

Grade: Orion™ PCQP7003R, UV, RUV

Molding Grade PCFR w/ Release, w/ UV, w/ UV and Release

**Typical Material Properties**

|  |  |  |
| --- | --- | --- |
| **Physical** | **Nominal Values** | **ASTM Test** |
| Specific Gravity | 1.20 | D792 |
| Melt Flow (300°C/1.2 kg) | 19.0 g/10 min | D1238 |
|  |  |  |
| **Mechanical** |  |  |
| Tensile Modulus | 350,000 psi | D638 |
| Tensile Strength @ Yield | 8,500 psi | D638 |
| Flexural Modulus | 34.5,000 psi | D790 |
| Flexural Strength @ Yield | 13,000 psi | D790 |
|  |  |  |
| **Impact** |  |  |
| Notched Izod Impact (73°F, 0.125 in) | 14.0 ft-lb/in | D256 |
|  |  |  |
| **Thermal** |  |  |
| DTUL @ 264 psi – Unannealed (0.125 in) | 260 °F | D648 |
|  |  |  |
| **Mold Shrinkage** |  |  |
| Linear Flow | .005 - .007 in/in | D955 |
| **UL Rating** | **(f1)** | **UL746C** |
| Flammability  RTI | V-2 @ 1.5mm  125°C, 115°C, 125°C | UL 94  UL 746B |

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**Recommended Processing Guidelines**

|  |  |
| --- | --- |
| **Nominal Values** | |
| Drying Time and Temperature | 4.0 hrs at 250°F |
| Suggested Max Moisture | 0.020% |
| Rear Temperature | 520 – 550°F |
| Middle Temperature | 530 – 570°F |
| Front Temperature | 550 – 600°F |
| Nozzle Temperature | 550 – 600°F |
| Processing (Melt) Temperature | 550 – 600°F |
| Mold Temperature | 170 – 220°F |
| Back Pressure | 50 – 100 psi |
| Screw Speed | 40 – 75 RPM |

The conditions listed above are only guidelines. You may want to adjust conditions to meet your requirements.

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