Product Description

Integrate® products are chemically modified polyolefins used to combine dissimilar materials for a variety of applications including molded articles, flexible materials and fiber technology or to provide property enhancements which fulfill final material parameters. These products are particularly effective when the materials involved contain both polar and non-polar components. Specific ingredients may include polymers such as polyethylene and/or its copolymers, polypropylene and/or its copolymers, polyamides (nylon), polycarbonates, cellulose, wood flour as well as a variety of minerals, which can be used to improve strength or stiffness of the final composition. Integrate® products are available in pellet form.

Regulatory Status

For regulatory compliance information, see Integrate® NE542013 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

Wire & Cable; Wood Composites

Market

Compounding; Coupling Agents; Industrial, Building & Construction; Wire & Cable

Processing Method

Sheet and Profile Extrusion; Wire & Cable

Typical Properties

<table>
<thead>
<tr>
<th></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>13</td>
<td>g/10 min</td>
<td>ASTM D1238</td>
</tr>
<tr>
<td>Density, (23 °C)</td>
<td>0.943</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>Flexural Modulus, (1% Secant)</td>
<td>552</td>
<td>MPa</td>
<td>ASTM D790</td>
</tr>
<tr>
<td>Tensile Strength at Break</td>
<td>15.3</td>
<td>MPa</td>
<td>ASTM D638</td>
</tr>
<tr>
<td>Tensile Elongation at Break</td>
<td>650</td>
<td>%</td>
<td>ASTM D638</td>
</tr>
<tr>
<td><strong>Thermal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vicat Softening Point</td>
<td>106</td>
<td>°C</td>
<td>ASTM D1525</td>
</tr>
</tbody>
</table>
Notes
These are typical property values not to be construed as specification limits.

Processing Techniques
A process melt temperature above 400 °F (205 °C) is recommended to ensure that adequate dispersion occurs among the components.
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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