Technical Data Sheet

*Alathon* L4550

High Density Polyethylene

**Product Description**

*Alathon* L4550 is a medium molecular weight high density copolymer with a narrow molecular weight distribution. L4550 inherently has very low gels and is used for monofilament, slit tape and high speed orientation processes. Typical applications include specialty films, packaging of agriculture products, protective netting for the agriculture and building industry, and netting for food applications.

**Regulatory Status**

For regulatory compliance information, see *Alathon* L4550 [Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS)].

**Status**

Commercial

**Availability**

North America

**Application**

Agriculture Film; Bags & Pouches; Nets; Raffia/Tapes/Strapping; Secondary Packaging

**Market**

Flexible Packaging

**Processing Method**

Blown Film; Tapes & Raffia

**Attribute**

General Purpose; Good Organoleptic Properties; High Density; Low Gel

### Typical Properties

<table>
<thead>
<tr>
<th>Physical</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>Melt Flow Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(190 °C/2.16 kg)</td>
<td>0.45</td>
<td>g/10 min</td>
<td>0.45</td>
<td>g/10 min</td>
<td>ASTM D1238</td>
</tr>
<tr>
<td>(190 °C/5.0 kg)</td>
<td>1.75</td>
<td>g/10 min</td>
<td>1.75</td>
<td>g/10 min</td>
<td>ASTM D1238</td>
</tr>
<tr>
<td>(190 °C/21.6 kg)</td>
<td>20.3</td>
<td>g/10 min</td>
<td>20.3</td>
<td>g/10 min</td>
<td>ASTM D1238</td>
</tr>
<tr>
<td>Density, (23 °C)</td>
<td>0.945</td>
<td>g/cm³</td>
<td>0.945</td>
<td>g/cm³</td>
<td>ASTM D1505</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Film</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>Tensile Strength at Break, MD</td>
<td>8600</td>
<td>psi</td>
<td>59.3</td>
<td>MPa</td>
<td>ASTM D882</td>
</tr>
<tr>
<td>Tensile Strength at Yield, MD</td>
<td>3300</td>
<td>psi</td>
<td>22.8</td>
<td>MPa</td>
<td>ASTM D882</td>
</tr>
<tr>
<td>Tensile Elongation at Break, MD</td>
<td>750</td>
<td>%</td>
<td>750</td>
<td>%</td>
<td>ASTM D882</td>
</tr>
<tr>
<td>Secant Modulus, MD</td>
<td>99400</td>
<td>psi</td>
<td>685</td>
<td>MPa</td>
<td>ASTM D882</td>
</tr>
</tbody>
</table>
Notes
Data obtained from 2.0 mil film produced on a blown film line with a 60 mil die gap, 2.2:1 BUR, and 390-410 °F
(199-210 °C) melt extrusion temperature.
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/.

© LyondellBasell Industries Holdings, B.V. 2018

Disclaimer
Information in this document is accurate to the best of our knowledge at the date of publication. The document is
designed to provide users general information for safe handling, use, processing, storage, transportation,
disposal and release and does not constitute any warranty or quality specification, either express or implied,
including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the
product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or
restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell
representative.

Trademarks
The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.