



**SICHEM® S58** is a **multidirectionally modified PTFE gasket sheet**, consisting of a **core made of unfilled modified PTFE** and **microcellular PTFE layers on both sides**. It is designed for applications where a more **compressible and conformable material** is required, even on **large, worn, or corroded flanges**. The **bi-oriented multilayer structure** and the **inner rigid virgin PTFE core** provide the material with excellent mechanical performance, superior resistance to hot creep, and optimal dimensional stability, even under **low and prolonged loads**.

**High chemical resistance:** compatible with acids and moderately basic fluids, solvents, and hydrocarbons. 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 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 S58
Composition	Microcellular Modified PTFE layers with Pure modified PTFE core
Density ASTM F 1315	1.3 g/cm <sup>3</sup>
Minimum operating temperature	-260 °C
Maximum operating temperature	+260 °C
Max operating pressure	80 bar
P x T Max. (Thk 0.8 - 2.0 mm)	12000 Bar x °C
P x T Max. (Thk 3.0 mm)	8500 Bar x °C
Leakage DIN 3535-6	<0.002 mg*s-1*m-1
Creep relaxation DIN 3535-6	<26 %
Compressibility DIN 3535-6	>44 %
Recovery DIN 3535-6	>6.3 %
Minimum PH	0
Maximum PH	14
Available sheets size	1.500x1.500 mm 1.750x1.750 mm
Available thickness	0.75 ÷ 6.00 mm
Sheet size tolerance	50 mm
Thickness tolerance	10 %



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