Lupoy® HP5004

LG Chem Ltd. - Polycarbonate + ABS

Friday, May 24, 2019

General Information

Product Description			
Description			
General Purpose, High Impact at Low Temperature			
High Flow, Heat Resistance			
Application			
Mobile Phone Housing			

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific • Europe	• Latin America • North America	
Features	• General Purpose • Good Heat Resistance	• High Flow • Low Temperature Impact Resistance	
Uses	• Cell Phones	• Electrical Housing	• General Purpose
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.14	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	5.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (23°C, 3.20 mm, Injection Molded)	0.40 to 0.60	%	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [2]			ASTM D638
Yield, 23°C, 3.20 mm, Injection Molded	54.9	MPa	
Tensile Elongation [2]			ASTM D638
Break, 23°C, 3.20 mm, Injection Molded	100	%	
Flexural Modulus [3] (23°C, 3.20 mm, Injection Molded)	2260	MPa	ASTM D790
Flexural Strength [3] (23°C, 3.20 mm, Injection Molded)	88.3	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			ASTM D256
-30°C, 3.20 mm, Injection Molded	490	J/m	
23°C, 3.20 mm, Injection Molded	590	J/m	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale, 23°C, Injection Molded)	111		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed, 6.40 mm, Injection Molded	112	°C	
RTI Elec	60.0	°C	UL 746
RTI Imp	60.0	°C	UL 746
RTI Str	60.0	°C	UL 746
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.70 mm)	HB		UL 94

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature	80 to 100	°C
Drying Time	3.0 to 5.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	240 to 250	°C
Middle Temperature	250 to 280	°C
Front Temperature	250 to 280	°C
Nozzle Temperature	250 to 280	°C
Processing (Melt) Temp	255 to 285	°C
Mold Temperature	80 to 100	°C
Back Pressure	0.981 to 3.92	MPa
Screw Speed	40 to 70	rpm

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 50 mm/min

[3] 10 mm/min