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>Nominal Value</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</td>
<td>g/10 min</td>
<td>ASTM D1238</td>
</tr>
<tr>
<td>Density, (23 °C)</td>
<td>0.949</td>
<td>g/cm³</td>
<td>0.949</td>
<td>g/cm³</td>
<td>ASTM D1505</td>
</tr>
<tr>
<td>Mechanical Flexural Modulus, (1% Secant)</td>
<td>134000</td>
<td>psi</td>
<td>924</td>
<td>MPa</td>
<td>ASTM D790</td>
</tr>
<tr>
<td>Tensile Strength at Yield</td>
<td>3690</td>
<td>psi</td>
<td>25.4</td>
<td>MPa</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Tensile Elongation at Break</td>
<td>&gt;600</td>
<td>%</td>
<td>&gt;600</td>
<td>%</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Environmental Stress Crack Resistance, F∞ (100% Igepal®, Cond B)</td>
<td>&gt;1000 hr</td>
<td>&gt;1000 hr</td>
<td>ASTM D1693</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact Tensile Impact Strength</td>
<td>188</td>
<td>ft-lb/in²</td>
<td>395</td>
<td>kJ/m²</td>
<td>ASTM D1822</td>
</tr>
<tr>
<td>Thermal Vicat Softening Temperature</td>
<td>122</td>
<td>°F</td>
<td>50</td>
<td>°C</td>
<td>ASTM D1525</td>
</tr>
<tr>
<td>Low Temperature Brittleness</td>
<td>&lt;-71</td>
<td>°F</td>
<td>&lt;-57</td>
<td>°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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