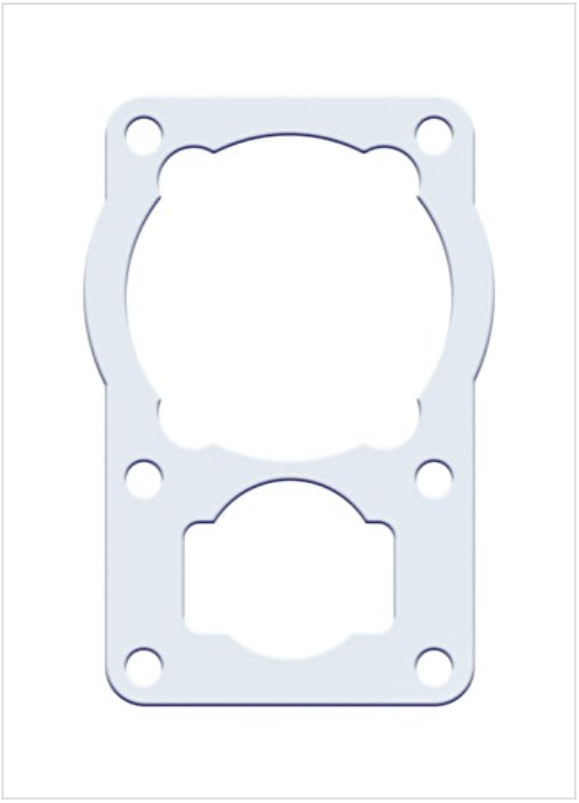
PLANICHEM
SICHEM SOLUTIONS

SICHEM DIAPHRAGM



SICHEM® DIAPHRAGM is a **flat gasket sheet made of pure multidirectional modified PTFE**. These structured sheets provide **enhanced performance compared to virgin PTFE**. The **thermal stability of PTFE** is particularly important, especially in **high-temperature chemical industry applications**. The multidirectional structure gives the material **excellent mechanical performance**, superior **resistance to hot creep**, and **optimal dimensional stability**, even under **prolonged loads**.

High chemical resistance: compatible with a wide range of chemicals and acids, and **suitable for food and pharmaceutical applications**. PTFE is not compatible with: **bromine trifluoride, chlorine trifluoride, fluorine dioxide, hydrogen fluoride, molten alkali metals, elemental lithium, elemental potassium, and elemental sodium**. For compatibility with the filler materials used in the Sichem range, please refer to the **Chemical Compatibility List**.

Superior mechanical stability: the biaxial orientation improves resistance to **creep and permanent deformation**.

Excellent machinability: easy to **punch and CNC cut**, ensuring precision even for complex geometries.

Low permeability coefficient: ideal for applications requiring **long-term tight sealing**.

Operating temperature: from **-200°C to +260°C**, depending on the type of fluid and the applied load.

Bidirectional PTFE	Sichem Diaphragm
Composition	Pure modified PTFE
Density ASTMF 1315	2.18 g/cm³
Minimum operating temperature	-260 °C
Maximum operating temperature	+260 °C
Max operating pressure	Please contact PLANICHEM technical service bar
Leakage DIN 3535-6	<0.005 mg*s-1*m-1
Creep relaxation DIN 3535-6	<55 %
Compressibility DIN 3535-6	>11 %
Recovery DIN 3535-6	>5 %
Minimum PH	0
Maximum PH	14
Available sheets size	1.000x1.000 mm 1.500x1.500 mm
Available thickness	0.75 ÷ 6.00 mm
Sheet size tolerance	50 mm
Thickness tolerance	10 %

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