



Flexitallic

**INTENSE HEAT.
EXTREME COLD.
AGGRESSIVE CHEMICALS.**

Material Technology That Handles It All.



Thermiculite® 715

innovative. versatile. complete.

For those who demand integrity in their gaskets and desire a complete gasket solution we proudly introduce ...



Thermiculite® 715

Developed as a cost-effective substitute for traditional fiber, graphite, and PTFE sheet products¹ Thermiculite 715 provides both chemical resistance and fire safety in one gasket material.

Leveraging our gasket material knowledge, Flexitallic® engineers developed the revolutionary Thermiculite material over ten years ago. Thermiculite 800 Critical Series gaskets have replaced asbestos and graphite gaskets in the most demanding service applications in the petrochemical markets. Operating temperatures exceeding 1000°F combined with aggressive chemicals have been successfully sealed for extended periods.

Thermiculite 715 extends our material technology with a novel coreless gasket structure that delivers superior temperature and chemical resistance in a fire safe gasket material.

¹ Please consult Flexitallic Engineering for chemical compatibility

* 2008 Frost & Sullivan North American Product Value Leadership of the Year Award Recipient.



Setting New Performance Standards

Discover the Thermiculite 715 Advantage:

- Chemically inert
- Fire safe—passing the API 607 Fire Test
- Non contaminating
- Total freedom from oxidation
- Easy to cut and handle

Material of Choice

Thermiculite 715 fiber will not oxidize and its seating stress ensures good load bearing properties while maintaining a flexibility that facilitates proper installation. Non-contaminating, good chemical resistance, and fire safe all wrapped into one gasket material

Thermiculite® 715

General Chemical Compatibility

Acid	Dilute to strong (*HF)
Caustic	Dilute to strong
Cryogenic	Nitrogen, oxygen
Halogens	Chlorine (*Fluorine)
Monomer	PVC, Styrene
Hydrocarbon	Aliphatic, aromatic, oxygenated, halogenated

*Not recommended

**Thermiculite 800
Critical Service Series**

**PRODUCT
TYPE**

**TEMPERATURE
RANGE**

**PRESSURE
RANGE**

**TYPICAL
USE**



**THERMICULITE®
815 Tanged Sheet**

Thermiculite sheet reinforced with a 0.004" 316 stainless steel tanged core. Available in thicknesses of 1/32", 1/16", and 1/8" in meter by meter (standard) and 60" x 60" sheet. Cut gaskets also available in all shapes and sizes.

Cryogenics to
1800°F / 980°C

Class
150 to 300

Critical service seals, problem applications, high temperatures, aggressive chemicals, oxidizing environments.



**THERMICULITE®
835 Spiral Wound Filler**

Thermiculite filler material for spiral wound gaskets. Wide range of metals available.

Cryogenics to
1800°F / 980°C

Class
150 to 2500

Critical service seals, problem applications, high temperatures, aggressive chemicals, oxidizing environments.



**THERMICULITE®
845 Flexpro™
(kammprofile) Facing**

Thermiculite facing material for kammprofile gaskets. Wide range of metallic core materials available.

Cryogenics to
1800°F / 980°C

Class
150 to 2500

Critical service seals, problem applications, high temperatures, aggressive chemicals, oxidizing environments.



Flexitallic

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Flexitallic

Contact your local Allied Distributor:



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KW208-5K

Material Facts & Findings

● Compatible
 ● Use Caution
 ● Not Compatible

PROPERTY	THERMICULITE 715	PTFE	ARAMID FIBER	CARBON FIBER	GRAPHITE
Chemical Resistance	●	●	●	●	●
Fire Safety	●	●	●	●	●
Oxidation	●	●	●	●	●
Purity/Non-Contaminating	●	●	●	●	●
Gasket Integrity > 500° F	●	●	●	●	●
Saturated Steam	●	●	●	●	●

In a head-to-head comparison with conventional gasket materials Thermiculite 715 consistently out performs in six key operational areas over time.

Physical Properties

Data is based on a 1.5mm (1/16") thickness, unless otherwise stated.

PROPERTY	VALUE
Density	g/cm ³ (lbs/ft ³) 1.8 (112)
ASTM F-36 Compressibility	% 10
ASTM F-36 Recovery	% >45
ASTM F-152 Tensile Strength Cross Grain	MPa (psi) 11 (1595)
BS 7531 Gas Permeability	mL/min <1.0
ASTM F-38 Creep Relaxation (0.8 mm thickness)	% 21
BS 7531 Residual Stress	MPa (psi) 25 (3630)
Design Properties	m 3.2 y 5000psi
AVAILABLE SIZES	
Sheet Sizes	meters (inches) 1.5 x 1.5 (60 x 60)
Sheet Thicknesses	mm (inch) 0.8 – 3.2 (1/32 – 1/8)
PRESSURE CONTAINMENT AND TEMPERATURE	
Maximum Temperature	F°(°C) 850° (454°)
Maximum Pressure (1/32")	psig (bar) 2030 (140 bar)
Pressure x Temperature	psig x °F (bar x °C) see chart below

