

LUMID GP2350B

Injection Molding, PA66+GF35%

Description

General purpose

Application

Automotive, Cylinder Head Cover

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Density		ISO 1183	g/cm ³	1.4
Molding Shrinkage (Flow), 2mm	Internal pressure 60MPa	ISO 294-4	%	0.371
Melt Flow Rate	275 °C/2.16kg	ISO 1133	g/10min	10.6
Melt Volume Rate	275 °C/2.16kg	ISO 1133	cm ³ /10min	
Water Absorption	23 °C, 24hrs	ISO 62	%	1.1
Mechanical				
Tensile Strength @ Yield	5mm/min	ISO 527	MPa	200
Tensile Elongation @ Break	5mm/min	ISO 527	%	3.0
Tensile Modulus	1mm/min	ISO 527	MPa	10,500
Flexural Strength	2mm/min	ISO 178	MPa	290
Flexural Modulus	2mm/min	ISO 178	MPa	9,000
IZOD Impact Strength, 80*10*4mm (Notched)	23 °C -40 °C	ISO 180/1A	kJ/m ² kJ/m ²	13
IZOD Impact Strength, 80*10*4mm (Unnotched)	23 °C -40 °C	ISO 180/1A	kJ/m ² kJ/m ²	
Charpy Impact Strength, 80*10*4mm (Notched)	23 °C -40 °C	ISO179/1eA	kJ/m ² kJ/m ²	12
Charpy Impact Strength, 80*10*4mm (Unnotched)	23 °C -40 °C	ISO179/1eA	kJ/m ² kJ/m ²	
Rockwell Hardness		ISO 2039	-	120

Note) • The property values above are give by Tech Center, LG Chemical Ltd. as a reference only, and are not inteded for specification purposes.

When pigmnets are loaed, there might be slight changes in the properties.

• All properties, except melt flow rate are measured on injection molulded specimens and after **48 hours** storage at 23 °C, 50% relative humidity.

Updated : 26-Mar-14

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Thermal

Crystallite melting point		ISO 3146	℃	260
Heat Deflection Temperature (Unannealed, Edge)	1.8MPa	ISO 75	℃	246
	0.45MPa		℃	259
Flammability 0.75mm		UL94	class	HB

Electrical

Volume Resistivity	23℃	IEC 60093	Ohm·cm	1.0E+14
Electric Strength, 1mm	23℃	IEC 60243-1	kV/mm	25

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Processing Guide (Injection Molding)

Processing Parameters		Unit	Value
Drying Temperature		℃	100 ~ 120
Drying Time		hrs	4 ~ 5
Maximum Moisture Content		%	0.12
Melt Temperature		℃	270 ~ 295
Cylinder Temperature	Rear	℃	260 ~ 270
	Middle	℃	270 ~ 285
	Front	℃	270 ~ 290
Nozzle Temperature		℃	270 ~ 295
Mold Temperature		℃	80 ~ 100
Back Pressure	Hydraulic	kg/cm ²	10 ~ 30
	Electronic	kg/cm ²	100 ~ 300
Screw Speed		rpm	60 ~ 200

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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