

LUMID GP2300B

Injection, PA66+GF30%

Description

Injection grade

Application

Auto & Electric parts

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.37
Molding Shrinkage, 3.2mm		ASTM D955	%	0.4-0.9
Melt Flow Rate		ASTM D1238	g/10min	
Water Absorption	23 °C, 24hrs	ASTM D570	%	1.1
Mechanical				
Tensile Strength, 3.2mm @ Break	5mm/min	ASTM D638	kg/cm ²	1,800
Tensile Elongation, 3.2mm @ Break	5mm/min	ASTM D638	%	2.9
Flexural Strength, 6.4mm	3mm/min	ASTM D790	kg/cm ²	2,500
Flexural Modulus, 6.4mm	3mm/min	ASTM D790	kg/cm ²	87,500
IZOD Impact Strength, 6.4mm (Notched)	23 °C	ASTM D256	kg·cm/cm	10
	-30 °C		kg·cm/cm	
Thermal				
Melting Temperature		ASTM D3418	°C	260
Heat Deflection Temperature, 6.4mm (Unannealed)	18.6kg	ASTM D648	°C	255
	4.6kg		°C	
Coefficient of Linear Thermal Expansion		ASTM D696		3
	Flow		10 ⁻⁵ m/m °C	
	Cross-flow	10 ⁻⁵ m/m °C		
Ball Pressure Temperature		IEC 60695-10-2	°C	
Burning Rate, 3.2mm		FMVSS 302	mm	
Flammability		UL94		
	0.75mm		class	HB
	1.5mm		class	HB
	3.0mm		class	HB
Relative Temperature Index		UL 746B		
Electrical		120	°C	
Mechanical with Impact		110	°C	
Mechanical without Impact		120	°C	

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 moluded specimens and after 48 hours storage at 23 °C, 50% relative humidity.

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Surface Resistivity		IEC 60093	Ohm	
Volume Resistivity	23 °C	ASTM D257	Ohm·cm	1.0E+14
Arc Resistance	23 °C	ASTM D495	sec	
Dielectric Strength, 1mm	23 °C	ASTM D149	kV/mm	25
Dielectric Constant (10 ⁶ Hz)	23 °C	ASTM D150		4

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Processing Guide (Injection Molding)

Processing Parameters		Unit	Value
Drying Temperature		°C	80 ~ 100
Drying Time		hrs	4 ~ 5
Maximum Moisture Content		%	0.09
Melt Temperature		°C	270 ~ 295
Cylinder Temperature	Rear	°C	260 ~ 270
	Middle	°C	270 ~ 285
	Front	°C	270 ~ 290
Nozzle Temperature		°C	270 ~ 295
Mold Temperature		°C	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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