

## Grade: Orion™ PCGF10, PCGF10R, PCGF10UV, PCGF10RUV

Molding Grade PC with 10% Glass, with Release, with UV, with UV & Release

### Typical Material Properties

| Physical                               | Nominal Values    | ASTM Test |
|----------------------------------------|-------------------|-----------|
| Specific Gravity                       | 1.27              | D792      |
| Melt Flow (300°C/1.2 kg)               | 15.0 g/10 min     | D1238     |
| <b>Mechanical</b>                      |                   |           |
| Tensile Modulus                        | 450,000 psi       | D638      |
| Tensile Strength @ Yield               | 9,500 psi         | D638      |
| Flexural Modulus                       | 450,000 psi       | D790      |
| Flexural Strength @ Yield              | 14,500 psi        | D790      |
| <b>Impact</b>                          |                   |           |
| Notched Izod Impact (73°F, 0.125 in)   | 1.0 ft-lb/in      | D256      |
| <b>Thermal</b>                         |                   |           |
| DTUL @ 264 psi – Unannealed (0.125 in) | 275°F             | D648      |
| <b>Mold Shrinkage</b>                  |                   |           |
| Linear Flow                            | .003 – .005 in/in | D955      |

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 at 250°F |
| Suggested Max Moisture        | 0.020%           |
| Rear Temperature              | 550 – 600°F      |
| Middle Temperature            | 575 – 625°F      |
| Front Temperature             | 600 – 650°F      |
| Nozzle Temperature            | 600 – 650°F      |
| Processing (Melt) Temperature | 666 – 650°F      |
| Mold Temperature              | 50 – 200°F       |
| Back Pressure                 | 40 – 100 psi     |
| Screw Speed                   | 25 – 75 RPM      |

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