Perlast® G74S
Pure white multi-purpose perfluoroelastomer for Life Science applications

Description
Perlast® G74S has been specifically developed to cope with a wide range of process media, potent active pharmaceutical ingredients (APIs) and aggressive cleaning agents, being especially suited to withstand steam-in-place (SIP) and clean-in-place (CIP) procedures within pipe work and vessels. G74S is also suitable for other critical applications such as Water-For-Injection (WFI) systems.

Perlast® G74S can be used for all types of applications requiring FDA and USP Class VI compliance. It is suitable for use in all product contact applications including dry, aqueous and fatty media.

Perlast® G74S is suitable for both dynamic and static applications and can be moulded into O-rings and custom shapes.

Key Attributes
- Excellent chemical resistance to a wide range of chemicals
- Superior mechanical properties
- High tensile strength makes G74S ideal for dynamic applications
- Excellent steam resistance (ASME BPE 2000)
- FDA compliant - extraction tested to CFR 21 § 177.2600(e,f)
- USP Class VI <88> and USP <87> compliant
- 3-A Standard 18-03 Class 1 compliant
- Free from Animal Derived Ingredients (ADI)

Typical Applications
Recommended for use in pharmaceutical, bio-analytical and food processing applications, where chemical resistance is crucial, and hygienic sealing capability is critical.

Dynamic seals - Split Butterfly Valve Seals
Ball Segment Valve Seals

Static seals - O-rings
Pressure Safety Rings
Gaskets
Hyclamp® Hygienic & Sanitary couplings
Mechanical seals

Other materials in this range
Perlast® G75S (white high temperature FDA/USP compliant grade)

Typical Material Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>ASTM</th>
<th>ISO</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Type</td>
<td>FFKM</td>
<td>FFP</td>
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</tr>
<tr>
<td>Colour</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardness: &quot;IRHD&quot; (Shore A)</td>
<td>D1415</td>
<td>ISO48</td>
<td>71</td>
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<tr>
<td>Tensile Strength (MPa)</td>
<td>D412</td>
<td>ISO37</td>
<td>17.4</td>
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<tr>
<td>Elongation at break (%)</td>
<td>D412</td>
<td>ISO37</td>
<td>166</td>
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<tr>
<td>100% Modulus (MPa)</td>
<td>D412</td>
<td>ISO37</td>
<td>9.9</td>
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<tr>
<td>Compression Set (%): 72 hrs @ 200°C (392°F)</td>
<td>D395</td>
<td>ISO815</td>
<td>25</td>
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<tr>
<td>Minimum Operating Temperature</td>
<td>-15°C (+5°F)</td>
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<tr>
<td>Maximum Operating Temperature</td>
<td>+260°C (+500°F)</td>
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<tr>
<td>Coefficient of Thermal Expansion (°C⁻¹)</td>
<td>2.9x10⁻⁴</td>
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</table>

SPECIAL NOTE: This information is to the best of our knowledge accurate and reliable. However, PPE Ltd makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer’s application. It is the customer’s responsibility to evaluate parts prior to use, especially in applications where their failure may result in injury and/or damage. It should also be noted that all elastomeric parts have a finite life, therefore a regular program of inspection and replacement is strongly recommended. In non-black grades of elastomer, it is possible to observe slight variations in colour. This is normal and is inherent in the part; it is not indicative of foreign matter. These colour variations are not expected to adversely affect the performance of the part.

Perlast® is a registered trademark of Precision Polymer Engineering Limited.