



KLINGERsil C-4500

Top quality Klingsil 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-DGVW 92.02 e 052
- BAM U W28 for use with oxygen 100 bar / 85°C
- KTW C54a/94/Stf

Availability

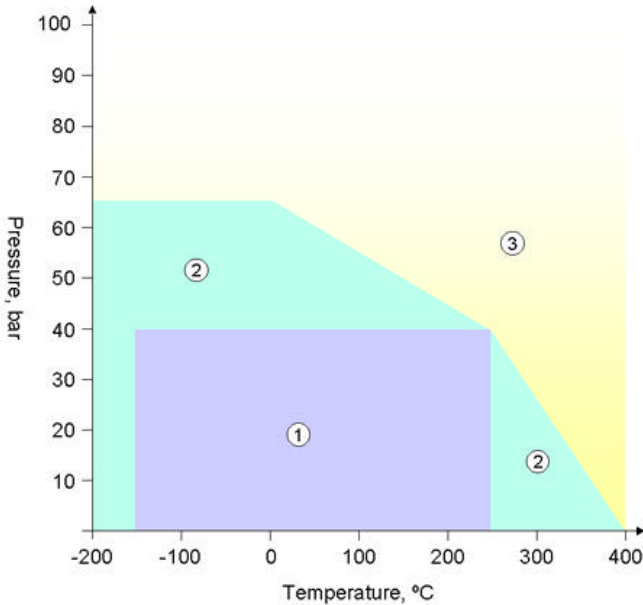
- Sheeting (m): 2.0 x 1.5*, 4.0 x 1.5, 1.5 x 1.0
- Thickness (mm): 0.4, 0.5, 0.75, 1.0, 1.5, 2.0, 3.0

* - Denotes standard sheet size

Also available with re-enforcements:
KLINGERsil C-4509, expanded mild steel



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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 | r _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 |

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