

**PRL PC-UV1-D(f1)**

PC

Polymer Resources, Ltd.

| <b>Processing/Physical Characteristics</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|--|--------------|-------------|----------------------|
| <b>ASTM Data</b>                           |              |             |                      |
| Melt Flow Index, MFI                       | <b>7.5</b>   | g/10min     | ASTM D 1238          |
| Temperature                                | <b>300</b>   | °C          | -                    |
| Load                                       | <b>1.2</b>   | kg          | -                    |
| Mold Shrinkage, MD                         | <b>0.006</b> | mm/mm       | ASTM D 955           |

| <b>Mechanical properties</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|------------------------------|--------------|-------------|----------------------|
| <b>ASTM Data</b>             |              |             |                      |
| Tensile Strength at Yield    | <b>62.1</b>  | MPa         | ASTM D 638           |
| Tensile Strength at Break    | <b>72.4</b>  | MPa         | ASTM D 638           |
| Elongation at Yield          | <b>7</b>     | %           | ASTM D 638           |
| Elongation at Break          | <b>130</b>   | %           | ASTM D 638           |
| Flexural Modulus             | <b>2310</b>  | MPa         | ASTM D 790           |
| Flexural Strength            | <b>96.5</b>  | MPa         | ASTM D 790           |
| Rockwell Hardness            | <b>M70</b>   | -           | ASTM D 785           |
| Izod Impact notched, 1/8 in  | <b>907</b>   | J/m         | ASTM D 256           |

| <b>Thermal properties</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|---------------------------|--------------|-------------|----------------------|
| <b>ASTM Data</b>          |              |             |                      |
| UL 94 Flame rating        | <b>V-2</b>   | -           | UL 94                |
| Thickness tested          | <b>1.5</b>   | mm          | -                    |
| DTUL @ 66 psi             | <b>138</b>   | °C          | ASTM D 648           |
| DTUL @ 264 psi            | <b>132</b>   | °C          | ASTM D 648           |
| Vicat Temperature         | <b>154</b>   | °C          | ASTM D 1525          |

| <b>Electrical properties</b>    | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|---------------------------------|--------------|-------------|----------------------|
| <b>ISO Data</b>                 |              |             |                      |
| Comparative tracking index      | <b>212</b>   | -           | IEC 60112            |
| <b>ASTM Data</b>                |              |             |                      |
| Dielectric Strength, Short Time | <b>11.8</b>  | kV/mm       | ASTM D 149           |
| Volume Resistivity              | <b>1E15</b>  | Ohm*cm      | ASTM D 257           |
| Arc Resistance                  | <b>150</b>   | s           | ASTM D 495           |

| <b>Optical properties</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|---------------------------|--------------|-------------|----------------------|
| <b>ASTM Data</b>          |              |             |                      |
| Haze                      | <b>1</b>     | %           | ASTM D 1003          |
| Light Transmittance       | <b>88</b>    | %           | ASTM D 1003          |

| <b>Other properties</b> | <b>Value</b> | <b>Unit</b>       | <b>Test Standard</b> |
|-------------------------|--------------|-------------------|----------------------|
| Density                 | <b>1200</b>  | kg/m <sup>3</sup> | ASTM D 792           |

| <b>Processing Recommendation Injection Molding</b> | <b>Value</b>      | <b>Unit</b> | <b>Test Standard</b> |
|--|-------------------|-------------|----------------------|
| Pre-drying - Temperature                           | <b>118 - 124</b>  | °C          | -                    |
| Pre-drying - Time                                  | <b>3 - 4</b>      | h           | -                    |
| Melt temperature                                   | <b>316 - 343</b>  | °C          | -                    |
| Mold temperature                                   | <b>82.2 - 116</b> | °C          | -                    |
| Zone 1   | <b>288 - 310</b>  | °C          | -                    |
| Zone 2   | <b>299 - 321</b>  | °C          | -                    |
| Zone 3   | <b>310 - 332</b>  | °C          | -                    |

**Characteristics****Processing**

Injection Molding

**Applications**

General Purpose

**Delivery form**

Pellets

**Regional Availability**

North America

**Special Characteristics**

High impact or impact modified, U.V. stabilized or stable to weather