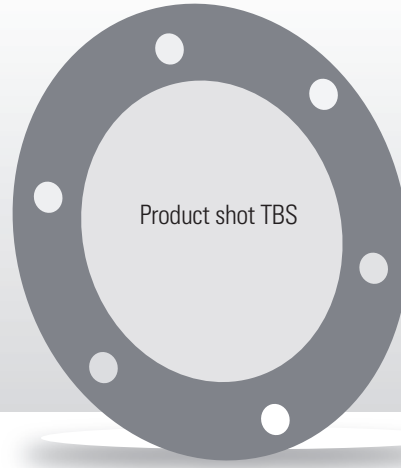


## PRODUCT DATASHEET

# FLEXICARB RGS 2



RGS 2 is a high purity graphite laminate reinforced with a stainless steel woven wire core.

### Service:

FLEXICARB RGS 2 is recommended for high temperature sealing applications. The inclusion of the steel wire reinforcing core gives rise to a robust sheet with improved handling characteristics. RGS 2 can be used to seal a wide range of media, with the exception of strong oxidizing agents, at extremes of temperatures. The soft conformable nature of the graphite facing material makes RGS 2 suitable for sealing between worn or pitted flanges.

### Maximum recommended temperature:

Oxidising media 370°C (700°F)  
Inert or reducing media 700°C (1290°F)

### Maximum recommended pressure:

10MPa (100 bar; 1450 psi)

### Note:

For applications sealing inert or reducing media, at temperatures in excess of 370°C, attention must be given to the possibility of oxidative attack on the gasket from the external environment.

Use with oxidising agents should be avoided.

For long term continuous high temperature use in oxidizing environments please consult Flexitallic's Applications Engineering Department.

### Physical Properties / Construction:

**Facing material:**  
98% pure graphite foil.

**Reinforcement:**  
Woven stainless steel wire mesh (AISI 316 grade).

**Adhesive:**  
No adhesive used.

### Availability:

**Sheet size:**  
1.0m x 1.0m

**Thickness range:**  
0.75mm to 1.5mm  
Tolerances +/- 10%

### Typical Physical Properties:

Thickness	1.5mm
Density	1.5gcm <sup>-3</sup>
ASTM Compressibility	40%
ASTM Recovery	20%
BS Residual Stress	32MPa
ASTM Tensile Strength	20MPa
Leachable Chloride Ion Content	< 50ppm
Leachable Fluoride Ion Content	< 50ppm

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.

## PRODUCT DATASHEET

### Health & Safety

Because of the 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.

RGS2 is a laminate containing exfoliated graphite reinforced with a stainless steel wire mesh.

Under harsh mechanical treatment (e.g. high speed stamping operations or abrasion) the constituents may give rise to irritant dusts which, in extreme cases of exposure, could lead to more serious respiratory problems. Occupational exposure to such dusts should therefore be minimized and kept below relevant national exposure limits. 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.

Graphite is combustible. At elevated temperatures or in a sustained fire, toxic fumes may be produced.

The material is conductive. Graphite debris or dust should not be allowed to penetrate electrical equipment. The reinforcing tanged steel may have very sharp edges; handle with care, particularly after cutting.

For more detailed information, reference must be made to our Health and Safety Bulletin, Sections 1, 2, 2.11, 3 and 3.2. This will enable you to carry out any necessary assessment of risk which may be required under national or local legislation.