



PERLAST®

The ultimate perfluoroelastomers for sealing applications where chemical resistance and high temperature performance are critical.

Product Overview - Food, Pharmaceutical & Life-Science

www.prepol.com

Perlast® from PPE

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What is Perlast®?

The Perlast® range of perfluoroelastomers (FFKM) has been developed to seal in the most aggressive fluid environments and temperatures. Each Perlast® material grade is fully fluorinated and designed to overcome specific sealing challenges found in the food, dairy, pharmaceutical, biomedical and life-science industries.

The Perlast® range includes perfluoroelastomers that not only withstand high temperatures but can resist steam, amines and solvents, making them ideal for withstanding SIP and CIP cleaning regimes.

The unique cross-linking system employed in all Perlast® grades ensures compatibility with virtually all chemicals. The molecular structure of Perlast® perfluoroelastomers is very similar to PTFE, providing excellent thermal stability and chemical resistance. This enables users to rationalize onto a single material grade across all applications.

Why Perlast® from PPE?

Perlast® perfluoroelastomers push the boundaries of polymer technology for critical elastomer sealing in extreme temperature and pressures. PPE's design capability, coupled with industry-leading material compounding, ensures the optimum sealing solution - all reinforced by various industry qualifications.

- Design advice to optimize the seal for the intended operating conditions
- Shortest manufacturing lead-times
- Global sales, manufacturing and support coverage
- Expert technical support both before and after the sale

PERLAST®

Why use Perlast®?

- Temperature capability from -46°C to 327°C (-51°F to 621°F).
- Almost universal chemical resistance including solvents, steam and amines, ideal for SIP and CIP.
- Low permeability for vacuum environments.
- Excellent mechanical properties, leading to extended in-service performance for valves, pumps and other processing equipment.
- Certification to FDA, EC1935/2004, EC2023/2006 and 3-A 18-03 Sanitary Standard for food and dairy applications.
- Certification to USP Class VI chapter <87>, <88> and <381> for pharmaceutical applications.
- Full manufacturing traceability, including certification to BS EN ISO 10204.



Perlast® products

Perlast® FFKM elastomers can be molded into a wide range of shapes, profiles and sizes to suit any sealing application.

Typically, Perlast® elastomers are available as O-rings, gaskets, diaphragms, washers, hygienic seals and many more profiles, including custom designed components and metal bonded parts.

Micro Components - Perlast® perfluoroelastomers can be molded into micro sized parts that solve industry's most critical applications, that require the highest degree of precision and endurance in aggressive media (eg. Microfluidics and lab-on-a-chip).

Design service and material testing

With over 40 years of experience, PPE has the technical knowledge and expertise to provide sealing solutions for the most critical and challenging applications. PPE's team of application engineers and material scientists work closely with customers, providing technical support and component design for non-standard seals and custom shapes in accordance with current GMP (good manufacturing practice).

PPE operates laboratories in the UK and Houston, Texas for polymer testing, including fluid compatibility, material identification and seal failure analysis.

Typical applications

Perlast® materials are typically used in a wide range of critical sealing applications within the food, dairy, pharmaceutical, biomedical and life-science industries including:

- Food processing equipment
- Pharmaceutical manufacturing equipment
- Biomedical apparatus
- Pumps
- Valves
- Pipe connections
- Mechanical seals



For more information

For more information on PPE's elastomer materials compliant and certified to FDA, USP Class VI and other industry standards please visit the PPE website: www.prepol.com/perlast



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PERLAST® ICE⁹

Exceptional perfluoroelastomers for extreme low temperature sealing applications.

ENDURA®

The ultimate range of elastomers for sealing applications in the world's most aggressive high pressure applications.

Local PPE sales agent:

www.prepol.com

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