



Sichem® S11 is a gasketing sheet made from biaxially oriented modified PTFE silica filled, designed for critical sealing applications involving aggressive fluids and demanding operating conditions. The oriented molecular structure and silica-based filler provide the material with excellent mechanical performance, superior hot creep resistance, and outstanding dimensional stability, even under high and prolonged loads.

- **High chemical resistance:** compatible with most corrosive fluids, strong acids, solvents, and oxidizing agents.
- **Enhanced mechanical stability:** biaxial orientation improves resistance to creep and permanent deformation.
- **Excellent workability:** easy to die-cut or CNC-machine, ensuring precision even for complex geometries.
- **Low permeability coefficient:** ideal for applications requiring long-term hermetic sealing.
- **Service temperature range:** from -200°C to +260°C depending on the type of fluid and applied load.

Bidirectional PTFE	Sichem S11
Composition	Modified PTFE with Silica filler
Density ASTM F 1315	2.2 g/cm ³
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	<0.05 mg*s-1*m-1
Creep relaxation DIN 3535-6	<24 %
Compressibility DIN 3535-6	>4 %
Recovery DIN 3535-6	>1.7 %
Minimum PH	0
Maximum PH	14
Available sheets size	1500x1500 mm 1750x1750 mm
Available thickness	0.75 ÷ 6.00 mm
Sheet size tolerance	50 mm
Thickness tolerance	10 %



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