



KLINGERSil C-4500

Top quality Klingersil grade based on carbon fibre with a nitrile rubber binder. A premium quality sealing material with outstanding resistance to alkaline media and steam.

The Klinger group has been recognised as the market leader in gaskets and sealing for over a century. Our research and development laboratories have investigated over 250 different fibre forms in the search for asbestos free alternatives. The search has resulted in a range of high quality and high performance asbestos free materials that have been proven in service

General Properties

- Good resistance to steam
- Good resistance to alkaline applications
- Excellent load bearing characteristics
- Good creep resistance
- Good resistance to oils, fuels, hydrocarbons
- 3xA anti-stick finish on both sides

Tests and Certifications

- BS 7531 Grade X
- Firesafe API 6 FA, HTB
- DIN-DVGW
- BAM U W28 for use with oxygen 100 bar / 85°C
- KTW C54a/94/Stf

Availability

- Sheetting (m): 2.0 x 1.5*, 4.0 x 1.5, 1.5 x 1.0
- Thickness (mm): 0.4, 0.5, 0.75, 1.0, 1.5, 2.0, 3.0

* - Denotes standard sheet size

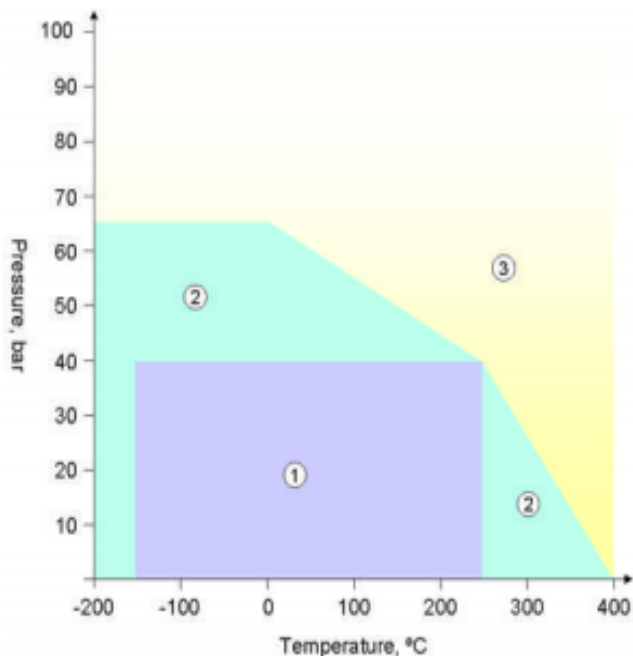
Also available with re-inforcements:
KLINGERSil C-4509, expanded mild steel



BS EN 9100:2003, ISO 9001:2008
Certificate no: FM 10571



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Application Guidelines

1. Usually satisfactory without reference.
2. Usually satisfactory, but suggest you refer to Klinger for advice
3. Caution: May be suitable but essential that you refer to Klinger for advice.

Chemical compatibility must be considered in all cases.

Typical Specifications

Compressibility ASTM F 36 A		12%
Recovery ASTM F 36 A		60%
Stress relaxation DIN 52913	50MPa, 16h/300°C	32MPa
Stress relaxation BS 7531		30MPa
Klinger cold/hot compression	Thickness decrease 23°C	10%
50MPa	decrease at 300°C	15%
Gas leakage according to DIN 3535/6		<1.0ml/min
Chlorides (soluble)		150ppm
Thickness increase after fluid	Oil nr.3:5h/150°C	3%
Immersion ASTM F 146	Fuel B:5h/23°C	5%
Density		1.4g/cm ³
Average surface resistance	R _{OA} (xE4)	5.7 Ω
Average specific volume resistance	ρ _D (xE4)	7.5 Ω cm
Average power factor		<0.1 kV/mm
Average dielectric strength	1kHz, ca. 3mm thick	0.147 tan δ
Average dielectric constant	1kHz, ca.3mm thick	9.7 ε _r
Heat conductivity		0.20W/mK