

LUPOY HP5004A

Injection Molding, PC/ABS
Description

 General Purpose, Good Weld Properties
 High Impact(at Low Temperature), Heat Resistance

Application

Mobile Phone Housing

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.14
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.5~0.7
Melt Flow Rate	250 °C/2.16kg	ASTM D1238	g/10min	4
Mechanical				
Tensile Strength, 3.2mm @ Yield	50mm/min	ASTM D638	kg/cm ²	600
Tensile Elongation, 3.2mm @ Yield @ Break	50mm/min 50mm/min	ASTM D638	% %	130
Flexural Strength, 3.2mm	10mm/min	ASTM D790	kg/cm ²	900
Flexural Modulus, 3.2mm	10mm/min	ASTM D790	kg/cm ²	21,000
IZOD Impact Strength, 3.2mm (Notched)	23 °C -30 °C	ASTM D256	kg·cm/cm kg·cm/cm	65 50
Rockwell Hardness	R-Scale	ASTM D785	-	113
Thermal				
Heat Deflection Temperature, 6.4mm (Unannealed)	18.6kg 4.6kg	ASTM D648	°C °C	118
Vicat Softening Temperature	5kg, 50 °C/h	ASTM D1525	°C	
Flammability 0.7mm 1.6mm 2.5mm 3.2mm		UL94	class class class class	HB
Relative Temperature Index Electrical Mechanical with Impact Mechanical without Impact		UL 746B	°C °C °C	60 60 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 moludled 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
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	80~100
Drying Time	hrs	3 ~ 5
Maximum Moisture Content	%	0.02
Melt Temperature	°C	255 ~ 285
Cylinder Temperature	°C	240 ~ 250
	°C	250 ~ 280
	°C	250 ~ 280
Nozzle Temperature	°C	250 ~ 280
Mold Temperature	°C	80 ~ 100
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.

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