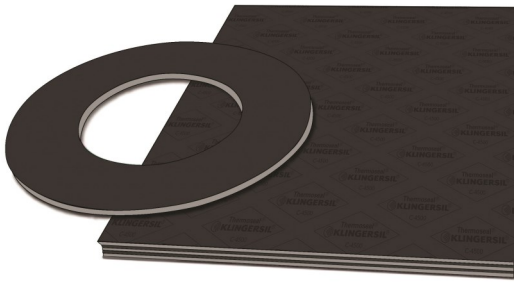
# KLINGERSIL® C-4500

Superior performance gasket material suitable for the chemical industry

KLINGERSIL® C-4500 is a premium grade, high pressure gasket material designed for use in high temperature alkaline media and superheated steam. C-4500 is a superior performance material suitable in the pulp and paper industry and chemical industry.

This material is manufactured with carbon fibers and special heat-resistant additives and reinforced with a nitrile binder.



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

| | |
|---|---|
| Creep relaxation **ASTM F38B** (1/32") | 20 % |
| Sealability **ASTM F37A** (1/32") | < 0.3 ml/hr |
| Gas Permeability **DIN 3535/6** | < 1.0 ml/min |
| Compressibility **ASTM F36J** | 8 - 14 % |
| Recovery **ASTM F36J** | 50 % minimum |
| KLINGER Hot Compression Test | |
| Thickness Decrease 73°F (23°C) | 12 % initial |
| Thickness Decrease 572°F (300°C) | 10 % additional |
| Weight Increase **ASTM F146** after immersion in | |
| Fuel B, 5h/73°F (23°C) | 10 % 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 - 3 % |
| ASTM Fuel A, 5h/73°F (23°C) | 0 - 5 % |
| ASTM Fuel B, 5h/73°F (23°C) | 0 - 5 % |
| Dielectric Strength **ASTM D149-95a** | 1.5 kV/mm |
| Density **ASTM F1315** | 87 lb/ft$^3$ (1.4 g/cc$^3$) |
| Leachable Chloride Content **FSA Method** | 200 ppm |
| **ASTM F104** Line Call Out | F712122B3E11K6M5 |
| Color | Black |

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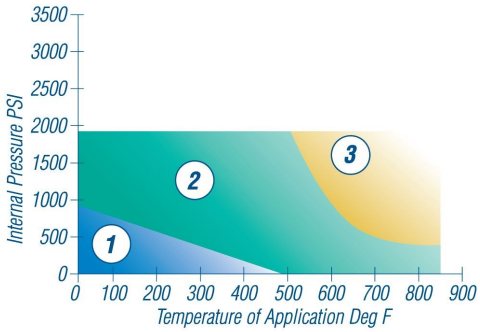
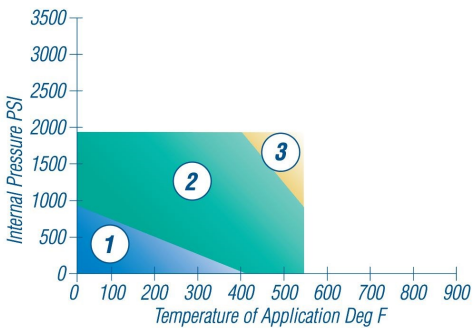
The pressure/temperature graphs shown are the most current method of determining the suitability of a gasket material in a known environment. However, chemical compatibility must also be considered.

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**

2350 Campbell Road, Sidney, Ohio 45365
Tel: +1 937 498 2222

3803 S. Sam Houston Parkway W., Houston, Texas 77053
Tel: +1 713 997 8111



info@klinger-thermoseal.com www.klinger-thermoseal.com