

Perlast® G74S

Pure white multi-purpose perfluoroelastomer for Life Science applications

PERLAST®

Description

Perlast® G74S has been specifically developed to cope with a wide range of process media, potent active pharmaceutical ingredients (API's) 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 Food Contact 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)
- ▶ Compliant with FDA 21 CFR § 177.2600 for use with dry, aqueous and fatty food stuffs (a to f)
- ▶ Meets the extractive limitations in 21 CFR § 177.2400 (d)
- ▶ Compliant with BfR XXI/1 Category 4 recommendation
- ▶ USP Class VI <88> and USP <87> compliant
- ▶ USP <381> Type I Elastomeric Closure for injection compliant
- ▶ 3-A Standard 18-03 Class I compliant
- ▶ EC1935/2004 and EC2023/2006 compliant
- ▶ Free from Animal Derived Ingredients (ADI)
- ▶ BAM (reactivity with oxygen) tested

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 food contact grade)



Typical Material Properties

| Property | Test method | Value |
|--|-------------|--------------------|
| Material Type | ASTM D1418 | FFKM |
| Colour | | White |
| Hardness (Shore A) | ASTM D2240 | 74 |
| Tensile Strength (MPa) | ASTM D412 | 18.5 |
| Elongation at break (%) | ASTM D412 | 190 |
| 50% Modulus (MPa) | ASTM D412 | 6.0 |
| 100% Modulus (MPa) | | 11.0 |
| Compression Set (%): 70 h @ 200°C (392°F) | ASTM D395B | 12 |
| Minimum Operating Temperature | | -15°C (+5°F) |
| Maximum Operating Temperature | * | +260°C (+500°F) |
| Continuous Use Temperature | ** | +210°C (+410°F) |

* and ** PPE proprietary test methods

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. The material properties above should not be used for specification purposes.

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