

# Flexitallic®

## PRODUCT DATASHEET

# FLEXICARB® RGS 3



RGS 3 is a high purity graphite laminate reinforced with a tanged stainless steel core.

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.

### Service:

FLEXICARB® RGS 3 is recommended for applications involving high sealing stresses and where high blowout resistance is required. The inclusion of the steel reinforced layer gives rise to a robust sheet. RGS 3 can be used to seal a wide range of media at moderate combinations of temperature and pressure. The product is not recommended for sealing against strong chemical oxidising agents.

### Maximum recommended temperature:

Thermal oxidising media 370°C  
Inert or reducing media 700°C

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.

For long term continuous use in oxidising environments at temperatures in excess of 370°C please consult Flexitallic Applications Engineering Department.

**Maximum recommended pressure:**  
ASME B16.5 Class rating pressure systems up to and including 600.

PN rated pressure systems up to and including PN100.

**Approvals:**  
BAM Oxygen

### Materials:

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

**Reinforcement:**  
0.1mm thick tanged stainless steel UNS S31600

**Bond Type:**  
Mechanical.

### Availability:

**Sheet size:**  
1.0m x 1.0m  
1.5m x 1.5m

**Thickness range:**  
1.0mm to 3.0mm

**Colour:** Silver / Grey

### Typical Physical Properties:

Thickness	1.5mm
Density	1.35gcm <sup>-3</sup>
ASTM F36A Compressibility	45%
ASTM F36A Recovery	10%
BS 7531 Residual Stress	38MPa
ASTM F152 Tensile Strength	17MPa
Leachable Chloride Ion Content	< 50ppm
Leachable Fluoride Ion Content	< 50ppm

### 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.

The  
**Flexitallic**  
Group