



**SICHEM® S66** is a **flat gasket sheet made of modified microcellular PTFE, biaxially oriented and reinforced with a 316L stainless steel insert**. Its **high compressibility** makes it suitable for use on **irregular or damaged surfaces** of both **metallic and non-metallic flanges**, even at **low bolt loads**. The **316L stainless steel insert** also makes it suitable for **high-pressure applications**. The multidirectional structure provides the material with **excellent mechanical performance**, superior **resistance to hot creep**, and optimal **dimensional stability**, even under **low loads**.

**High chemical resistance:** compatible with a wide range of chemicals, including **acids and solvents**. 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 S66
Composition	Microcellular Modified PTFE with SS316L tanged core
Density ASTM F 1315	1.2 g/cm <sup>3</sup>
Minimum operating temperature	-260 °C
Maximum operating temperature	+260 °C
Max operating pressure	170 bar
P x T Max. ( Thk 0.8 - 2.0 mm)	25000 Bar x °C
P x T Max. ( Thk 3.0 mm)	15000 Bar x °C
Leakage DIN 3535-6	<0.01 mg*s-1*m-1
Creep relaxation DIN 3535-6	<5 %
Compressibility DIN 3535-6	>41 %
Recovery DIN 3535-6	>6 %
Minimum PH	0
Maximum PH	14
Available sheets size	1.500x1.500 mm
Available thickness	0.75 ÷ 6.00 mm
Sheet size tolerance	50 mm
Thickness tolerance	10 %



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