

LUMID GP2300BW

Injection, PA66+GF30%

Description

Injection grade

Application

Electric parts

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.37
Molding Shrinkage (Flow), 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		ASTM D638		
@ Break	5mm/min		kg/cm ²	1,750
Tensile Elongation, 3.2mm		ASTM D638		
@ Break	5mm/min		%	2.8
Flexural Strength, 3.2mm	3.0mm/min	ASTM D790	kg/cm ²	2,500
Flexural Modulus, 3.2mm	3.0mm/min	ASTM D790	kg/cm ²	83,000
IZOD Impact Strength, 3.2mm (Notched)		ASTM D256		
	23 °C		kg·cm/cm	9
	-30 °C		kg·cm/cm	
Thermal				
Melting Temperature		ASTM D3418	°C	260
Heat Deflection Temperature, 6.4mm (Unannealed)		ASTM D648		
	18.6kg		°C	255
	4.6kg		°C	
Coefficient of Linear Thermal Expansion		ASTM D696		
Flow			10 ⁻⁵ m/m°C	3
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 (Extrusion Molding)

Processing Parameters		Unit	Value
Drying Temperature		°C	80 ~ 100
Drying Time		hrs	4 ~ 5
Minimum Moisture Content		%	
Melt Temperature		°C	260 ~ 290
Cylinder Temperature	Rear	°C	250 ~ 270
	Middle	°C	260 ~ 285
	Front	°C	260 ~ 290
Nozzle Temperature		°C	260 ~ 290
Mold Temperature		°C	80 ~ 100
Back Pressure		kg/cm ²	
Screw Speed		rpm	

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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