Purell PE 1810E

Low Density Polyethylene

Product Description
Purell PE 1810E is a low density polyethylene with good flexibility and delivered in pellet form. The grade is used by our customers for small blow mouldings and injection moulding in healthcare market as well as for tube applications.

Regulatory Status
For regulatory compliance information, see Purell PE 1810E Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status
Commercial: Active

Availability
Africa-Middle East; Asia-Pacific; Australia and New Zealand; Europe; North America; South & Central America

Application
Blow-Fill-Seal Applications; Bottles and Vials; Collapsible Tubes (Healthcare); Healthcare Applications; Medical Devices; Medical Film

Market
Flexible Packaging; Healthcare; Rigid Packaging

Processing Method
Blow, Fill, & Seal; Blown Film; Extrusion Blow Molding; Injection Blow Molding; Injection Molding

Attribute
Ethylene Oxide Sterilisation; Good Flexibility

Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Nominal Value</th>
<th>Units</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melt Flow Rate, (190 °C/2.16 kg)</td>
<td>0.4</td>
<td>g/10 min</td>
<td>ASTM D1238</td>
</tr>
<tr>
<td>Density, (23 °C)</td>
<td>0.920</td>
<td>g/cm³</td>
<td>ASTM D1505</td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile Modulus, (1% Secant)</td>
<td>28200</td>
<td>psi</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Tensile Stress at Yield</td>
<td>1390</td>
<td>psi</td>
<td>ASTM D638</td>
</tr>
<tr>
<td><strong>Hardness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shore Hardness, (Shore D)</td>
<td>55</td>
<td></td>
<td>ASTM D2240</td>
</tr>
<tr>
<td><strong>Thermal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vicat Softening Temperature, (A/50 N)</td>
<td>196</td>
<td>°F</td>
<td>ASTM D1525</td>
</tr>
<tr>
<td>DSC Melting Point</td>
<td>226</td>
<td>°F</td>
<td>ASTM D3418</td>
</tr>
</tbody>
</table>
Notes
These are typical property values not to be construed as specification limits.

Processing Techniques
Recommended processing temperatures: 170 °C to 220 °C.
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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