

**LUMID GN1001AF**

PA6

LG Chem

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Mold Shrinkage, MD	<b>0.012</b>	mm/mm	ASTM D 955
<b>Mechanical properties</b>			
<b>ASTM Data</b>			
Tensile Strength at Yield	<b>78.5</b>	MPa	ASTM D 638
Elongation at Break	<b>20</b>	%	ASTM D 638
Flexural Modulus	<b>2845</b>	MPa	ASTM D 790
Flexural Strength	<b>108</b>	MPa	ASTM D 790
Rockwell Hardness	<b>R 116</b>	-	ASTM D 785
Izod Impact notched, 1/4 in	<b>47.1</b>	J/m	ASTM D 256
<b>Thermal properties</b>			
<b>ASTM Data</b>			
UL 94 Flame rating	<b>V-2</b>	-	UL 94
Thickness tested	<b>0.8</b>	mm	-
Coefficient of Thermal Expansion, MD	<b>80</b>	E-6/K	ASTM D 696
DTUL @ 66 psi	<b>190</b>	°C	ASTM D 648
DTUL @ 264 psi	<b>60</b>	°C	ASTM D 648
Melting Temperature	<b>220</b>	°C	ASTM D 3418
<b>Electrical properties</b>			
<b>ASTM Data</b>			
Dielectric Strength, Short Time	<b>21</b>	kV/mm	ASTM D 149
Dielectric Constant, 1 MHz	<b>3</b>	-	ASTM D 150
Volume Resistivity	<b>1E17</b>	Ohm*cm	ASTM D 257
Arc Resistance	<b>80</b>	s	ASTM D 495
<b>Other properties</b>			
Water Absorption, 24hr	<b>1.3</b>	%	ASTM D 570
Density	<b>1140</b>	kg/m <sup>3</sup>	ASTM D 792
<b>Processing Recommendation Injection Molding</b>			
Pre-drying - Temperature	<b>80 - 100</b>	°C	-
Pre-drying - Time	<b>4 - 5</b>	h	-
Melt temperature	<b>240 - 270</b>	°C	-
Mold temperature	<b>60 - 80</b>	°C	-
Zone 1	<b>225 - 245</b>	°C	-
Zone 2	<b>230 - 260</b>	°C	-
Zone 3	<b>240 - 270</b>	°C	-
Nozzle temperature	<b>240 - 270</b>	°C	-

**Characteristics****Processing**

Injection Molding

**Special Characteristics**

Flame retardant, Halogen-free

**Applications**

Electrical and Electronical

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America