



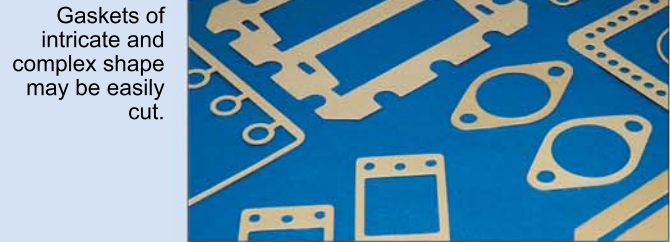
**Thermiculite™ 866**  
**A High Temperature, High Performance**  
**Gasket Material for SOFC Applications**

Thermiculite™ 866 was designed for, and has been proven in, SOFC applications.

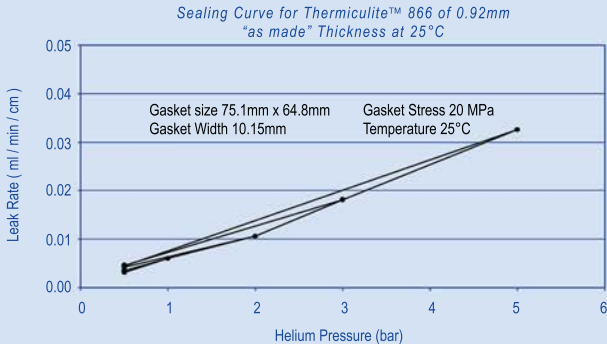
The components of Thermiculite™ 866 ensure that a seal is created and also maintained in service.

The material consists of highly aligned platelets of chemically exfoliated vermiculite that are blended with, and bind together, plates of steatite.

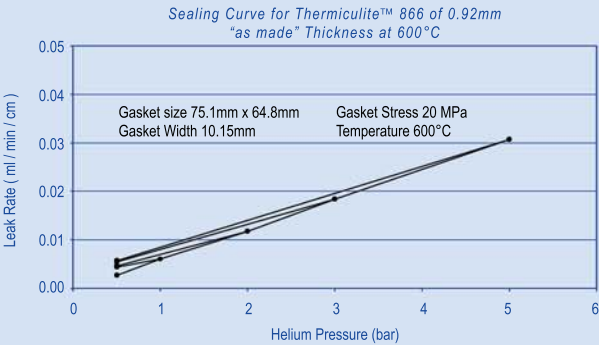
Both of these minerals are very soft, resulting in a compressible and flexible material that is completely free of organic content and produced in a roll form.



Vermiculite and steatite are both highly temperature resistant and, as there is no organic content, there is no burn off at SOFC operational temperatures.



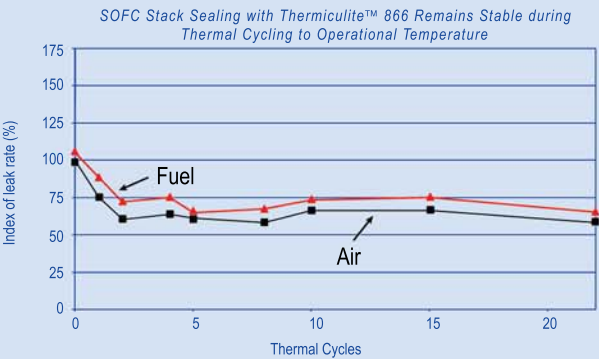
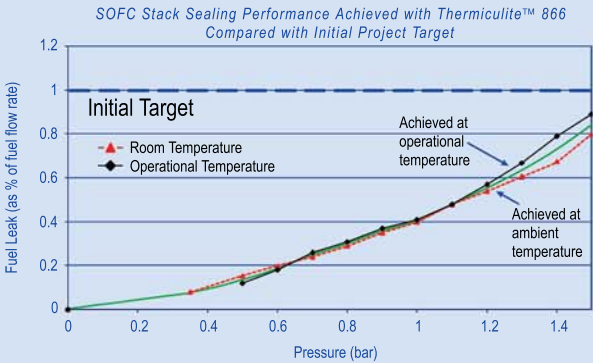
The lack of burn off means that there is no increase in porosity and no additional leakage at elevated temperature. Also, there is no reduction in the gasket thickness at temperature and therefore no resulting relaxation of the bolts.



Note that 600°C represents the highest temperature that the test rig could achieve, the temperature limit of Thermiculite™ 866 is 1050°C.

The seal is therefore stable during cycling between ambient and operational temperatures.

The features and benefits listed above result in excellent service performance as illustrated by the following stack results obtained by a customer and reproduced with their full permission.



To ensure that the best performance is achieved in service, full support will be given in the use of the material, gasket design considerations and stack assembly techniques.

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