

## CORRICULITE<sup>®</sup> Hydrogen



Corriculite<sup>®</sup> is a specially formulated gasket material developed for use in applications where high levels of tightness are essential, such as when sealing hydrogen.

**CORRICULITE<sup>®</sup>**  
Protection. Sealed in.

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 UK Ltd.

#### Service

The small molecular size of hydrogen and ability to form flammable and explosive atmospheres in the presence of air can make the effective, long term sealing of gaseous hydrogen containing pressure systems a challenge.

Flexitallic Corriculite<sup>®</sup> exploits the unique structural and chemical properties of exfoliated vermiculite to create an exceptionally tight, inert, high compression material capable of meeting the hydrogen sealing challenge.

Leakage testing to recognized industry standards demonstrates Corriculite's class leading tightness capability, across a range of standard semi-metallic gasket styles. Benchmark testing against graphite based gaskets indicate leakage rates in the order of 1000 times tighter.

All Corriculite<sup>®</sup> based semi-metallic gaskets comply with the stringent fire safety requirements of API 6FB.

Corriculite<sup>®</sup> has been specially formulated to offer a wide range of chemical resistance. High purity and electrical properties help to mitigate flange face corrosion associated with other non-metallic sealing materials.

#### Typical Physical Properties

Leachable sulphur	ppm	<75
Leachable fluoride ion content	ppm	<30
Leachable chloride ion content	ppm	<50

#### Availability

Corriculite<sup>®</sup> is available in a wide range of industry standard, semi-metallic gasket styles.

Corriculite<sup>®</sup> 235 spiral wound gaskets offer high levels of resilience and can be used in variety of seal face configurations.

When faced with Corriculite<sup>®</sup> 245, Flexpro<sup>™</sup> (kammprofile) gaskets offer exceptional levels of seal tightness, especially in load compromised connections.

Corriculite<sup>®</sup> 255 Change gaskets offer class leading sealing performance in applications subject to cyclic loading.

Gaskets using Corriculite<sup>®</sup> are available for use in all industry standard, PN and class rated, pipeline flanges. They can also be designed to suit bespoke connections.

Gasket style and metallurgy selection are based on application details.

#### Fire Safety:

API 6FB fire compliant.

#### Temperature Range:

-196°C (-321°F) to 260°C (500°F)

#### Pressure Range:

Vacuum to 400 barg