

# **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 <a href="http://www.balseal.com/techlib.Select\_Technical Reports">http://www.balseal.com/techlib.Select\_Technical Reports</a> (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 10<sup>9</sup> rads.

## **Mechanical Properties**

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

Tensile strength ASTM D638 14,100 psi Min. (991 kg/cm <sup>2</sup>) Elongation ASTM D638 10% Min

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.

It is essential that the customer run evaluation testing under actual service conditions with a sufficient safety factor to determine if the proposed, supplied, or purchased, Bal Seal Engineering products are suitable for the intended purpose and to confirm expected results. Bal Seal Engineering makes no warranty, express or implied, regarding Bal Seal Engineering products or of the information contained herein, including but not limited to, warranties of merchantability, performance, and fitness for a particular use or purpose. Bal Seal Engineering shall not be liable for any loss or damage of any kind or nature that may result from the use of, reference to, or reliance on, the information contained herein, including, but not limited to, consequential, special (including loss of profits) direct, indirect, incidental, or similar damages, even if Bal Seal Engineering has been advised of the possibility of such damages. © 2010 © 2003 RT-49 (50-238-2); M-34 (623-33-1 and 623-64) Rev. C, 04-13-10.