



Typical Applications

Components

Large diameter standard flanges, piping systems, apparatus flanges, complex geometries

Flange Types

Steel flanges and high grade FRP components

Media

Highly aggressive chemicals, all media in food and pharma applications (FluorTex™ multiFlon® sheet gasketing is also available with embossed marking or unbranded)

Key Features

- 100 % pure multidirectional expanded PTFE
- easy manufacture into all gasket shapes
- chemically inert (except for molten or dissolved alkali metals and elemental fluorine gas - please contact our technical service for questions)
- suitable for high temperatures
- higher rigidity and stiffness
- highly conformable to the sealing surface
- reliably tight and blow-out safe
- resistant to ageing
- reduces service and operating costs

Multidirectional ePTFE Sheet Gasketing

FluorTex™ multiFlon® - Gasket Sheets are made from 100% pure, multidirectional ePTFE with higher density.

It consists solely of highest grade PTFE resins that offer an almost unlimited chemical resistance.

During installation, gaskets made from FluorTex™ multiFlon® sheets, adapt perfectly to flange roughness, unevenness and usual irregularities of used flanges.

In service, stressed with temperature cycling and external forces, FluorTex™ multiFlon® keeps high gasket stress and forms an optimum thin gasket with high blow-out safety.

With FluorTex™ multiFlon® sheet gasketing you can cover a wide range of metal flange shapes in highly demanding aggressive, as well as high purity applications.

Technical Data

Material

100 % pure multidirectionally expanded PTFE

Temperature Range of the material

-240°C bis +270°C, kurzzeitig bis +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 40 bar*
at -240°C to +230°C*

Tests and Certificates

proven according to TA-Luft (VDI 2440) up to 230 °C conforming to FDA 21 CFR 177.1550 (PTFE)

* depending on the individual application

Gasket Sheet

Available Sizes

Type	Size [mm]	Size [mm]	Thickness [mm]
multiFlon® 05	1000 x 1000	1500 x 1500	0,5
multiFlon® 10	1000 x 1000	1500 x 1500	1
multiFlon® 15	1000 x 1000	1500 x 1500	1,5
multiFlon® 20	1000 x 1000	1500 x 1500	2
multiFlon® 30	1000 x 1000	1500 x 1500	3
multiFlon® 60	1000 x 1000	1500 x 1500	6

Properties

EN 13555 (2 mm Thickness)

Q_{min} (40 bar He; 0,01 mg/(s*m)):	25 MPa
Q_{Smin} ($Q_s=30$ MPa; 40 bar He; L=0,01):	< 10 Mpa
Q_{Smax} (23°C):	> 180 MPa
Leakage Rate ($Q_s=40$ MPa; 40 bar He):	< 10^{-4} mg/(s*m)
PQR @ 150 °C ($Q_s=40$ MPa):	0,65

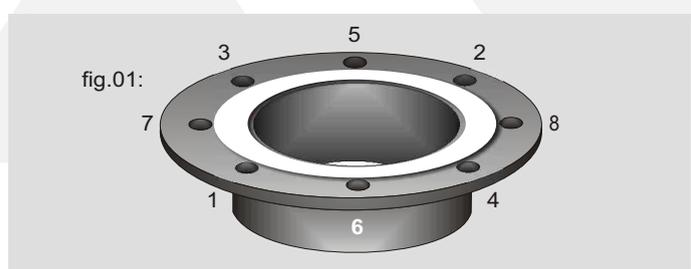
ASTM F36

Compressibility:	55 - 60 %
compressed Thickness:	0,86 mm
Recovery:	13 %
recovered Thickness:	1,01 mm

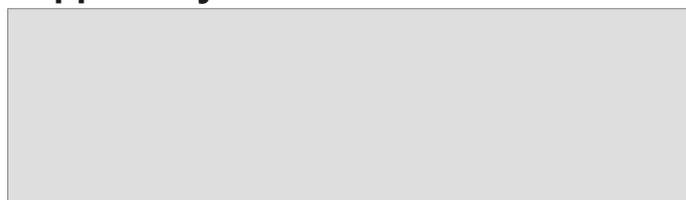
Due to the unique structure of the gasketing material, **FluorTex® multiFlon** gaskets are highly resistant to creep relaxation. They contain no binders, fillers or additives. The multidirectional structure of **FluorTex® ePTFE** sheet gasketing results in a high reliability in service.

Choice Recommendation

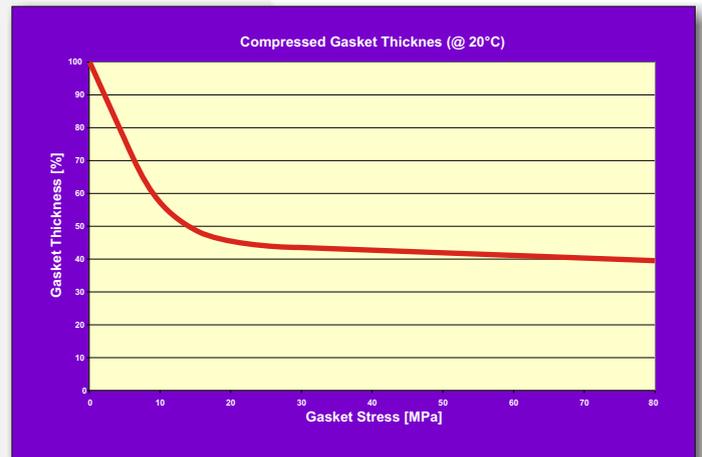
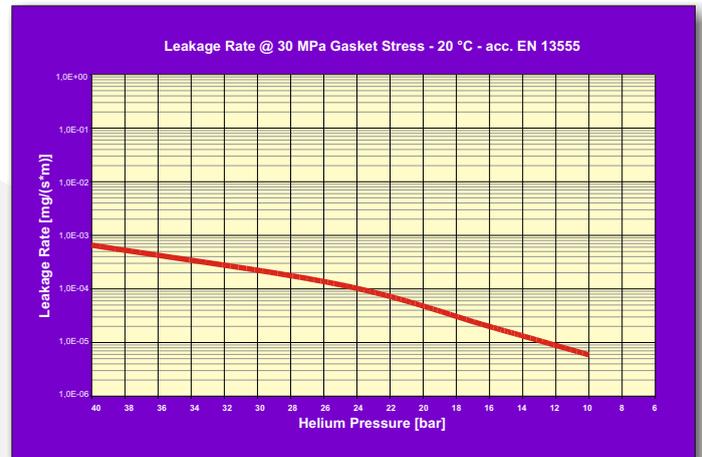
- 1,5 mm thickness in new piping systems up to DN 300 / 12"
- 2 mm thickness in standard flanges with good sealing surface
- 3 mm thickness in flanges and flange-like joints with tolerable unevenness and roughness



supplied by:



Characteristics



Assembly

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

Position gasket to the middle of 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 (follow sequence as shown in fig. 01).

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 FluorTex® 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. Detailed selection criteria, technical assistance and installation guidelines are available from your local FluorTex® distributor, or the application engineer at FluorTex® Service.

© FluorTex® and multiFlon® are registered trademarks
multiFlon Sheet en 120602