

# THERMa-PUR™



## Style 4122

(FC; CMG; KAMM)

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

# Garlock

SEALING TECHNOLOGIES®

an EnPro Industries company

### Configurations

THERMa-PUR™ will be available in:



Cut Gaskets  
(4122-FC)

Corrugated Metal Gasket  
(4122-CMG)

Kammprofile  
(4122-KAMM)

### 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

# Typical Physical Properties

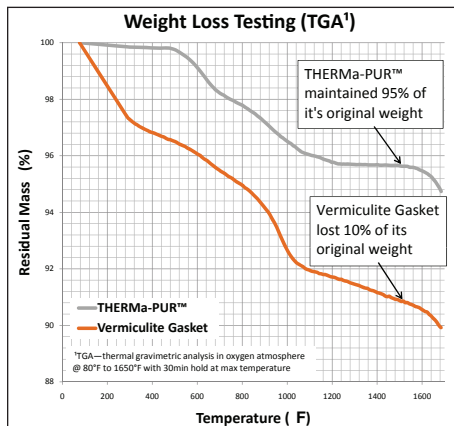
<b>Temperature</b>	Continuous max.	+1832°F (1000°C)
<b>Pressure</b> <sup>1</sup>	psig (bar)	4122-FC 4122-CMG 4122-KAMM
		500 (34.5) 1000 (68.9) Equal to flange rating
<b>P x T, max.</b> <sup>2</sup>	psig x °F (bar x °F)	4122-FC 4122-CMG 4122-KAMM
		150,000 (5,100) 600,000 (21,500) Equal to flange rating
<b>Typical Physical Properties for 4122-FC<sup>3</sup>:</b>		
<b>ASTM Test Method F36</b>		35-45
Compressibility, range, %		18
Recovery %		
<b>ASTM F38</b>		25
Creep Relaxation, %		
<b>ASTM F152</b>		1,500 (10.34)
Tensile, w/insert, psi (N/mm <sup>2</sup> )		
<b>ASTM F1315</b>		95 (1.52)
Density, lbs./ft <sup>3</sup> (grams/cm <sup>3</sup> )		
<b>ASTM D149</b>		100
Dielectric Properties, volts/mil.		

## Notes:

1. Based on ANSI RF flanges at our preferred torque. When approaching maximum pressure, continuous operating temperature, minimum temperature or 50% of maximum P x T, 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.

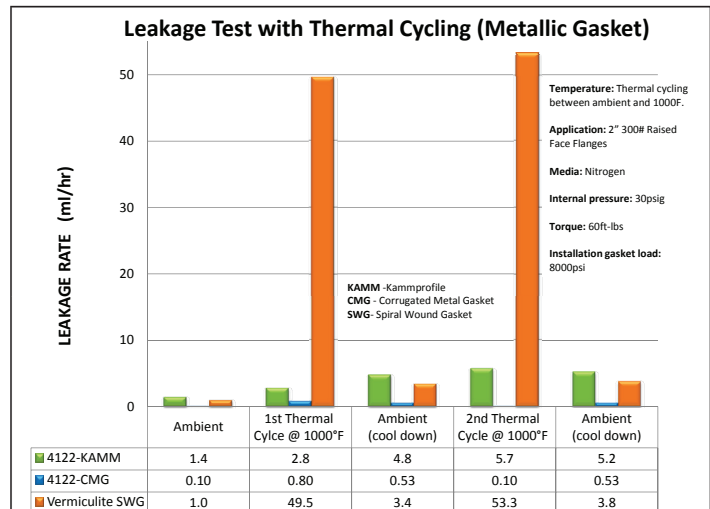
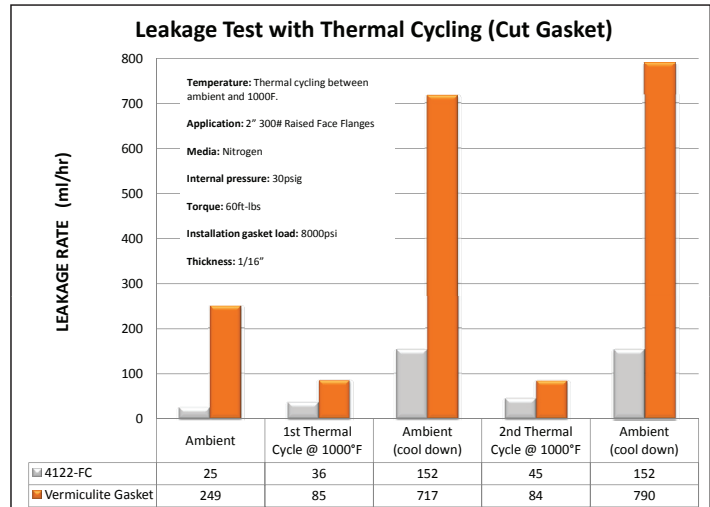


## Low Weight Loss

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

## Out Performs

THERMa-PUR™ out performed 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



## AUTHORIZED REPRESENTATIVE

2008 RECIPIENT OF ENVIRONMENTAL PROTECTION AGENCY'S



## WARNING:

Properties/applications shown throughout this brochure are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult Garlock. Failure to select the proper sealing products could result in property damage and/or serious personal injury.

Performance data published in this brochure has been developed from field testing, customer field reports and/or in-house testing.

While the utmost care has been used in compiling this brochure, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues. Subject to change without notice.

Garlock Sealing Technologies, LLC is a registered trademark for packings, seals, gaskets, and other products of Garlock.

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