

## 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            |
| <b>Mechanical</b>                      |                                    |                  |
| Tensile Modulus                        | 350,000 psi                        | D638             |
| Tensile Strength @ Yield               | 8,500 psi                          | D638             |
| Flexural Modulus                       | 345,000 psi                        | D790             |
| Flexural Strength @ Yield              | 13,000 psi                         | D790             |
| <b>Impact</b>                          |                                    |                  |
| Notched Izod Impact (73°F, 0.125 in)   | 14.0 ft-lb/in                      | D256             |
| <b>Thermal</b>                         |                                    |                  |
| DTUL @ 264 psi – Unannealed (0.125 in) | 260 °F                             | D648             |
| <b>Mold Shrinkage</b>                  |                                    |                  |
| Linear Flow                            | .005 - .007 in/in                  | D955             |
| <b>UL Rating</b>                       |                                    |                  |
| Flammability                           | (f1)                               | UL746C           |
| RTI                                    | V-2 @ 1.5mm<br>125°C, 115°C, 125°C | UL 94<br>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.