

## A Longer Wearing UHMW Polyethylene (UP-40)

**UP-40** is an ultra-high molecular weight (UHMW) polyethylene-based material that provides excellent results, especially in HPLC service at pressures to 6000 psi and 4 fpm in water.

For use in general applications, **UP-40** gives substantially better performance than any other type of seal material. The temperature range is from -450° F to +180° F (-268° C to +82° C.)

### Chemical Compatibility

**UP-40** is compatible with acids and bases. (For more compatibility information, request report TR-60A, or go to [www.balseal.com/techlib](http://www.balseal.com/techlib). Select Technical Reports, then select TR-60A Chemical Compatibility Guide

### FDA and USP Compliant

**UP-40** is FDA compatible. (Request Research Report 50-640 for Bal Seal's definition of FDA compatible).

### Mechanical Properties

Tensile strength	ASTM D638	5,000 psi min (352 kg/cm <sup>2</sup> )
Elongation	ASTM D638	230% min

### Color

Yellow-gold

### Cost

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### Typical applications

- Pumps in liquid chromatography
- Cryogenic components
- Paint spraying equipment
- Laboratory equipment
- Cold adhesives and epoxy
- Pumps, valves, and fluid components
- Ink dispensing
- Medical (in contact with blood debris and surgical debris)

### 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 test 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 RT-68 (50-707); M5 Rev. D (623-4 and 623-64) 04-13/10

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