

LUMID GP1100AWR

Injection Molding, PA6+UV stabilized

Description

General Purpose, UV stabilized

Application

Automotive, E&E

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Density	23 °C	ISO1183	-	1.13
Mechanical				
Tensile Strength @ Break	5mm/min	ISO527-1/-2	Mpa	72
Tensile Elongation @ Break	5mm/min	ISO527-1/-2	%	>40
Flexural Strength	2.0mm/min	ISO178	MPa	110
Flexural Modulus	2.0mm/min	ISO178	MPa	2,600
Charpy Impact Strength (Notched)	23 °C -30 °C	ISO179/1eA	kJ/m ² kJ/m ²	6
IZOD Impact Strength (Notched)	23 °C -30 °C	ISO180/1A	kJ/m ² kJ/m ²	
Rockwell Hardness	R-Scale	ISO 2039	-	120
Thermal				
Melting Temperature		ISO 11357	°C	220
Heat Deflection Temperature (Unannealed)	1.8MPa 0.45MPa	ISO 75-1/-2	°C °C	60 165
Coefficient of Linear Thermal Expansion		ISO11359-1/-2		
Flow			E-6/K	
Cross-flow			E-6/K	
Flammability		UL94		
0.75mm			class	
1.5mm			class	
3.0mm			class	
Relative Temperature Index		UL 746B	mm	0.75 1.5 3.0
Electrical			°C	
Mechanical with Impact			°C	
Mechanical without Impact			°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 moulded specimens and after 48 hours storage at 23 °C, 50% relative humidity.

Updated : 1-Jul-15

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Thermal				
Glow Wire Flammability Index(GWFI)		IEC 60695-2-13		
0.8mm			℃	
1.6mm			℃	
3.2mm			℃	
Glow Wire Ignition Temp.(GWIT)		IEC 60695-2-13		
0.8mm			℃	
1.6mm			℃	
3.2mm			℃	

Processing Guide (Injection Molding)

Processing Parameters		Unit	Value
Drying Temperature		℃	80 ~ 100
Drying Time		hrs	4 ~ 5
Minimum Moisture Content		%	
Melt Temperature		℃	240 ~ 270
Cylinder Temperature	Rear	℃	225 ~ 245
	Middle	℃	230 ~ 260
	Front	℃	240 ~ 270
Nozzle Temperature		℃	240 ~ 270
Mold Temperature		℃	60 ~ 80
Back Pressure	Hydraulic Type	kg/cm ²	5 ~ 20
	Electric Type	kg/cm ²	50 ~ 200
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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