LG Chemical LUMID GP3200A(W) PA6+MF20%, General Purpose

Categories: Polymer; Thermoplastic; Nylon (Polyamide PA); Nylon 6 (PA6); Nylon 6, 20% Mineral Filled

Material Notes: Feature: Injection Molding, PA6+MF23%, High ImpactPA6+MF15%, General Purpose

Application: E&E (Rice Cooer Housing)

CAS No. 25038-54-4 and 9010-79-1

Information provided by LG Chemical

Vendors: No vendors are listed for this material. Please click here if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Specific Gravity	1.28 g/cc	1.28 g/cc	ASTM D792
Water Absorption	1.2 %	1.2 %	ASTM D570
Linear Mold Shrinkage, Flow	0.0080 - 0.012 cm/cm @Thickness 3.20 mm	0.0080 - 0.012 in/in @Thickness 0.126 in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	121	121	ASTM D785
Tensile Strength, Yield	73.5 MPa @Thickness 3.20 mm	10700 psi @Thickness 0.126 in	5mm/min; ASTM D638
Elongation at Break	5.0 % @Thickness 3.20 mm	5.0 % @Thickness 0.126 in	5mm/min; ASTM D638
Flexural Yield Strength	113 MPa @Thickness 3.20 mm	16400 psi @Thickness 0.126 in	1.3mm/min; ASTM D790
Flexural Modulus	4.31 GPa @Thickness 3.20 mm	626 ksi @Thickness 0.126 in	1.3mm/min; ASTM D790
Izod Impact, Notched	0.490 J/cm @Thickness 3.20 mm, Temperature 23.0 °C	0.918 ft-lb/in @Thickness 0.126 in, Temperature 73.4 °F	ASTM D256

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	ASTM D257
Dielectric Constant	5.7 @Frequency 1e+6 Hz	5.7 @Frequency 1e+6 Hz	ASTM D150
Dielectric Strength	22.0 kV/mm @Thickness 1.00 mm	559 kV/in @Thickness 0.0394 in	ASTM D149
Arc Resistance	185 sec	185 sec	ASTM D495
Hot Wire Ignition, HWI	7.0 - 15 sec @Thickness >=0.750 mm	7.0 - 15 sec @Thickness >=0.0295 in	
High Amp Arc Ignition, HAI	>= 120 arcs @Thickness 0.750 mm	>= 120 arcs @Thickness 0.0295 in	
High Voltage Arc-Tracking Rate, HVTR	10.0 - 25.4 mm/min	0.394 - 1.00 in/min	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	56.0 µm/m-°C	31.1 µin/in-°F	ASTM D696
Melting Point	220 °C	428 °F	ASTM D3418
Deflection Temperature at 0.46 MPa (66 psi)	210 °C @Thickness 6.40 mm	410 °F @Thickness 0.252 in	Unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	130 °C @Thickness 6.40 mm	266 °F @Thickness 0.252 in	Unannealed; ASTM D648
UL RTI, Electrical	65.0 °C @Thickness >=0.750 mm	149 °F @Thickness >=0.0295 in	
UL RTI, Mechanical with Impact	65.0 °C @Thickness >=0.750 mm	149 °F @Thickness >=0.0295 in	
UL RTI, Mechanical without Impact	65.0 °C @Thickness >=0.750 mm	149 °F @Thickness >=0.0295 in	
Flammability, UL94	HB @Thickness >=0.750 mm	HB @Thickness >=0.0295 in	

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	230 - 255 °C	446 - 491 °F	Injection Molding
Middle Barrel Temperature	245 - 260 °C	473 - 500 °F	Injection Molding
Front Barrel Temperature	245 - 270 °C	473 - 518 °F	Injection Molding
Nozzle Temperature	250 - 270 °C	482 - 518 °F	Injection Molding
Melt Temperature	250 - 270 °C	482 - 518 °F	Injection Molding
Mold Temperature	60.0 - 80.0 °C	140 - 176 °F	Injection Molding
Drying Temperature	80.0 - 100 °C	176 - 212 °F	Injection Molding
Dry Time	4.00 - 5.00 hour	4.00 - 5.00 hour	Injection Molding