## Orion™ Resins

Grade: ABSGF15

Molding Grade ABS w/ 15% Glass



## TYPICAL MATERIAL PROPERTIES

| Physical                              | Nominal Values | ASTM Test |
|---------------------------------------|----------------|-----------|
| Specific Gravity                      | 1.15           | D792      |
| Melt Flow (230°C/3.8 kg)              | 5.0 g/10 min   | D1238     |
| Mechanical                            |                |           |
| Tensile Modulus                       | 510,000 psi    | D638      |
| Tensile Strength @ Yield              | 7,000 psi      | D638      |
| Flexural Modulus                      | 525,000 psi    | D790      |
| Flexural Strength @ Yield             | 10,500 psi     | D790      |
| Impact                                |                |           |
| Notched Izod Impact (73 °F, 0.125 in) | 1.0 ft-lb/in   | D256      |
| Thermal                               |                |           |
| DTUL @ 264 psi-unannealed (0.125 in)  | 205 °F         | D648      |
| Mold Shrinkage                        |                |           |
| Linear Flow                           | .002003 in/in  | D955      |

The information provided above is based upon typical values, and are intended only as guides. Star Plastics, /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   | 2.0 - 4.0 hrs at 180 - 200°F |  |
| Suggested Max Moisture        | 0.15%                        |  |
| Rear Temperature              | 370 – 425 °F                 |  |
| Middle Temperature            | 400 – 450 °F                 |  |
| Front Temperature             | 425 – 475 °F                 |  |
| Nozzle Temperature            | 425 – 525 °F                 |  |
| Processing (Melt) Temperature | 425 – 525 °F                 |  |
| Mold Temperature              | 120 – 170 °F                 |  |
| Back Pressure                 | 25 – 100 psi                 |  |
| Screw Speed                   | 25 – 75 RPM                  |  |

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

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**Navigating Custom Compounds** 

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