UHMW Polyethylene (UPC-10)

UPC-10 is an ultra high molecular weight (UHMW) polyethylene-based material. It is “FDA compliant” for general-purpose commercial-grade usage. **UPC-10** has good wear resistance in water and other aqueous applications, and is suitable for very low speed, low pressure service. **UPC-10** is recommended for general service applications and may be used in food contact applications at temperatures from ––65°F to +180°F (-55°C to +82°C).

**Chemical Compatibility**

UPC-10 performs well in water and other aqueous solutions. It is highly suitable for use in contact with ketones, alcohols, amines, and esters and has limited applications in contact with oxidizing acids and chlorinated solvents. (For more compatibility information, request report TR-60A, or go to [http://www.balseal.com/techlib](http://www.balseal.com/techlib). Select Technical Reports (Login Required), then select TR-60A Chemical Compatibility Guide)

**FDA Compliant**

UPC-10 is an “FDA compliant” resin for use in food contact. It meets FDA Regulation 21 CFR 177.1520, and USDA requirements for use in food contact applications. (Request Research Report 50-640-3 for Bal Seal’s definition of FDA compliant).

**Mechanical Properties**

The mechanical properties of **UPC-10** are:

- Tensile strength: 7,500 psi (510 kg/cm²) to 8,100 psi (569 kg/cm²)
- Elongation: 405% to 412%

**Color**

White, translucent

**Cost:**

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**Typical Applications**

Industrial components handling aqueous solutions.

- Food contact components
- Industrial equipment handling powders and slurries
- Industrial mixers and blenders
- Seals for use in low speed, low-pressure service
- General-purpose fluid components

**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.