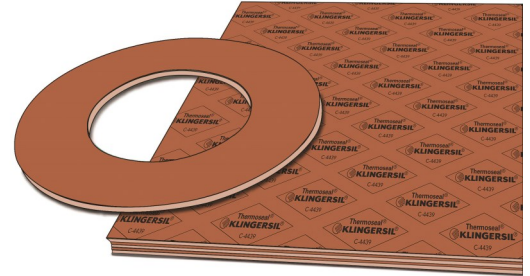


# KLINGERSIL® C-4439

High performance steam sheet with metal reinforcement

KLINGERSIL® C-4439 is an excellent high performance material for use in high temperature and high stress applications. The expanded metal reinforcement is a galvanized low carbon steel insert which makes this material suitable when vibrations are present.

This material is manufactured with a combination of fiberglass and aramid and inorganic fibers reinforced with a nitrile binder.



## TYPICAL VALUES REFER TO 1/16" THICK MATERIAL UNLESS NOTED

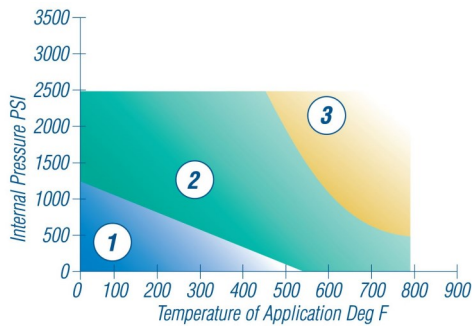
Creep relaxation ASTM F38B (1/32")	20 %
Compressibility ASTM F36J	6 - 12 %
Recovery ASTM F36J	50 % minimum
KLINGER Hot Compression Test	
Thickness Decrease 73°F (23°C)	10 % initial
Thickness Decrease 572°F (300°C)	6 % additional
Weight Increase ASTM F146 after immersion in	
Fuel B, 5h/73°F (23°C)	9 % maximum
Thickness Increase ASTM F146 after immersion in	
ASTM Oil IRM 901, 5h/300°F (149°C)	0 - 5 %
ASTM Oil IRM 903, 5h/300°F (149°C)	0 - 5 %
ASTM Fuel A, 5h/73°F (23°C)	0 - 5 %
ASTM Fuel B, 5h/73°F (23°C)	5 - 10 %
Dielectric Strength ASTM D149-95a	10 kV/mm
Density ASTM F1315	131 lb/ft <sup>3</sup> (2.1 g/cc <sup>3</sup> )
Leachable Chloride Content FSA Method	150 ppm
ASTM F104 Line Call Out	F712112B3E12K6M8
Color	Red

## KLINGERSIL® C-4439

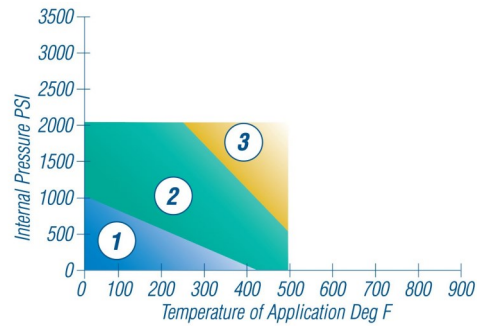
The pressure/temperature graphs shown are the most current method of determining the suitability of a gasket material in a known environment. However, chemical compatibility must also be considered.

pT diagram for thickness 1/16”:

### LIQUIDS



### GASES & STEAM



In area ① the gasket material is suitable using common installation practices subject to chemical compatibility.

In area ② appropriate measures are necessary for installation of the gasket to ensure maximum performance. Please call or refer to KLINGERexpert for assistance.

In area ③ do not install gaskets in these applications without first referring to KLINGERexpert or contacting KLINGER’s technical support service.

The ability of a gasket to make and maintain a seal depends not only on the style and quality of the gasket material, but also on medium being sealed, the flange design, the amount of pressure applied to the gasket by the bolts and how the gasket is assembled onto the flanges and tightened. These factors are beyond the manufacturer’s control.

**KLINGER Thermoseal**

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