

**PRL PC-FR-UV2****Polymer Resources Ltd. - Polycarbonate**Units **Action****Legend (Open)****General Information****Product Description**

PRL PC FR UV2 is a non halogen FR PC product. It can be processed by injection molding and is available in North America.

**General**

|                   |   |   |  |
|-------------------|---|---|--|
| Material Status   | <ul style="list-style-type: none"> <li>Commercial: Active</li> </ul>  |   |  |
| Availability      | <ul style="list-style-type: none"> <li>North America</li> </ul>   |   |  |
| Features          | <ul style="list-style-type: none"> <li>Flame Retardant</li> <li>Halogen Free</li> <li>High Impact Resistance</li> </ul> | <ul style="list-style-type: none"> <li>Medium Flow</li> <li>Medium Heat Resistance</li> <li>Self Extinguishing</li> </ul> | <ul style="list-style-type: none"> <li>UV Resistant</li> </ul> |
| RoHS Compliance   | <ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>  |   |  |
| Forms             | <ul style="list-style-type: none"> <li>Pellets</li> </ul>   |   |  |
| Processing Method | <ul style="list-style-type: none"> <li>Injection Molding</li> </ul>   |   |  |

**ASTM & ISO Properties <sup>1</sup>**

| Physical  | Nominal Value    | Unit     | Test Method |
|---|------------------|----------|-------------|
| Density / Specific Gravity  | 1.20             |          | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)                          | 9.0 to 16        | g/10 min | ASTM D1238  |
| Molding Shrinkage - Flow (0.125 in)                               | 5.0E-3 to 7.0E-3 | in/in    | ASTM D955   |
| Mechanical  | Nominal Value    | Unit     | Test Method |
| Tensile Strength (Yield, 0.125 in)                                | 10000            | psi      | ASTM D638   |
| Tensile Strength (Break, 0.125 in)                                | 9000             | psi      | ASTM D638   |
| Flexural Modulus (0.125 in)                                       | 335000           | psi      | ASTM D790   |
| Flexural Strength (Yield, 0.125 in, 2.00 in Span)                 | 13900            | psi      | ASTM D790   |
| Impact  | Nominal Value    | Unit     | Test Method |
| Notched Izod Impact (73°F, 0.125 in)                              | 15               | ft-lb/in | ASTM D256   |
| Gardner Impact (0.125 in)   | 320              | in-lb    | ASTM D3029  |
| Thermal   | Nominal Value    | Unit     | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed, 0.125 in)  | 275              | °F       | ASTM D648   |
| Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in) | 265              | °F       | ASTM D648   |
| Flammability  | Nominal Value    | Unit     | Test Method |
| Flame Rating  |                  |          | UL 94       |
| 0.06 in, ALL  | V-0              |          |             |
| 0.12 in, ALL  | V-0              |          |             |
| 0.12 in   | 5VA              |          |             |

**Processing Information**

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 245 to 255    | °F   |
| Drying Time            | 3.0 to 4.0    | hr   |
| Drying Time, Maximum   | 8.0           | hr   |
| Rear Temperature       | 520 to 560    | °F   |
| Middle Temperature     | 540 to 580    | °F   |
| Front Temperature      | 560 to 600    | °F   |
| Processing (Melt) Temp | 550 to 600    | °F   |
| Mold Temperature       | 160 to 200    | °F   |

**Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

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