



FLEXITALLIC LIMITED

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**FLEXITALLIC
 Thermiculite™
 896**

PROVISIONAL DATA SHEET

PRODUCT REFERENCE: FLEXITALLIC Thermiculite™ 896

DESCRIPTION: High temperature, ultra-low emission, chemically resistant sheet sealing material comprising, chemically and thermally exfoliated vermiculite and steatite chemically bonded to a flat 316 stainless steel reinforcing core.

SERVICE: Maximum Service Temperature 1000°C (1830°F)
 Maximum Service Pressure 15 MPa (150 bar; 2175 psi)

Thermiculite 896 possesses outstanding gas tightness when tested in accordance with TA-Luft VDI 2440 and is suitable for use in applications where stringent emissions control, especially at elevated temperatures, is of importance. In addition the materials excellent cutting characteristics, robustness and handleability make it suitable for use in applications involving complex and/or fragile gasket geometries.

- PROPERTIES:**
- * TA-Luft Compliant to VDI 2440. Cert. No. 30175002E/FH/17.06.09.
 - * Conformable.
 - * Resilient.
 - * Free from oxidation, suitable for high temperature applications.
 - * Excellent gas and liquid sealing characteristics.
 - * Excellent stress retention.
 - * Excellent low load sealing characteristics.
 - * Suitable for use in high temperature low stress sealing applications.
 - * Chemically resistant.
 - * Low halogen content coupled with a sulphur free curing system resulting in excellent resistance to both galvanic and stress induced corrosion.
 - * Suitable for seawater service or marine environments. This contrasts with products based on exfoliated graphite where galvanic corrosion can occur.

TYPICAL PHYSICAL PROPERTIES:

Nominal Thickness (mm)		1.0
Facing Density	gcm ⁻³	1.70
Laminate Density	gcm ⁻³	2.10
ASTM Compressibility	%	27
ASTM Recovery	%	15
BS 7531 Gas Permeability	mL/min	0.0
BS 7531 Stress Retention @ 300°C	MPa	36
Sulphur Content	ppm	<50 ppm
Chloride Ion Content	ppm	<50 ppm

AVAILABILITY: Thickness range 1.0 thru 2.0mm
 Sheet size 1000 x 381 mm

PDS 478 06/09

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 AND 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.

Flexitallic 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.