

LUPOY GN5001RFH

Injection Molding, PC/ABS

Description

Halogen Free Flame Retardent, Heat Resistance

Application

E&E(TV, Navigation Housing)

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.19
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.4 ~ 0.6
Melt Flow Rate	250 °C/2.16 kg	ASTM D1238	g/10min	15
Mechanical				
Tensile Strength, 3.2mm @ Yield	50mm/min	ASTM D638	kg/cm ²	640
Tensile Elongation, 3.2mm @ Yield	50mm/min	ASTM D638	%	
Tensile Elongation, 3.2mm @ Break	50mm/min	ASTM D638	%	>80
Tensile Modulus, 3.2mm	1mm/min	ASTM D638	kg/cm ²	
Flexural Strength, 3.2mm	10mm/min	ASTM D790	kg/cm ²	950
Flexural Modulus, 3.2mm	10mm/min	ASTM D790	kg/cm ²	27,000
IZOD Impact Strength, 3.2mm (Notched)	23 °C -30 °C	ASTM D256	kg·cm/cm kg·cm/cm	62
Rockwell Hardness	R-Scale	ASTM D785	-	113
Thermal				
Heat Deflection Temperature, 6.4mm (Unannealed)	18.6kg 4.6kg	ASTM D648	°C °C	103
Vicat Softening Temperature	5kg, 50 °C/h	ASTM D1525	°C	
Ball Pressure Temperature		IEC 60695-10-2	°C	
Burning Rate, 3.2mm		FMVSS 302	mm	
Flammability		UL94		
0.7mm			class	
1.2mm			class	V0
2.5mm			class	V0
3.0mm			class	V0
Relative Temperature Index Electrical		UL 746B	°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 moulded specimens and after 48 hours storage at 23 °C, 50% relative humidity.

Updated : Aug-01, 2014

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Electrical

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	75 ~ 85
Drying Time	hrs	3 ~ 5
Maximum Moisture Content	%	0.02
Melt Temperature	°C	235 ~ 265
Cylinder Temperature	Rear	220 ~ 240
	Middle	235 ~ 255
	Front	250 ~ 265
Nozzle Temperature	°C	250 ~ 265
Mold Temperature	°C	50 ~ 80
Back Pressure	kg/cm ²	0.2 ~ 0.6
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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