**VALUPAK™ RESINS**

Grade: ABSHF
Molding Grade High Flow ABS

### TYPICAL MATERIAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical</th>
<th>Nominal Values</th>
<th>ASTM Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity</td>
<td>1.05</td>
<td>D792</td>
</tr>
<tr>
<td>Melt Flow (230°C/3.8 kg)</td>
<td>6.0 g/10 min</td>
<td>D1238</td>
</tr>
</tbody>
</table>

**Mechanical**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>ASTM Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Modulus</td>
<td>330,000 psi</td>
<td>D638</td>
</tr>
<tr>
<td>Tensile Strength @ Yield</td>
<td>6,000 psi</td>
<td>D638</td>
</tr>
<tr>
<td>Flexural Modulus</td>
<td>350,000 psi</td>
<td>D790</td>
</tr>
<tr>
<td>Flexural Strength @ Yield</td>
<td>10,000 psi</td>
<td>D790</td>
</tr>
</tbody>
</table>

**Impact**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>ASTM Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notched Izod Impact (73 °F, 0.125 in)</td>
<td>2.5 ft-lb/in</td>
<td>D256</td>
</tr>
</tbody>
</table>

**Thermal**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>ASTM Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTUL @ 264 psi-unannealed (0.125 in)</td>
<td>180 °F</td>
<td>D648</td>
</tr>
</tbody>
</table>

**Mold Shrinkage**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>ASTM Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear Flow</td>
<td>.004 - .008 in/in</td>
<td>D955</td>
</tr>
</tbody>
</table>

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.

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### RECOMMENDED PROCESSING GUIDELINES

<table>
<thead>
<tr>
<th>Property</th>
<th>Nominal Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drying Time and Temperature</td>
<td>2.0 - 4.0 hrs at 180 - 200°F</td>
</tr>
<tr>
<td>Suggested Max Moisture</td>
<td>0.15%</td>
</tr>
<tr>
<td>Rear Temperature</td>
<td>370 – 425 °F</td>
</tr>
<tr>
<td>Middle Temperature</td>
<td>400 – 450 °F</td>
</tr>
<tr>
<td>Front Temperature</td>
<td>425 – 475 °F</td>
</tr>
<tr>
<td>Nozzle Temperature</td>
<td>425 – 525 °F</td>
</tr>
<tr>
<td>Processing (Melt) Temperature</td>
<td>425 – 525 °F</td>
</tr>
<tr>
<td>Mold Temperature</td>
<td>120 – 170 °F</td>
</tr>
<tr>
<td>Back Pressure</td>
<td>25 – 100 psi</td>
</tr>
<tr>
<td>Screw Speed</td>
<td>25 – 75 RPM</td>
</tr>
</tbody>
</table>

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