

## Grade: PC8040

Molding Grade PCFR without Release and UV

### Typical Material Properties

| Physical                              | Nominal Values    | ASTM Test |
|---------------------------------------|-------------------|-----------|
| Specific Gravity                      | 1.20              | D792      |
| Melt Flow (300°C/1.2kg)               | 20.0 g/10 min     | D1238     |
| <b>Mechanical</b>                     |                   |           |
| Tensile Modulus                       | 350,000 psi       | D638      |
| Tensile Strength @ Yield              | 9,000 psi         | D638      |
| Flexural Modulus                      | 350,000 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                          | V-0 @ 1.5mm       | UL 94     |
| RTI                                   | 80°C, 80°C, 80°C  | UL746B    |

The information provided above is based upon typical values and is intended only as a guide. Star Plastics, LLC assumes no obligation or liability for any advice furnished or for any results obtained with respect to this information. *No guarantees or warranties are expressed or implied.*

Orion® is a registered trademark of Star Plastics, LLC, its subsidiaries or affiliates.

### Recommended Processing Guidelines

|                               | Nominal Values |
|-------------------------------|----------------|
| Drying Time and Temperature   | 4.0 hrs, 250°F |
| Suggested Max Moisture        | 0.020%         |
| Rear Temperature              | 520°F – 550 °F |
| Middle Temperature            | 530°F – 570 °F |
| Front Temperature             | 550°F – 600 °F |
| Nozzle Temperature            | 550°F – 600 °F |
| Processing (Melt) Temperature | 550°F – 600 °F |
| Mold Temperature              | 170°F – 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.