

*PRESS RELEASE FST07
FOR UK ONLY*

Freudenberg Simmerring now available in food-grade materials

Freudenberg Sealing Technologies, a leading global specialist in sealing products and their application, has made its proven and successful Simmerring seals available in two new materials to suit food industry applications. Availability for the new products is via Dichtomatik UK Ltd, the exclusive provider for Freudenberg's food and beverage related products in the UK.

The Freudenberg Simmerring has been proving itself as a successful sealing product for the past 85 years. Designed for the reliable sealing of rotating shafts, Simmerring can today be found in millions of applications and machines across a myriad of different sectors. Importantly, the product is flexible, highly loadable and very dependable. Based on this portfolio of attributes, Freudenberg Sealing Technologies has now further developed Simmerring for use in the process industry, by making it available in food-grade materials.

Conventional PTFE shaft seal rings soon reach their limits at high rotational speeds and pressures, which typically leads to leaks and other seal failure modes. In addition, to date it has not been possible to use Simmerring in the food industry as its PTFE materials have not been approved for food-related applications. With this challenge in mind, experts at Freudenberg Sealing Technologies set about developing two new Simmerring materials especially to meet the requirements of process industries such as food and beverage, and pharmaceuticals.

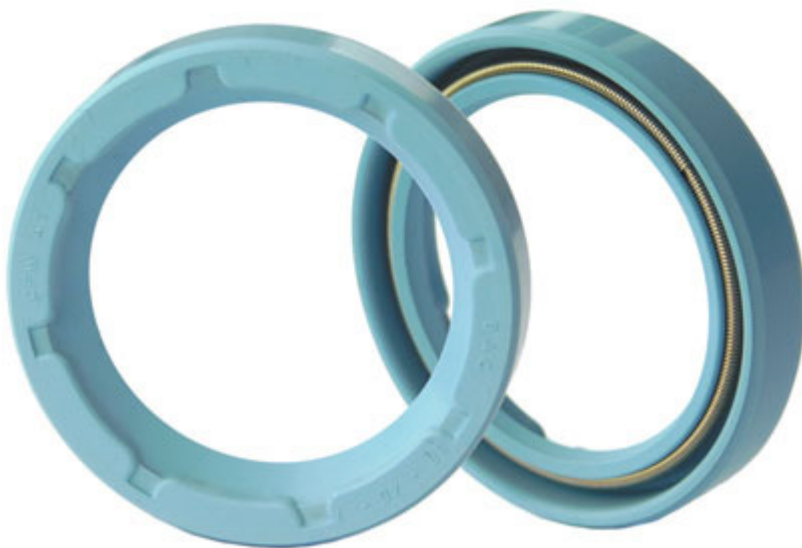
Continued

Simmerring products in the B2PT design are now produced from a newly developed material, Quantum® PTFE F18245, and a housing manufactured from 1.4571 (V4a) stainless steel. Here, the PTFE deployed has been created specifically for direct food contact. Approvals are anticipated shortly under FDA 21 CFR 177.1550 und EC 10/2011. The B2PT design, which is suitable for applications up to 10 bar, can also be adapted to suit specific customer requirements.

A further innovation from Freudenberg Sealing Technologies is the Hygienic BlueSeal, which is the first dead-space-free version of the Simmerring. Ideal for food and beverage industry applications, this hygienic shaft seal ring has a forward-mounted lip featuring geometry that allows no hard-to-clean areas, thus preventing any bacteria build-up and subsequent process contamination. As a point of note, the Hygienic BlueSeal can be used in low-friction and low-pressure (<1 bar) applications. The latter is made possible thanks to targeted adjustments in geometry. Hygienic BlueSeal also makes use of the newly announced Quantum® PTFE F18245 material.

The second new material development for Simmerring is 75 Fluoroprene® XP 45, which aids secure attachment to metal. This highly fluorinated material already has the required approvals and certificates under EC 1935/2004, EC 2023/2006 and FDA 21 CFR 177.2600.

Any seals manufactured from Fluoroprene® XP stand out for their excellent, broad resistance. The material combines the outstanding performance characteristics of FKM and VMQ in non-polar media (greases, oils and hydrocarbons), with the qualities of EPDM materials in polar media (water, acids and lye). Thanks to the complete encasement of the Simmerring with 75 Fluoroprene® XP 45, complemented by a stainless steel spring, the product is ideal for use in a wide range of food and beverage applications.



Caption: Freudenberg Sealing Technologies has now further developed Simmerrings, made of food grade materials, for use in the process industry.

[Download high resolution 300dpi image](#)

[Download low resolution 72dpi image](#)

About Freudenberg Sealing Technologies and Dichtomatik

Freudenberg Sealing Technologies is a longstanding technology expert and market leader in sealing technology and electric mobility solutions worldwide. With its unique materials and technology expertise, the company is a proven supplier for demanding products and applications, as well as a development and service partner to customers in the automotive industries and in general industries. In 2017, Freudenberg Sealing Technologies generated sales of about €2.3 billion and employed approximately 15,000 people. More information at www.fst.com.

Dichtomatik is Freudenberg Sealing Technologies' sales organisation for technical seals. There are currently 8 locations in Europe: in England, Sweden, the Netherlands, France, Austria, Hungary, Italy and the headquarters in Germany as well as locations in the USA, Canada, Middle and South America as well as Asia. More information at www.dichtomatik.com

For product inquiries:

Freudenberg Sealing Technologies
Dichtomatik UK Ltd
Donington House, Riverside Road, Pride Park, Derby, DE24 8HY
tel: 01332 524422
email: fst-food-beverage@dichtomatik.co.uk
web: food-beverage-seals-uk.fst.com

For media inquiries relating to Freudenberg Sealing Technologies:

Freudenberg Sealing Technologies GmbH & Co. KG
Ulrike Reich, Head of Media Relations
tel: +49 (0)6201 80 5713
email: ulrike.reich@fst.com