## LUMILOY GP2200K

PPE-GF20 LG Chem

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Melt flow index, MFI | **18** | g/10min | ISO 1133 |
| Temperature | **280** | °C | - |
| Load | **5** | kg | - |
| Molding shrinkage, parallel | **0.4** | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | **0.5** | % | ISO 294-4, 2577 |
| **ASTM Data** | | | |
| Melt Flow Index, MFI | **18** | g/10min | ASTM D 1238 |
| Temperature | **280** | °C | - |
| Load | **5** | kg | - |
| Mold Shrinkage, MD | **0.004** | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | **0.005** | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Tensile Modulus | **7280** | MPa | ISO 527 |
| Yield stress | **113** | MPa | ISO 527 |
| Stress at break | **113** | MPa | ISO 527 |
| Strain at break | **2.3** | % | ISO 527 |
| Flexural modulus, 23°C | **5960** | MPa | ISO 178 |
| Flexural strength | **160** | MPa | ISO 178 |
| Charpy notched impact strength, +23°C | **8**[1] | kJ/m² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | **5.9**[1] | kJ/m² | ISO 179/1eA |
| Izod notched impact strength, +23°C | **7.8**[1] | kJ/m² | ISO 180/1A |
| Izod notched impact strength | **6.2**[1] | kJ/m² | ISO 180/1A |
| Temperature | **-30** | °C | - |
| Rockwell hardness | **R 123** | - | ISO 2039-2 |
| **ASTM Data** | | | |
| Tensile Modulus | **7397** | MPa | ASTM D 638 |
| Tensile Strength at Break | **110** | MPa | ASTM D 638 |
| Elongation at Break | **2.6** | % | ASTM D 638 |
| Flexural Modulus | **5150** | MPa | ASTM D 790 |
| Flexural Strength | **152** | MPa | ASTM D 790 |
| Rockwell Hardness | **R 123** | - | ASTM D 785 |
| Izod Impact notched, 1/8 in | **82.4** | J/m | ASTM D 256 |
| Izod Impact notched, Low-Temperature | **52** | J/m | ASTM D 256 |
| Temperature | **-30** | °C | - |

1: 4 mm

| Thermal properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Temp. of deflection under load, 1.80 MPa | **139**[2] | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | **146**[2] | °C | ISO 75-1/-2 |
| Vicat softening temperature, B | **147** | °C | ISO 306 |
| Coeff. of linear therm. expansion, parallel | **36** | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | **82** | E-6/K | ISO 11359-1/-2 |
| Burning behav. at thickness h | **HB** | class | IEC 60695-11-10 |
| Thickness tested | **0.8** | mm | - |
| **ASTM Data** | | | |
| UL 94 Flame rating | **HB** | - | UL 94 |
| Thickness tested | **0.8** | mm | - |
| Coefficient of Thermal Expansion, MD | **36** | E-6/K | ASTM D 696 |
| Coefficient of Thermal Expansion, TD | **82** | E-6/K | ASTM D 696 |
| DTUL @ 66 psi | **146** | °C | ASTM D 648 |
| DTUL @ 264 psi | **140** | °C | ASTM D 648 |
| Vicat Temperature | **147** | °C | ASTM D 1525 |

2: 4 mm

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| Electrical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Volume resistivity | **1E14** | Ohm*m | IEC 62631-3-1 |
| Surface resistivity | **1E14** | Ohm | IEC 62631-3-2 |
| **ASTM Data** | | | |
| Dielectric Strength, Short Time | **29** | kV/mm | ASTM D 149 |
| Surface Resistivity | **1E14** | Ohm | ASTM D 257 |
| Volume Resistivity | **1E16** | Ohm*cm | ASTM D 257 |
| **Other Standards**[S] | | | |
| Comparative tracking index | **137** | - | UL 746A |

S: These properties are reported by the producer according standards that are different to our defaults.

| Other properties | Value | Unit | Test Standard |
|---|---|---|---|
| Humidity absorption | **0.1** | % | Sim. to ISO 62 |
| Density | **1180** | kg/m³ | ISO 1183 |
| Density | **1180** | kg/m³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---|---|---|
| Pre-drying - Temperature | **80 - 100** | °C | - |
| Pre-drying - Time | **4 - 5** | h | - |
| Processing humidity | **≤0.02** | % | - |
| Melt temperature | **280 - 320** | °C | - |
| Mold temperature | **70 - 110** | °C | - |
| Zone 1 | **260 - 300** | °C | - |
| Zone 2 | **270 - 310** | °C | - |
| Zone 3 | **270 - 310** | °C | - |
| Nozzle temperature | **270 - 310** | °C | - |

### Characteristics

**Processing**

Injection Molding

**Regional Availability**

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

**Applications**

General Purpose