



LUPOY ER5001RFH

Injection Molding, PC/ABS

Description

PCR(Post-Consumer Recycled Material) 60%
Halogen Free Flame Retardant

Application

IT/OA, Electrical & Electronic Housing
Server, Network Equipment, Keyboard

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.18
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.4 ~ 0.6
Melt Flow Rate	250 °C/2.16kg	ASTM D1238	g/10min	11
Mechanical				
Tensile Strength, 3.2mm @ Yield	50mm/min	ASTM D638	kg/cm ²	570
Tensile Elongation, 3.2mm @ Break	50mm/min	ASTM D638	%	60
Flexural Strength, 3.2mm	10mm/min	ASTM D790	kg/cm ²	920
Flexural Modulus, 3.2mm	10mm/min	ASTM D790	kg/cm ²	24,000
IZOD Impact Strength, 3.2mm (Notched)	23°C	ASTM D256	kg·cm/cm	55
Thermal				
Heat Deflection Temperature, 6.4mm (Unannealed)	4.6kg	ASTM D648	°C	98
Flammability		UL94		
1.2mm			class	V-1
1.5mm			class	V-0
3.0mm			class	V-0
Relative Temperature Index (RTI)		UL 746B		
Electrical			°C	80
Mechanical with Impact			°C	80
Mechanical without Impact			°C	85

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

Updated : Feb, 2022

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 ER5001RFH

Injection Molding, PC/ABS

Processing Guide (Injection Molding)

Processing Parameters		Unit	Value
Drying Temperature		°C	75 ~ 85
Drying Time		hrs	3 ~ 5
Maximum Moisture Content		%	0.04
Melt Temperature		°C	235 ~ 270
Cylinder Temperature	Rear	°C	225 ~ 245
	Middle	°C	240 ~ 260
	Front	°C	250 ~ 280
Nozzle Temperature		°C	250 ~ 270
Mold Temperature		°C	50 ~ 80
Back Pressure		kg/cm ²	-
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 : Feb, 2022

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.