

PRL PEI-G30

PEI-GF30

Polymer Resources, Ltd.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|--|---------------|-------------|----------------------|
| ASTM Data | | | |
| Melt Flow Index, MFI | 13.5 | g/10min | ASTM D 1238 |
| Temperature | 337 | °C | - |
| Load | 6.6 | kg | - |
| Mold Shrinkage, MD | 0.0025 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|------------------------------|--------------|-------------|----------------------|
| ASTM Data | | | |
| Tensile Modulus | 9308 | MPa | ASTM D 638 |
| Tensile Strength at Yield | 162 | MPa | ASTM D 638 |
| Tensile Strength at Break | 162 | MPa | ASTM D 638 |
| Elongation at Break | 3 | % | ASTM D 638 |
| Flexural Modulus | 8894 | MPa | ASTM D 790 |
| Flexural Strength | 221 | MPa | ASTM D 790 |

| Thermal properties | Value | Unit | Test Standard |
|--------------------------------------|--------------|-------------|----------------------|
| ASTM Data | | | |
| UL 94 Flame rating | V-0 | - | UL 94 |
| Thickness tested | 1.5 | mm | - |
| Coefficient of Thermal Expansion, MD | 18 | E-6/K | ASTM D 696 |
| Coefficient of Thermal Expansion, TD | 41.4 | E-6/K | ASTM D 696 |
| DTUL @ 66 psi | 211 | °C | ASTM D 648 |
| DTUL @ 264 psi | 210 | °C | ASTM D 648 |
| Vicat Temperature | 227 | °C | ASTM D 1525 |

| Electrical properties | Value | Unit | Test Standard |
|---------------------------------|-----------------|-------------|----------------------|
| ASTM Data | | | |
| Dielectric Strength, Short Time | 24.4 | kV/mm | ASTM D 149 |
| Volume Resistivity | >1E15 | Ohm*cm | ASTM D 257 |

| Other properties | Value | Unit | Test Standard |
|-------------------------------|--------------|-------------------|----------------------|
| Water Absorption, 24hr | 0.16 | % | ASTM D 570 |
| Water Absorption, Equilibrium | 0.9 | % | ASTM D 570 |
| Density | 1510 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature | 143 - 149 | °C | - |
| Pre-drying - Time | 4 - 6 | h | - |
| Melt temperature | 338 - 399 | °C | - |
| Mold temperature | 107 - 177 | °C | - |
| Zone 1 | 332 - 399 | °C | - |
| Zone 2 | 338 - 399 | °C | - |
| Zone 3 | 343 - 399 | °C | - |

Characteristics**Processing**

Injection Molding

Delivery form

Pellets

Additives

Flame retarding agent

Special Characteristics

Flame retardant, Heat stabilized or stable to heat

Regional Availability

North America