## Orion™ RESINS

Grade: PC1212R, PC1212FRR

Molding Grade PC w/ Release, PCFR w/ Release and V2



## TYPICAL MATERIAL PROPERTIES

| Physical                              | Nominal Values     | ASTM Test |
|---------------------------------------|--------------------|-----------|
| Specific Gravity                      | 1.20               | D792      |
| Melt Flow (300°C/1.2 kg)              | 12 g/10 min        | D1238     |
| Mechanical                            |                    |           |
| Tensile Modulus                       | 345,000 psi        | D638      |
| Tensile Strength @ Yield              | 8,500 psi          | D638      |
| Flexural Modulus                      | 345,000 psi        | D790      |
| Flexural Strength @ Yield             | 12,500 psi         | D790      |
| Impact                                |                    |           |
| Notched Izod Impact (73 °F, 0.125 in) | 12 ft-lb/in        | D256      |
| Thermal                               |                    |           |
| DTUL @ 264 psi-unannealed (0.125 in)  | 260 °F             | D648      |
| Mold Shrinkage                        |                    |           |
| Linear Flow                           | .005007 in/in      | D955      |
| UL Rating                             | FRR is V2 (.1.5mm) | UL 94     |

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

## 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 Access: 12/6/17
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**Navigating Custom Compounds** 

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