

**LUMID GP2309A(W)**

PA6-GF30

LG Chem

| Processing/Physical Characteristics | Value  | Unit  | Test Standard |
|-------------------------------------|--------|-------|---------------|
| <b>ASTM Data</b>                    |        |       |               |
| Mold Shrinkage, MD                  | 0.0065 | mm/mm | ASTM D 955    |

| Mechanical properties       | Value | Unit | Test Standard |
|-----------------------------|-------|------|---------------|
| <b>ASTM Data</b>            |       |      |               |
| Tensile Strength at Break   | 162   | MPa  | ASTM D 638    |
| Elongation at Break         | 4.5   | %    | ASTM D 638    |
| Flexural Modulus            | 8825  | MPa  | ASTM D 790    |
| Flexural Strength           | 255   | MPa  | ASTM D 790    |
| Rockwell Hardness           | R 121 | -    | ASTM D 785    |
| Izod Impact notched, 1/8 in | 123   | J/m  | ASTM D 256    |

| Thermal properties                   | Value | Unit  | Test Standard |
|--------------------------------------|-------|-------|---------------|
| <b>ASTM Data</b>                     |       |       |               |
| Coefficient of Thermal Expansion, MD | 35    | E-6/K | ASTM D 696    |
| DTUL @ 264 psi                       | 210   | °C    | ASTM D 648    |
| Melting Temperature                  | 220   | °C    | ASTM D 3418   |

| Electrical properties           | Value | Unit   | Test Standard |
|---------------------------------|-------|--------|---------------|
| <b>ASTM Data</b>                |       |        |               |
| Dielectric Strength, Short Time | 20    | kV/mm  | ASTM D 149    |
| Dielectric Constant, 1 MHz      | 3.8   | -      | ASTM D 150    |
| Volume Resistivity              | 1E17  | Ohm*cm | ASTM D 257    |
| Arc Resistance                  | 130   | s      | ASTM D 495    |

| Other properties       | Value | Unit              | Test Standard |
|------------------------|-------|-------------------|---------------|
| Water Absorption, 24hr | 1.1   | %                 | ASTM D 570    |
| Density                | 1350  | kg/m <sup>3</sup> | ASTM D 792    |

| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature                    | 80 - 100  | °C   | -             |
| Pre-drying - Time                           | 4 - 5     | h    | -             |
| Melt temperature                            | 260 - 290 | °C   | -             |
| Mold temperature                            | 80 - 100  | °C   | -             |
| Zone 1                                      | 250 - 270 | °C   | -             |
| Zone 2                                      | 260 - 285 | °C   | -             |
| Zone 3                                      | 260 - 290 | °C   | -             |
| Nozzle temperature                          | 260 - 290 | °C   | -             |

**Characteristics****Processing**

Injection Molding

**Regional Availability**

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

**Applications**

Automotive, General Purpose