

# Orion™ RESINS

Grade: PCQP7011R, PCQP7011UV, PCQP7011RUV  
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)              | 15.0 g/10 min                    | D1238            |
| <b>Mechanical</b>                     |                                  |                  |
| Tensile Modulus                       | 350,000 psi                      | D638             |
| Tensile Strength @ Yield              | 8,800 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                          | (f1)                             | <b>UL746C</b>    |
| RTI                                   | V-0 @ 3mm<br>125°C, 115°C, 125°C | UL 94<br>UL 746B |

The information provided above is based upon typical values, and are intended only as guides. Star Plastics, LLC/SDR Inc. 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; SDR Plastics Inc, 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              | 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.

Rev0

Technical Data Sheet  
StarPlastics.com

Access: 12/6/17

# Navigating Custom Compounds