



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







aerospace sector certification scheme

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

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

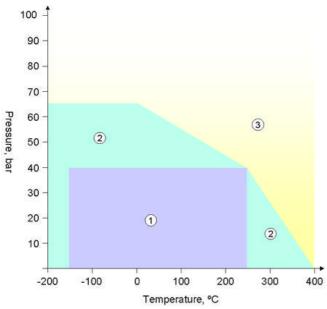
Availability

- Sheeting (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



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Application Guidelines

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

Chemical compatibility must be considered in all cases.

Typical Specifications

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Compressibility ASTM F 36 A Recovery ASTM F 36 A		12% 60%
Stress relaxation DIN 52913 Stress relaxation BS 7531	50MPa, 16h/300 ⁰ C	32MPa 30MPa
Klinger cold/hot compression 50MPa Gas leakage according to DIN 3535/6 Chlorides (soluble)	Thickness decrease 23°C decrease at 300°C	10% 15% <1.0ml/min 150ppm
Thickness increase after fluid Immersion ASTM F 146 Density	Oil nr.3:5h/150°C Fuel B:5h/23°C	3% 5% 1.4g/cm ³
Average surface resistance Average specific volume resistance Average power factor Average dielectric strength Average dielectric constant Heat conductivity	R _{OA} (xE4) ρ _D (xE4) 1kHz,ca. 3mm thick 1kHz,ca.3mm thick	5.7Ω 7.5Ω cm <0.1 kV/mm 0.147 tan δ $9.7~arepsilon r$ $0.20W/mK$
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