# FluorTex GmbH Polymer Technology

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# microFlon®fawnReinforced PTFE Gasket Sheet



## universal microstructured filled PTFE Gasketing

**microFlon**<sup>®</sup> **fawn** is the universal PTFE gasket for chemical and petrochemical industries.

Due to the silica reinforcement **microFlon**<sup>®</sup> **fawn** has an excellent creep resistance and good relaxation factors, even at higher temperatures.

The very dense and uniform structure makes it the ideal gasket for high demands in emission control.

Even at low torque and applicable operating gasket stress, **microFlon**<sup>e</sup> **fawn** offers reliable safety and lowest leakage rates.

#### **Typical Applications**

Components Piping systems, apparatus flanges, temperature stressed components

Flange Types Steel flanges

Media

Highly agressive chemicals, all media in chemical and petrochemical applications

#### **Key Features**

- 100 % virgin PTFE reinforced with inorganic filler
- · good stability at thermal stress
- chemically inert (except for molten or dissolved alkali metals
  and elemental fluorine gas please contact our technical service for questions)
- suitable for high temperatures applications up to +230 °C
- · resistant to "cold flow"
- high recovery
- · good electrical properties
- · resistant to ageing

#### **Technical Data**

#### Material

100 % virgin PTFE, filled with inorganic silica

#### Temperature Range of the material -210°C to +260°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 +230°C (also in combination, up to 40 bar\*)

#### **Tests and Certificates**

tested according to TA-Luft (VDI 2440) up to 250 °C and VDI 2290 @ 23 °C and 40 bar EU 1907/2006 (REACH) with Annex XVII and it's amendments

\* depending on the individual assembly

### fawn <u>microFlon</u><sup>®</sup> **Reinforced PTFE Gasket Sheet**

#### **Standard Sizes**

Туре	Size [mm]	Thickness [mm]
microFlon <sup>®</sup> fawn 05	1500 x 1500	0,5 mm
microFlon <sup>®</sup> fawn 10	1500 x 1500	1 mm
microFlon <sup>®</sup> fawn 15	1500 x 1500	1,5 mm
microFlon <sup>®</sup> fawn 20	1500 x 1500	2 mm
microFlon <sup>®</sup> fawn 30	1500 x 1500	3 mm

#### **Properties**

#### EN 13555 (2 mm Dicke)

$\label{eq:Qmin} \begin{array}{l} Q_{min} \ (40 \ bar \ He; \ 0.01 \ mg/(s^*m)) \textbf{:} \\ Q_{Smin} \ (Q_{\text{a}}=40 \ MPa; \ 40 \ bar \ He; \ L=0,01) \textbf{:} \\ Q_{Smax} \ (at \ ambient \ temperature) \textbf{:} \\ PQR \ (30 \ Mpa \ 150 \ ^{\circ}\text{C}) \textbf{:} \end{array}$	16 MPa < 10 MPa 120 MPa 0,73
ASTM F36 Compressibility: Recovery:	12 % > 40 %
M-Value: Y-Value:	3,5 2450 psi
Density:	2,2 g/cm <sup>3</sup>
electrical insulation resistance:	> 100 MΩ

(T=1.5mm; A=4200mm<sup>2</sup>; U=500 V)



#### Leakage Characteristics



At applicable gasket stress in DIN flanges, microFlon® fawn gaskets offer 100 times lower leakage rates than comparable competitors materials (Qmin values according EN 13555).

#### 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 handtight.

At least 4 progressive torgue sequences with a torgue 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 idividual calculations for special equipment or nonstandard 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.

® microFlon<sup>®</sup> is a registered trademark microFlon fawn 210401 en

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