High-Performance Polymer (P-40 HT)

Suitable for sealing viscous and abrasive materials in scraping-action applications at elevated temperatures, P-40 HT performs well in low surface-speed applications and has superior tensile strength and excellent chemical compatibility.

P-40 HT has high temperature and extrusion resistance, but has limited flexibility at temperatures below 200 °F (93°C). Operating temperatures of P-40 HT range from –70 °F to +600 °F (-57 °C to +316 °C.)
P-40 HT is recommended for scraping applications that require higher extrusion resistance and longer life.

Chemical Compatibility

P-40 HT has excellent chemical compatibility. However, it is not recommended for use with strong acids, such as nitric, sulfuric and hydrofluoric acids. (For more compatibility information, request report TR-60A, or go to http://www.balseal.com/techlib, Select Technical Reports (Login Required), then select TR-60A Chemical Compatibility Guide)

FDA Compliance

P-40 HT is made from an “FDA compliant” resin for use in food contact applications. (Request Research Report 50-640 for Bal Seal’s definition of FDA compliant).

Radiation Resistance

Suitable to 10⁹ rads.

Mechanical Properties

The mechanical properties of P-40 HT at ambient temperatures are:

<table>
<thead>
<tr>
<th>Property</th>
<th>ASTM D638</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile strength</td>
<td></td>
<td>14,100 psi Min. (991 kg/cm²)</td>
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<tr>
<td>Elongation</td>
<td></td>
<td>10% Min</td>
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</tbody>
</table>

Color

Beige

Cost

$$$$$

Advantages of P-40 HT

- Superior tensile strength
- Excellent extrusion resistance
- Excellent chemical compatibility
- Excellent temperature stability to 500°F (260°C)

Other Information

For additional information, please contact our Technical Sales Representative at (949) 460-2100. Bal Seal maintains a vast library of material references and testing information.