Technical Data Sheet

**Plexar PX1164**

Tie-Layer, EVA

#### Product Description

**Plexar** tie-layers are chemically modified resins used to bond unlike materials, primarily in packaging and industrial applications. Common adherents include polyethylene resins and copolymers, EVA, EMA, polypropylene, polyamide (nylon), ethylene vinyl alcohol copolymers (EVOH), ionomer and other sealants, polyethylene terephthalate (PET) resins and copolymers, styrenic polymers, metal, and paperboard. Product grades primarily used for blown and cast films, sheet and thermoforming, blow molding, extrusion coating and lamination, tubing, pipe, and other specialty applications are available in pellet form. Contact your Plexar sales and/or Equistar technical service representative for more information and specific recommendations for your application(s).

#### Regulatory Status

For regulatory compliance information, see **Plexar PX1164** Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

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#### Status

Commercial: Active

#### Availability

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

#### Application

Barrier Film; Food Packaging Film

#### Market

Flexible Packaging; Tie-Layer

#### Processing Method

Blown Film

#### 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>3.8</td>
<td>g/10 min</td>
<td>ASTM D1238</td>
</tr>
<tr>
<td>Density, (23 °C)</td>
<td>0.928</td>
<td>g/cm³</td>
<td>ASTM D1505</td>
</tr>
<tr>
<td><strong>Film</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile Strength at Break MD</td>
<td>24.3</td>
<td>MPa</td>
<td>ASTM D882</td>
</tr>
<tr>
<td>Tensile Strength at Break TD</td>
<td>27.2</td>
<td>MPa</td>
<td>ASTM D882</td>
</tr>
<tr>
<td>Tensile Strength at Yield MD</td>
<td>4.2</td>
<td>MPa</td>
<td>ASTM D882</td>
</tr>
<tr>
<td>Tensile Strength at Yield TD</td>
<td>7.4</td>
<td>MPa</td>
<td>ASTM D882</td>
</tr>
<tr>
<td>Tensile Elongation at Break MD</td>
<td>710</td>
<td>%</td>
<td>ASTM D882</td>
</tr>
<tr>
<td>Tensile Elongation at Yield TD</td>
<td>460</td>
<td>%</td>
<td>ASTM D882</td>
</tr>
<tr>
<td>Elmendorf Tear Strength MD</td>
<td>14</td>
<td>%</td>
<td>ASTM D882</td>
</tr>
<tr>
<td>Elmendorf Tear Strength TD</td>
<td>28</td>
<td>%</td>
<td>ASTM D882</td>
</tr>
<tr>
<td>Water Vapor Transmission Rate, (38 °C, 100% RH) @ 2 mils</td>
<td>60.8</td>
<td>g/m²/day</td>
<td>ASTM F372</td>
</tr>
</tbody>
</table>

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Date: 3/27/2020
Notes
Film sample used for testing was 2.0 mil gauge, 2:1 BUR.
These are typical property values not to be construed as specification limits.

Processing Techniques
A process melt temperature above 410°F (210°C) is recommended to ensure adhesion between adherents.
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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