

# THERMa-PUR™ Style 4122

THERMa-PUR™ is a proprietary new gasketing material designed for use in high temperature sealing applications. It is produced using an environmentally friendly solvent-free process and combines a unique formulation with a patent-pending fiber core. THERMa-PUR™ is yet another innovative Garlock Sealing Technologies sealing solution that provides more than just temperature resistance.

## VALUE & BENEFITS

- » Extreme Temperature Able to withstand high temperature, whether continuous or in thermal cycling conditions
- » Oxidation Resistance Contains proprietary materials that provide improved weight loss characteristics over other high temperature solutions. (see graph)
- » Hydrophobic & Electrically Insulating Resists water and provides electrical isolation thus reducing the possibility of corrosion between flanges made of dissimilar metals
- » Easy Release from Flanges Does not stick to flanges making removal of gaskets easy and fast
- » Safer Handling Patent-pending fiber core makes gaskets safer to handle when compared to traditional high temperature gaskets with steel cores

## IDEAL FOR

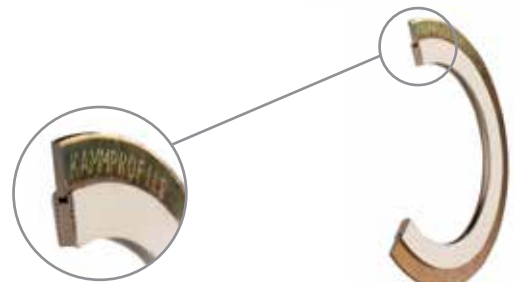
- » Marine and Land-based Exhaust Systems
- » Biomass Gasification Process
- » Oil and Gas Production
- » Mineral and Fertilizer Processing
- » Incineration Process
- » Co-generation Systems
- » Turbochargers Equipment
- » Process Drying Equipment



Cut Gaskets (4122-FC)



Corrugated Metal Gasket  
(4122-CMG)



Kammprofile  
(4122-KAMM)

# THERMa-PUR™ EXTREME TEMPERATURE GASKETING

## TYPICAL PHYSICAL PROPERTIES

<b>Temperature</b>	Continuous max.	+1832°F (1000°C)
<b>Pressure</b> <sup>1</sup>	psig (bar)	4122-FC
		500 (34.5)
		4122-CMG
		1000 (68.9)
		4122-KAMM
		Equal to flange rating
<b>P x T, max.</b> <sup>2</sup>		4122-FC
		150,000 (5,100)
		4122-CMG
		600,000 (21,500)
		4122-KAMM
		Equal to flange rating

### Typical Physical Properties for 4122-FC\*:

#### ASTM Test Method F36

Compressibility, range, %	35-45
Recovery %	18

#### ASTM F38

Creep Relaxation, %	25
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#### ASTM F152

Tensile, w/insert, psi (N/mm <sup>2</sup> )	1,200 (8.3)
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#### ASTM F1315

Density, lbs./ft <sup>3</sup> (grams/cm <sup>3</sup> )	85 (1.36)
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#### ASTM D149

Dielectric Properties, volts/mil.	100
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### NOTES:

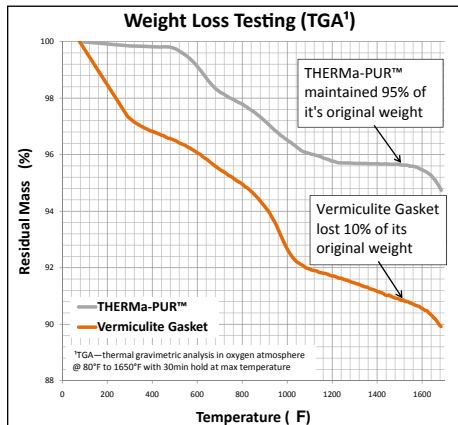
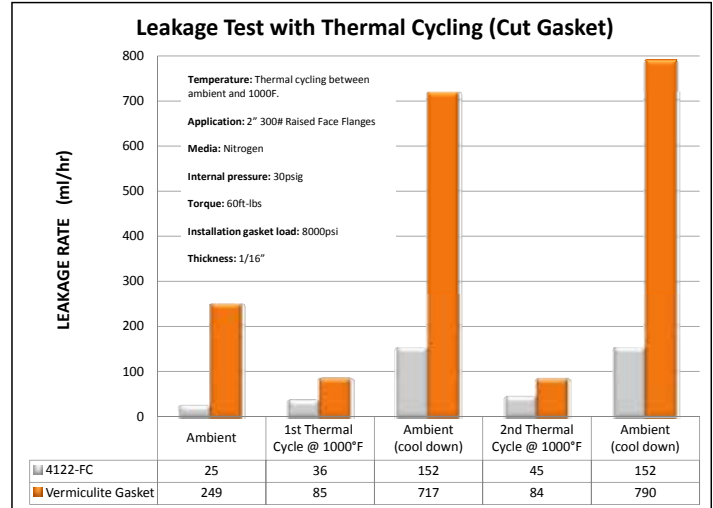
1. Based on ANSI RF flanges at our preferred torque. When approaching maximum pressure, continuous operating temperature, minimum temperature or 50% of maximum PXT, consult Garlock Engineering.

2. P x T = psig x °F (bar x °C)

\* This is a general guide and should not be the sole means of selecting or rejecting this material. ASTM test results in accordance with ASTM F-104; properties based on 1/16" (1.6mm) gasket thickness unless otherwise mentioned.

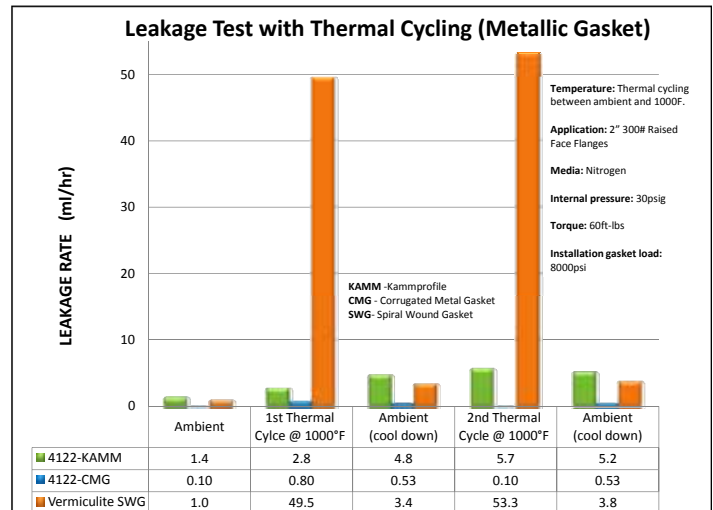
## OUT PERFORMS

THERMa-PUR™ outperformed vermiculite based gaskets in laboratory testing<sup>†</sup>. THERMa-PUR™ showed significantly less leakage even in extreme thermal cycling condition<sup>†</sup>. For test details, please contact Garlock Engineering



## LOW WEIGHT LOSS

THERMa-PUR™ proprietary formulation resists oxidation and has improved weight loss property by almost 2X when compared to other high temp organic based gaskets such as graphite and vermiculite



GSK 3:78

## GARLOCK

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