

Reinforced PTFE Gasket Sheet



The reliable gasketing for chemical plants

microFlon® BLUE is the new generation of microstructured, reinforced PTFE gasketing materials.

Due to the very homogenous distribution of hollow glass microspheres, **microFlon® BLUE** gets its uniform density and a high adaptability.

It assimilates to flange roughness and unevenness, applying just low gasket stress, and reduces surface diffusion to the minimum.

Even at increased temperatures **microFlon® BLUE** shows its advantages. Low compressive creep and high stableness lead to a reliable jointing.

With this **microFlon® BLUE** is the optimum PTFE gasketing for all flanges with slightly damaged surfaces, distorted flanges, or fragile components.

Typical Applications

Components

piping systems, apparatus flanges, also with reduced gasket stress or damaged surface

Flanges

steel, metal alloy, glass, ceramics or plastics flanges, glass lined and rubber lined piping systems

Media

highly aggressive media, except for molten alkali metals and fluorine gas.

Key Features

- microstructured PTFE with inorganic filler
- high compressibility and adaptability
- chemically inert (except for molten or dissolved alkali metals and elemental fluorine gas - please contact our technical service for questions)
- suitable for high temperature applications up to +250 °C
- resistant to "cold flow"
- high recovery
- highly tight, already at low gasket stress
- easy to remove
- does not stick to the flange surface



Technical Data

Material

100 % virgin PTFE, with hollow glass microspheres

Temperature Range of the material

-210°C to +270°C, intermittent to +315°C

Chemical Resistance

resistant to all media in the range of pH 0 to 14, except for molten and dissolved alkali metals and elemental fluorine gas at high temperatures and pressures

Recommended Operating Range

Vacuum up to 55 bar, from ambient to +250°C (also in combination, up to 40 bar @ 200°C*)

Tests and Certificates

TA-Luft (VDI 2440) up to 250 °C
 FDA 21 CFR 177.1550 (PTFE) and 21 CFR 170.30(b) (Glass)
 Extraction Limits according 21 CFR 177.1550 § (e)(3)
 and EG1935 / EG10-2011
 DVGW tested and certified according DIN 3535-6 : 2011-01
 EU 1907/2006 (REACH) with Annex XVII and it's amendments

BLUE

microFlon®

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Standard Sizes

Type	Size [mm]	Thickness [mm]
microFlon® BLUE 05	1500 x 1500	0,5 mm
microFlon® BLUE 08	1500 x 1500	0,8 mm
microFlon® BLUE 10	1500 x 1500	1 mm
microFlon® BLUE 15	1500 x 1500	1,5 mm
microFlon® BLUE 20	1500 x 1500	2 mm
microFlon® BLUE 30	1500 x 1500	3 mm

Properties

EN 13555 (2 mm Thickness)

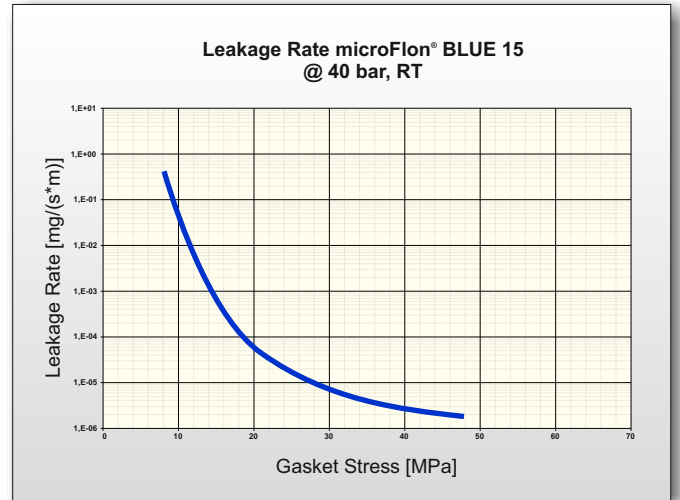
Q_{min} (40 bar He; 0,01 mg/(s*m)): < 15 MPa
 Q_{Smin} ($Q_s=40$ MPa; 40 bar He; L=0,01): < 5 MPa
 Leakage Rate ($Q_s=30$ MPa; 40 bar He): < 10^{-4} mg/(s*m)
 PQR @ 150 °C: 0,45

ASTM F36

Compressibility: 25 - 30 %
 compressed Thickness: 1,45 mm
 Recovery: 35 %
 recovered Thickness: 1,64 mm

Density: 1,7 g/cm³

Sealing Characteristics



Even at low gasket stress **microFlon® BLUE** shows very good sealing properties.

Assembly

Clean sealing surface completely. Remove any dirt, corrosion, grease or left-over from old sealing materials.

Center gasket on the sealing surface and torque bolts hand-tight.

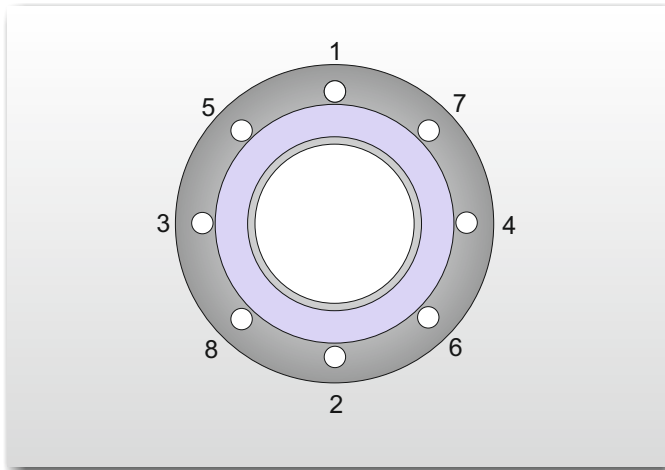
At least 4 progressive torque sequences with a torque wrench should follow, until you reach the recommended gasket stress.

Always torque crosswise as shown in the sketch (see left).

Perform a circular torque check before start-up of the equipment.

Always follow the state-of-the-art guidelines for gasket assembly as well as the recommended torque for your sealing system.

If you need individual calculations for special equipment or non-standard gasket sizes contact our Technical Support.



All technical information and advice are based on our experience and are to the best of our knowledge, but do not state any liability by our company. Specifications and values must always be checked by the customers, for they are the only ones that can judge the efficiency of a product taking into account all of the on site operating conditions. For detailed selection criteria, technical assistance and installation guidelines contact our technical service.

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