Virgin UHMW Polyethylene (UPC)

**UPC** is an ultra-high molecular weight (UHMW) polyethylene material that can be used in a wide variety of applications.

**UPC** has excellent wear resistance in water and other aqueous media, and is suitable for low-speed, low-pressure service. The material has a temperature range of $-450 \, ^\circ F$ to $+180 \, ^\circ F$ ($-268 \, ^\circ C$ to $+82 \, ^\circ C$).

**Chemical Compatibility**
**UPC** performs well in water and other aqueous solutions. It is suitable for use in contact with ketones, alcohols, amines and esters. **UPC** has limited applications in contact with oxidizing acids and chlorinated solvents.

**FDA Compliance**
**UPC** 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. Bal Seal defines FDA Compliant as materials that have been deemed by the FDA to be "safe for use in food contact" or "acceptable for use in food contact."

**Mechanical Properties**
<table>
<thead>
<tr>
<th>Property</th>
<th>Standard</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength, Min</td>
<td>ASTM D638</td>
<td>5,000 PSI</td>
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<tr>
<td>Elongation, Min</td>
<td>ASTM D638</td>
<td>300%</td>
</tr>
</tbody>
</table>

**Advantages of UPC**
- Good chemical compatibility
- Excellent wear resistance in liquids
- Cryogenic compatibility

**Typical applications for UPC include**
- Pumps
- Processing equipment
- Painting equipment
- Cutting equipment

For more information, contact a technical sales representative, or e-mail us at sales@balseal.com.