cm	
Rockwell Hardness	R-Scale	ASTM D785	-	
<b>Thermal</b>				
Heat Deflection Temperature, 6.4mm (Unannealed)	18.6kg	ASTM D648	°C	97
	4.6kg		°C	
Vicat Softening Temperature	5kg, 50 °C/h	ASTM D1525	°C	
Ball Pressure Temperature		IEC 60695-10-2	°C	
Flammability		UL94		
	0.7mm		class	
	1.2mm		class	V0
	1.5mm		class	V0
3.0mm		class	V0	
Relative Temperature Index		UL 746B		
Electrical			°C	60
Mechanical with Impact			°C	60
Mechanical without Impact			°C	60

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

Updated : Aug-01, 2014

The information contained herein, including, but not limited to, data, statements and typical values, are given in good faith. LG Chem makes no warranty or guarantee, expressed or implied, (i) that the result described herein will be obtained under end - use conditions, or (ii) as to the effectiveness or safety of any design incorporating LG Chem materials, products, recommendations or advice. Further, any information contained herein shall not be construed as a part of legally binding offer. Especially, the typical values should be regarded as reference values only and not as binding minimum values. Each user bear full responsibility for making its own determination as to the suitability of LG Chem's materials, products, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating LG Chem material or products will be safe and suitable for use under end - use conditions. The data contained herein can be changed without notice as a result of the quality improvement of the products.

# LUPOY ER5001RF

Injection Molding , PC/ABS

## Description

Halogen Free Flame Retardant, EPEAT  
PCR material 30%

## Application

IT&OA (All in One PC & Notebook PC housing)

## 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 <sup>6</sup> Hz)	23 °C	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 °C, 50% relative humidity.

## Processing Guide (Injection Molding)

Processing Parameters		Unit	Value
Drying Temperature		°C	75 ~ 85
Drying Time		hrs	3 ~ 4
Maximum Moisture Content		%	0.02
Melt Temperature		°C	235 ~ 265
Cylinder Temperature	Rear	°C	225 ~ 240
	Middle	°C	240 ~ 255
	Front	°C	250 ~ 265
Nozzle Temperature		°C	250 ~ 265
Mold Temperature		°C	50 ~ 80
Back Pressure		kg/cm <sup>2</sup>	
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 : Aug-01, 2014

The information contained herein, including, but not limited to, data, statements and typical values, are given in good faith. LG Chem makes no warranty or guarantee, expressed or implied, (i) that the result described herein will be obtained under end - use conditions, or (ii) as to the effectiveness or safety of any design incorporating LG Chem materials, products, recommendations or advice. Further, any information contained herein shall not be construed as a part of legally binding offer. Especially, the typical values should be regarded as reference values only and not as binding minimum values. Each user bear full responsibility for making its own determination as to the suitability of LG Chem's materials, products, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating LG Chem material or products will be safe and suitable for use under end - use conditions. The data contained herein can be changed without notice as a result of the quality improvement of the products.