

## PRODUCT DATASHEET

# SF 5000

Flexitallic SF 5000 is a premium grade sheet gasket material reinforced with carbon and aramid fibre bound with high quality nitrile (NBR) rubber. SF 5000 complies with the requirements of the BS 7531 Grade X specification.



### Service:

Developed for use across a wide range of demanding industrial sealing applications requiring a high degree of long term joint integrity. SF 5000 is chemically compatible with a wide range of media including dry and wet steam, hydrocarbons and moderate chemical service. SF 5000 is ideal for use in alkaline or caustic conditions found in bauxite ore processing and the paper and pulp industry.

Maximum recommended temperature:  
440°C (825°F)

Maximum recommended pressure:  
14 MPa (140 bar; 2030 psi)

pH range:  
3 to 14

API 6FB Fire-Safe

### Note:

These temperature and pressure guides cannot necessarily be used simultaneously and may not apply at all thicknesses.  
Do NOT use gasket pastes.

### Availability:

Sheet size:  
1.5m x 1.5m, 2.0m x 1.5m

Thickness range:  
0.4mm to 3.0mm

Available with steel wire reinforcement  
as SFM 5000.

Supplied with Sark III release coating as standard.

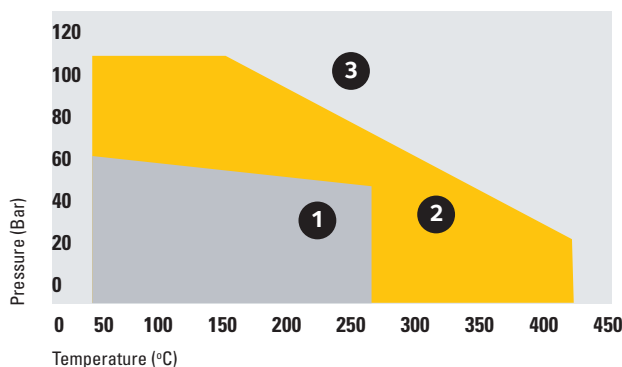
Other sizes and thicknesses may be available  
on request.

**Colour:** Black

### Typical Physical Properties:

Thickness	1.5mm
Density	1.60gcm <sup>3</sup>
ASTM Compressibility	12%
ASTM Recovery	> 55%
ASTM Tensile Strength	13 MPa
BS Residual Stress	> 25 MPa
DIN Gas Permeability	0.01mL/min
ASTM Oil 3 Thickness Increase	2.0%
ASTM Fuel B Thickness Increase	3.0%

### SF 5000 Pressure/Temperature Limits



- 1 Suitable subject to chemical compatibility.
- 2 Suitable in some cases but check your application requirements with Flexitallic. Contact the Application Engineering Team for applications with higher temperatures and pressures. Applicable to 1.5mm and below.
- 3 The operating temperature of non-asbestos sheet material is related to the thickness of materials selected. Thinner materials give better temperature and pressure properties.

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.

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### Health & Safety:

Because of the binding processes which take place during manufacture, the product is believed to present no health and safety hazard and, under normal handling and use it is unlikely that the product will give rise to significant levels of exposure to constituent materials.

Flexitallic SF 5000 is reinforced with carbon and aramid fibres. Small amounts of crystalline silica may also be present in the filler material.

Under harsh mechanical treatment (e.g. high speed stamping operations or abrasion) or if the product has become embrittled by high temperature applications, the constituents may give rise to irritant dust which, in extreme cases of exposure, could lead to more serious respiratory problems. Occupational exposure to such dusts should therefore be minimised and kept below relevant national exposure limits. Flexitallic has adopted an in-house fibre Control Limit of 0.5 fibre per millilitre of air (8 hour TWA) for asbestos-free fibres which may be respirable.

Good standards of hygiene should be applied during gasket cutting operations and off-cuts should be disposed of by transfer to a site appropriately licensed to accept industrial materials of this nature.

Although the reinforcing fibres and fillers are inherently flame resistant, at elevated temperatures or in a sustained fire, decomposition will occur and give rise to irritant and in some instances harmful or toxic fumes.

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