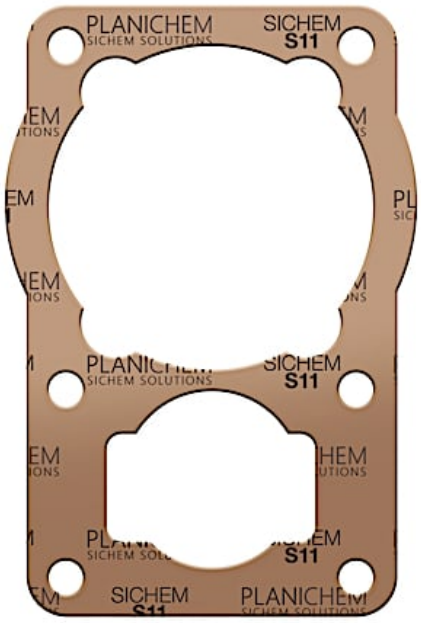
PLANICHEM
SICHEM SOLUTIONS

# SICHEM S11




**SICHEM® S11** is a biaxially oriented, silica-filled, modified PTFE gasket sheet designed for critical sealing applications involving aggressive fluids and severe operating conditions. The biaxially oriented molecular structure and silica-based filler give the material excellent mechanical properties, superior resistance to thermal creep and optimum dimensional stability, even under high and prolonged loads.

**High chemical resistance:** compatible with most corrosive fluids, strong acids, solvents and oxidising agents. PTFE is not compatible with: bromine trifluoride, chlorine trifluoride, fluorine dioxide, hydrogen fluoride, molten alkali metals, elemental lithium, elemental potassium, elemental sodium. For compatibility with the filler materials used in the Sichem range, please refer to the Chemical Compatibility List.

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

**Excellent machinability:** easy to die-cut or CNC-cut, ensuring precision even for complex geometries.

L**ow permeability coefficient:** ideal for applications requiring a long-lasting hermetic seal.

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

| **Bidirectional PTFE** | Sichem S11 |
|---|---|
| **Composition** | Modified PTFE with Silica filler |
| **Density ASTMF 1315** | 2.2 g/cm³ |
| **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 |
| **Available thickness** | 0.75 ÷ 6.00 mm |
| **Sheet size tolerance** | 50 mm |
| **Thickness tolerance** | 10 % |

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