TECHNICAL DATA SHEET

STYRENE ACRYLIC COPOLYMER (SMMA)

FEATURES
• Excellent Clarity
• Easy to Process
• Low Density
• FDA Rating: 21 CFR 177.1830
• USP Rating: Class VI Plastics
• Gamma & EtO Sterilizable

APPLICATIONS
• Glassware
• Household Products
• Cosmetic Packaging
• Medical Devices
• Health Care Items

PROPERTIES

<table>
<thead>
<tr>
<th>Physical</th>
<th>English (Value)</th>
<th>Metric (Value)</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melt Flow Rate (200°C/5.0 Kg)</td>
<td>3 g/10 min</td>
<td>67 g/cm³</td>
<td>ASTM D1238</td>
</tr>
<tr>
<td>Density</td>
<td>1.08 lb/ft³</td>
<td></td>
<td>ASTM D792</td>
</tr>
<tr>
<td>Mechanical (*)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile Strength, Break</td>
<td>Kpsi 8.0</td>
<td>MPa 55</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Break Elongation</td>
<td>% 3</td>
<td>% 3</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Tensile Strength, Yield</td>
<td>Kpsi 7.0</td>
<td>MPa 48</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Yield Elongation</td>
<td>% 2</td>
<td>% 2</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Tensile Modulus</td>
<td>Kpsi 444</td>
<td>MPa 3,000</td>
<td>ASTM D638</td>
</tr>
</tbody>
</table>

Impact
- Notched Izod (0.125 in / 3.175 mm)
  ft-lbf/in 0.3 J/m 16 ASTM D256
- Unnotched Izod (0.125 in / 3.175 mm)
  ft-lbf/in 3.5 J/m 187 ASTM D256

Thermal
- Vicat Temperature
  °F 219 °C 104 ASTM D1525
- HDT @ 264 psi (Unannealed)
  °F 176 °C 80 ASTM D648

Ignitability Characteristics
- Flammability (0.060 in | 1.524 mm)
  - HB - HB UL94

Optical
- Haze % 0.4 % 0.4 ASTM D1003
- Light Transmittance % 92 % 92 ASTM D1003

Properties reported in this data sheet are determined according to referred standard methods. Values shown represent averages from typical results measured in the laboratory and are provided only as a guide, not as specification limits.

INJECTION MOLDING CONDITIONS

<table>
<thead>
<tr>
<th>°C</th>
<th>°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear</td>
<td>170-180 340-360</td>
</tr>
<tr>
<td>Center</td>
<td>180-190 360-375</td>
</tr>
<tr>
<td>Front</td>
<td>200-210 390-410</td>
</tr>
<tr>
<td>Maximum Recommended</td>
<td>250 480</td>
</tr>
</tbody>
</table>

ADDITIONAL INFORMATION

This product presents a very low moisture absorption and it is a common practice to process it without pre-drying; however, if it has been exposed to high humidity or in direct contact with water, it is recommended to dry it for 2 hours at 140°F (60°C). Resirene’s materials are biological and chemically inert. If possible recycling of final parts is recommended. If you require dispose it, follow indications established by government laws, related norms and the material safety data sheet.
Warning
Combustion of this material may cause hazardous fumes and gases that may be dangerous to health, especially in enclosed places. It should be noted that excessive heating or long residence times may cause degradation or yellowing.

Note:
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