

## PRODUCT DATASHEET

# THERMICULITE® 896

Thermiculite® 896 is a high temperature, chemically resistant sheet sealing material comprising, chemically and thermally exfoliated vermiculite and steatite chemically bonded to a 50 micron 316 stainless steel reinforcing core.

**Thermiculite®**  
innovative. versatile. complete.

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:

Thermiculite® 896 material has found usage where a robust product is required with small land-widths.

- Conformable
- Resilient
- Suitable for high temperature applications
- Excellent gas and liquid sealing characteristics
- Good stress retention
- Excellent low load sealing characteristics
- Suitable for use in high temperature low stress sealing applications
- Chemically resistant
- Very low halogen content coupled with a sulphur free curing system gives excellent resistance to stress corrosion
- Suitable for seawater service or marine environments. This contrasts with products based on exfoliated graphite where galvanic corrosion can occur
- Not susceptible to thermal oxidation.

Maximum service temperature:  
1000°C (1830°F)

Maximum service pressure:  
15 MPa (150 bar; 2175 psi)

TA LUFT approved.

#### Availability:

Thickness range: 1.0mm  
(Others available on request)

Sheet size: 1000 x 380mm

#### Typical Physical Properties:

Nominal Thickness	1.0mm
Facing Density	1.55 gcm <sup>-3</sup>
Laminate Density	1.60 gcm <sup>-3</sup>
ASTM compressibility	40%
ASTM recovery	15%
BS 7531 gas permeability	0.01 mL/min
BS 7531 stress retention @ 300°C	26 MPa
Sulphur content	< 50 ppm
Chloride Ion content	< 50 ppm

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### 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.

Thermiculite® 896 is a laminate comprising chemically and thermally exfoliated vermiculite and steatite reinforced with a chemically bonded 316 stainless steel core.

Under harsh mechanical treatment (e.g. high speed stamping operations or abrasion) 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. 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.

Vermiculite is not combustible.

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