Technical Data Sheet

Alathon 9302

High Density Polyethylene

Product Description

Alathon 9302 is a high molecular weight, polyethylene copolymer resin selected by customers for sheet extrusion. Alathon 9302 exhibits outstanding toughness and melt strength, excellent creep resistance, and broad molecular weight distribution.

Regulatory Status

For regulatory compliance information, see Alathon 9302 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status

Commercial: Active

Availability

North America

Application

General Sheet Extrusion

Market

Rigid Packaging

Processing Method

Sheet and Profile Extrusion

Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Nominal Value</th>
<th>English Units</th>
<th>SI Units</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical: Melt Flow Rate, (190 °C/2.16 kg)</td>
<td>0.06</td>
<td>g/10 min</td>
<td>0.06 g/10 min</td>
<td>ASTM D1238</td>
</tr>
<tr>
<td>Physical: Density, (23 °C)</td>
<td>0.949</td>
<td>g/cm³</td>
<td>0.949 g/cm³</td>
<td>ASTM D1505</td>
</tr>
<tr>
<td>Mechanical: Flexural Modulus, (1% Secant)</td>
<td>134000</td>
<td>psi</td>
<td>924 MPa</td>
<td>ASTM D790</td>
</tr>
<tr>
<td>Mechanical: Tensile Strength at Yield</td>
<td>3690</td>
<td>psi</td>
<td>25.4 MPa</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Mechanical: Tensile Elongation at Break</td>
<td>&gt;600%</td>
<td>%</td>
<td>&gt;600%</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Mechanical: Environmental Stress Crack Resistance, F&lt;sub&gt;se&lt;/sub&gt; (100% Igepal®, Cond B)</td>
<td>&gt;1000 hr</td>
<td>hr</td>
<td>&gt;1000 hr</td>
<td>ASTM D1693</td>
</tr>
<tr>
<td>Impact: Tensile Impact Strength</td>
<td>188</td>
<td>ft-lb/in²</td>
<td>395 kJ/m²</td>
<td>ASTM D1822</td>
</tr>
<tr>
<td>Thermal: Vicat Softening Temperature</td>
<td>122</td>
<td>°F</td>
<td>50 °C</td>
<td>ASTM D1525</td>
</tr>
<tr>
<td>Thermal: Low Temperature Brittleness</td>
<td>&lt; -71</td>
<td>°F</td>
<td>&lt; -57 °C</td>
<td>ASTM D746</td>
</tr>
</tbody>
</table>
Notes
Igepal® is a registered trademark of Rhodia.
These are typical property values not to be construed as specification limits.

Processing Techniques
Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information
For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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