

## Polymer-Filled PTFE Material (SP83HT) for low friction performance applications

**Description** SP83HT is a special-purpose, low friction polymer-filled PTFE sealing material made for use in contact with shafts and housings made from 300 series stainless steel, aluminum, and other soft metallic or plastic materials. SP83HT has very low abrasion to mating parts, and it is designed primarily for sealing moisture and gases at moderate speeds and low pressures. It retains its sealing properties in temperatures ranging from -320F° dry to +475°F (196C° to +246°C).

**Chemical Compatibility** SP83HT exhibits excellent compatibility with most fluids and gases, but it is not recommended for use with sulfuric and nitric acids, alkali metals, chlorine fluoride, lithium, potassium and sodium at high temperatures.

**Mechanical Properties** The mechanical properties of SP83HT at ambient temperatures are: Tensile strength ASTM D638 4700 psi (330 kg/cm<sup>2</sup>) Elongation ASTM D638 360% Coefficient of Friction ASTM D1894 0.06

### **Color**

Dark gray

### **Advantages of SP83HT**

- Minimizes countersurface wear
- Lower coefficient of friction than Bal Seal's comparable SP-45 polymer-filled PTFE material
- Low torque while maintaining sealing ability in air or dry gases

### **Other Information**

To learn more about this material, please contact your Bal Seal technical sales representative.

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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. Copyright , 2009; M-56 (623-61) (Rev. NC) 06/12/09

U.S. Address 19650 Pauling Foothill Ranch, CA 92610-2610 • Telephone: (949) 460-2100 • Fax: (949) 460-2300

BV Address: VIDA Building, 1st Floor • Kabelweg 57 • 1014 BA Amsterdam • The Netherlands • Telephone: 31 20 638 65 23 • Fax: 31 20 625 60 18

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