



SIGMA® 511 is a high performance biaxially orientated sheet sealing material containing PTFE with silica filler

## Service

SIGMA® 511 is suitable for sealing most chemicals across the whole pH range (0-14) with the exception of molten alkali metals, fluorine gas, hydrogen fluoride or materials which may generate these. Sigma® 511 is particularly suitable for use in applications involving strong acids.

Recommended temperature range: - 250°C to 260°C  
Recommended pressure range: Vacuum to 85 bar (1230 psi)

## Note

These temperature and pressure guides cannot necessarily be used simultaneously and may not apply at all thicknesses.

Complies with the requirements of FDA regulations.  
WRAS Approved for use with potable water: Approval No. 1206528  
TA-LUFT approved  
BAM Oxygen

Do NOT use gasket pastes

## Availability

Sheet size:

1.5m x 1.5m

2.0m x 2.0m

For large sizes, welded gaskets are available.

Thickness range: 0.75mm to 3.2mm

Other thicknesses may be available on request.

Colour: Pink

## Typical Physical Properties

Thickness	1.5mm	3.0mm
Density	2.2g/cm <sup>3</sup>	2.2g/ cm <sup>3</sup>
ASTM F36A Compressibility	7%	7%
ASTM F36A Recovery	44%	45%
ASTM F152 Tensile Strength	16MPa	15MPa
DIN 52913 Residual Stress @ 175°C	30MPa	20MPa
DIN 3535-6 Gas Permeability	< 0.1mL/min	0.1mL/min
ASTM F37A Liquid Leakage	4mL/hr	3mL/hr
1000 psi gasket stress, 50 psi Fuel A		
ASTM F38B Creep Relaxation	35%	53%

## Warranty exclusion

In view of the variety of different installation and operation conditions as well as application and process engineering options, the information given in this datasheet can only provide approximate guidance and cannot be used as basis for warranty claims.