Luban HP3104K
Polypropylene Homopolymer

Description

Luban polypropylene is manufactured using Novolen vertical stirred Gas-phase polymerization process.
Luban HP3104KTI is Homopolymer polypropylene & is suitable for metallisable film.

Application

Core layer in BOPP film.

Properties (Typical Values)

<table>
<thead>
<tr>
<th>Property</th>
<th>Units</th>
<th>Test method</th>
<th>Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melt flow rate (230°C/2.16 kg)</td>
<td>g/10 min</td>
<td>ISO 1133</td>
<td>3.3</td>
</tr>
<tr>
<td>Density</td>
<td>g/cm³</td>
<td>ISO 1183</td>
<td>0.91</td>
</tr>
<tr>
<td>Tensile modulus (1 mm/min)</td>
<td>MPa</td>
<td>ISO 527-2</td>
<td>1450</td>
</tr>
<tr>
<td>Tensile stress at yield (50 mm/min)</td>
<td>MPa</td>
<td>ISO 527-2</td>
<td>34</td>
</tr>
<tr>
<td>Tensile strain at yield (50 mm/min)</td>
<td>%</td>
<td>ISO 527-2</td>
<td>9</td>
</tr>
<tr>
<td>Tensile strain at break (50 mm/min)</td>
<td>%</td>
<td>ISO 527-2</td>
<td>&gt; 50</td>
</tr>
<tr>
<td>Charpy unnotched impact strength (+23°C)</td>
<td>kJ/m²</td>
<td>ISO 179/1eU</td>
<td>190</td>
</tr>
<tr>
<td>Charpy notched impact strength (+23°C)</td>
<td>kJ/m²</td>
<td>ISO 179/1eA</td>
<td>4</td>
</tr>
<tr>
<td>Heat Deflection Temperature (0.45 MPa)</td>
<td>°C</td>
<td>ISO 75-2</td>
<td>85</td>
</tr>
</tbody>
</table>

Processing Guidelines

The Typical Processing Conditions for Luban HP3104KTI are:

- **Extrusion Temperatures**: 200 – 250 °C
- **Chill Roll Temperature**: 20 – 40 °C
- **MD Stretching Temperature**: 130 – 160 °C
- **MD Stretching Ratio**: 4 – 7
- **TD Stretching Temperature**: 155 – 170 °C
- **TD Stretching Ratio**: 7 – 10

NOTE: Processing parameters should only be used as guidelines. The above properties values are not to be construed as specifications.
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Storage and Handling

Luban HP3104KTI should be stored in well ventilated area during handling or processing of to prevent accumulation of dust and fumes. Avoid contact with strong oxidizers, excessive heat, sparks or open flame as this could well speed up alteration and consequently loss of quality of the material in which could lead to unforeseen dangers. The bags must be protected from direct sunlight and should be stored in shaded and completely dry area for good processing.

Safety

Luban HP3104KTI is not classified as dangerous preparation. For further information about safety in handling and processing please refer to the Safety Data Sheet.

Food Contact

Luban HP3104KTI meets the requirements of the U.S. Food and Drug Administration (FDA) as specified in 21 CFR 177.1520, covering safe use of polyolefin articles and components of articles intended for direct food contact. For additional information on approved conditions of use for food contact applications, please refer to the “Product Stewardship Declaration”.

Recycling

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

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