

LUPOY HR5007AC

Injection Molding, PC/ABS

Description

Heat Resistance, High Flow
High Impact at Low Temp.

Application

Automotive Interior, Electric/Electrics

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ISO 1183	kg/m ³	1.14
Molding Shrinkage (Flow), 3.2mm		ISO 294-4	%	0.5 ~ 0.8
Melt Flow Index	250°C/2.16kg	ISO 1133	g/10min	4
Melt Flow Index	260°C/5.0kg	ISO 1133	g/10min	18
Mechanical				
Tensile Modulus		ISO 527		
@ Yield	1mm/min		MPa	2 100
Tensile Strength		ISO 527		
@ Yield	50mm/min		MPa	50
Tensile Strain		ISO 527		
@ Break	50mm/min		%	>100
Flexural Strength	2mm/min	ISO 178	MPa	80
Flexural Modulus	2mm/min	ISO 178	MPa	2 200
Charpy Impact Strength (Notched)		ISO 179		
	23°C		kJ/m ²	53
	-30°C		kJ/m ²	44
IZOD Impact Strength, 4.0mm (Notched)		ISO 180		
	23°C		kJ/m ²	46
	-30°C		kJ/m ²	27
Rockwell Hardness	R-Scale	ASTM D785	-	113
Thermal				
Heat Deflection Temperature, 4.0mm (Unannealed)		ISO 75		
	1.8MPa		°C	113
	0.45MPa		°C	-
Vicat Softening Temperature		ISO 306		
	50N, 50°C/h		°C	132
Coefficient of Linear Thermal Expansion		ASTM D696		
Flow			10 ⁻⁵ m/m °C	7.7
Cross-flow			10 ⁻⁵ m/m °C	8.3
Ball Pressure Temperature		IEC 60695-10-2	°C	
Burning Rate, 3.2mm		FMVSS 302	mm	
Flammability		IEC 60695-11-10	Thickness	
HB75			mm	1.6
HB40			mm	3.0
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 moloulded specimens and after 48 hours storage at 23°C, 50% relative humidity.

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Electrical

Comparative Tracking Index(CTI)	Solution A	IEC 60112	Volts	600
Arc Resistance	23°C	ASTM D495	Ohm-cm	6

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Processing Guide (Injection Molding)

Processing Parameters		Unit	Value
Drying Temperature		°C	80 ~100
Drying Time		hrs	4 ~ 6
Maximum Moisture Content		%	0,02
Melt Temperature		°C	250 ~ 275
Cylinder Temperature	Rear	°C	240 ~ 270
	Middle	°C	245 ~ 275
	Front	°C	245 ~ 275
Nozzle Temperature		°C	245 ~ 275
Mold Temperature		°C	50 ~ 70
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.