


**PRODUCT DATASHEET**

## SIGMA® 600



SIGMA® 600 is a high performance biaxially orientated PTFE sheet sealing material with enhanced, low stress sealing characteristics.



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.

**Disclaimer**

Please note, failure to select the correct materials or products we supply ("the Products") may result in damage to plant, equipment or property. In some instances, it may cause death or personal injury. We are not designers and do not give advice about design related matters concerning the Products. We can help and assist with the technical specifications for the Products. In specific applications, particularly where critical conditions exist, we will try to assist you within the limitations of the services that we offer. All information supplied by us is intended as technical co-operation outlining the specifications of the different Products which we supply. To the extent permitted in law, no warranty is given in respect of any information supplied by us. The customer must satisfy themselves as to the suitability of the Products for their intended application and use. The correct fitting of Products is the responsibility of the customer. Your statutory rights remain unaffected. Save in respect of death, personal injury or fraud, our entire liability to you, however arising from the supply of Products shall be limited to the £10M indemnity amount provided by our insurers.

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**Service:**

SIGMA® 600 is capable of creating a seal at very low stresses. This makes the product suitable not just for use in standard metallic flanged connections but also in load compromised bolted connections; such as those applications involving glass lined, plastic flanges and thin or distorted metal flanges.

Suitable for sealing most chemicals across the whole pH range (0-14) with the exception of molten alkali metals and fluorine gas. Consisting entirely of PTFE, SIGMA® 600 is suitable for use with practically all chemical media.

**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 approval 1206528

TA-LUFT approved

Do NOT use gasket pastes.

**Availability:**

**Sheet size:**  
1.5m x 1.5m

**Thickness range:**  
1mm to 6.4mm

**Colour:** White (Pigment free)

**Typical Physical Properties:**

Thickness	1.5mm	3.0mm	6.4mm
Density	0.75g/cm <sup>3</sup>	0.75g/cm <sup>3</sup>	0.75g/cm <sup>3</sup>
ASTM F36A Compressibility	68%	60%	31%
ASTM F36A Recovery	5%	10%	22%
ASTM F152 Tensile Strength	6.7MPa	6.7MPa	6.7MPa
DIN 52913 Residual Stress @ 175°C	34MPa	19MPa	16MPa
DIN 3535-6 Gas Permeability	0.01mL/min	0.01mL/min	0.02mL/min
ASTM F34A Liquid Leakage	1.2mL/hr	1.2mL/hr	1.2mL/hr
1000 psi gasket stress, 50 psi Fuel A			

