

# Flexitallic®

## PRODUCT DATASHEET

# SIGMA® 511



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

## SIGMA

### 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

Tested in accordance to EC Regulation  
No. 10/2011\*

\*being the specific testing requirements  
of EN Regulation 1935/2004

### 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

This Data Sheet refers to the material as supplied. The information contained herein is given in good faith, but no liability will be accepted by the Company in relation to same.

We reserve the right to change the details given on this Data Sheet as additional information is acquired. Customers requiring the latest version of this Data Sheet should contact our Applications Engineering Department.

The information given and, in particular, any parameters, should be used for guidance purposes only. The Company does not give any warranty that the product will be suitable for the use intended by the customer.

### Health & Safety

For further Health and Safety information please see the relevant Material Safety Datasheets or contact Flexitallic Ltd.

### Typical Physical Properties:

Thickness	1.5mm	3.0mm
Density	2.2gcm <sup>-3</sup>	2.2gcm <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 1000 psi gasket stress, 50 psi Fuel A	4mL/hr	3mL/hr
ASTM F38B Creep Relaxation	35%	53%