



Chemical applications are effectively sealed even with varying surface pressure with Garlock GYLON EPIX®.

The chemical industry faces many challenges in sealing its production processes. The desire for improved load retention combined with a reliable material, greater accommodation of faults during assembly, and simplified stock-keeping led the manufacturer Garlock to develop GYLON EPIX®.

Chemical products require special attention during their production process. To protect against external influences and contamination of the media as well as to avoid emissions, the sealing solution is of great importance. The wrong bolt force when installing the gaskets, creep behaviour and constant retightening of the gaskets, insufficient sealing with too little surface pressure, installation errors, and leaky flange connections due to aggressive chemicals are just some of the problems that need to be solved.

A practical example shows how the requirements of an aggressive medium, awkward flange connections, and the desired safety and economy of a plant could be met with a single sealing solution from Garlock:

In this case study, a manufacturer of CN-based chemical specialities and agricultural chemicals, including biocides, was experiencing difficulties with partly glass lined, partly PTFE-coated flanged joints on the inlet/outlet of a plate and on the frame heat exchanger. The medium to be sealed, cyanogen chloride, is highly toxic. The operator of the plant used expanded PTFE on a trial basis, which showed good resistance to the medium. However, fugitive emission leaks caused alarms and created uncertainty within the plant. EPDM rubber gaskets were then used, but they only lasted tightly for 3 months. FKM rubber seals could be used for only 6 months. GYLON EPIX® 3504 from Garlock was tested in the application with the modern, glass lined flange and the PTFE-coated flange. The result was impressive. GYLON EPIX® 3504 lasted for more than a year without retightening and without leaks. Since then, the company has only used GYLON EPIX® on the heat exchanger.

GYLON EPIX® is a family of gaskets that effectively seal a wider range of applications and is forgiving of errors during the installation process. The patented hexagonal profile provides the torque retention and blow-out resistance of a thin gasket while offering the conformability of a thicker gasket. The hexagonal profile provides excellent sealing and conformability even to imperfect flange surfaces. With a universal thickness of 2.4 mm, there is no need to stock a variety of material thicknesses with different stress requirements. GYLON EPIX® is made from the same PTFE material as the classic GYLON® products. As GYLON® is a modified and

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restructured PTFE it offers all the possibilities of using the advantages of PTFE, but eliminating the typical disadvantages due to the manufacturing process of virgin PTFE.

Case study on this solution:

https://www.garlock.info/wp-content/uploads/2022/02/Garlock-GYLON-EPIX-3504_Chemical_Specialities_EN-EU.pdf

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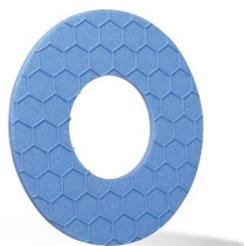
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About Garlock:

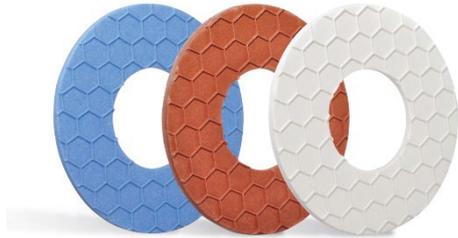
Garlock, an Enpro Company, is one of the leading international companies in the field of sealing technology and is regarded as a specialist for the sealing of critical and demanding media in innovative mechanical and plant engineering. More than 1,500 employees work for the company worldwide, of which around 240 work in Europe. Garlock is also represented by sales partners and specialist dealers in over 90 countries. Garlock supports a wide range of industries with an integrated range of services. In addition to standard seals, Garlock primarily develops and produces special solutions for customer-specific applications.

www.garlock.com



Caption: GYLON EPIX® Style 3504 (blue)
Photo credits: Garlock

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Caption: GYLON EPIX® Style 3504 (blue), Style 3501-E (brick-red), Style 3510 (white)
Photo credits: Garlock