**Technical Data Sheet**

**Adflex V 109 F**

**Catalloy**

**Product Description**

*Adflex V 109 F* is a reactor TPO (thermoplastic polyolefin) manufactured using LyondellBasell's proprietary *Catalloy* process technology. It is primarily used for molding, impact modification, extrusion coating and film applications. This resin can be used on conventional injection molding or extrusion equipment. *Adflex V 109 F* features a very high softness and low modulus, with a relatively high melt flow. The grade is available in natural pellet form.

**Regulatory Status**

For regulatory compliance information, see *Adflex V 109 F* Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

## Status
Commercial: Active

## Availability
North America; South & Central America

## Application
Automotive Flooring; Film Wrap; Housewares; Industrial; Specialty Film; Sports, Leisure & Toys; TPO Residential Flooring

## Market
Flexible Packaging; Rigid Packaging

## Processing Method
Cast Film; Compounding; Injection Molding

## Attribute
Contact Clarity; Low Temperature Impact Resistance; Soft

<table>
<thead>
<tr>
<th><strong>Typical Properties</strong></th>
<th><strong>Nominal Value</strong></th>
<th><strong>Units</strong></th>
<th><strong>Test Method</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melt Flow Rate, (230 °C/2.16 kg)</td>
<td>12</td>
<td>g/10 min</td>
<td>ISO 1133-1</td>
</tr>
<tr>
<td>Density, (23 °C, Method A)</td>
<td>0.88</td>
<td>g/cm³</td>
<td>ISO 1183-1</td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexural Modulus</td>
<td>80</td>
<td>MPa</td>
<td>ISO 178</td>
</tr>
<tr>
<td>Tear Strength</td>
<td>65</td>
<td>kN/m</td>
<td>ASTM D624</td>
</tr>
<tr>
<td>Tensile Stress at Break</td>
<td>8</td>
<td>MPa</td>
<td>ISO 527-1, -2</td>
</tr>
<tr>
<td>Tensile Stress at Yield</td>
<td>5</td>
<td>MPa</td>
<td>ISO 527-1, -2</td>
</tr>
<tr>
<td>Tensile Strain at Break</td>
<td>800</td>
<td>%</td>
<td>ISO 527-1, -2</td>
</tr>
<tr>
<td>Tensile Strain at Yield</td>
<td>40</td>
<td>%</td>
<td>ISO 527-1, -2</td>
</tr>
<tr>
<td><strong>Impact</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charpy Impact Strength - Notched</td>
<td>35</td>
<td>kJ/m²</td>
<td>ISO 179</td>
</tr>
<tr>
<td>(23 °C)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Failure Mode - Partial Break</td>
<td>5</td>
<td>kJ/m²</td>
<td>ISO 179</td>
</tr>
<tr>
<td>(-20 °C)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Failure Mode - Partial Break</td>
<td>1.4</td>
<td>kJ/m²</td>
<td>ISO 179</td>
</tr>
<tr>
<td>(-40 °C)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Failure Mode - Complete Break</td>
<td>1.4</td>
<td>kJ/m²</td>
<td>ISO 179</td>
</tr>
<tr>
<td><strong>Hardness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shore Hardness, (Shore D, 15 sec)</td>
<td>30</td>
<td></td>
<td>ISO 868</td>
</tr>
<tr>
<td><strong>Thermal</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Vicat Softening Temperature, (A50)</td>
<td>55</td>
<td>°C</td>
<td>ISO 306</td>
</tr>
</tbody>
</table>
Notes
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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