



**WILLIAM JOHNSTON
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KLINGERSil C-4400

High quality non-asbestos grade based on aramid fibre with nitrile rubber binder. A general purpose material for many industrial-sealing applications.

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 oils, fuels, hydrocarbons
- Good creep resistance
- Low leakage
- Very successful in internal combustion engine applications
- 3xA anti-stick finish on both sides

Tests and Certifications

- BS 7531 Grade Y
- BS F 130 Type A
- Firesafe HTB 90.0223.39.0
- DIN-DVGW
- BAM U W28 for use with oxygen 100^oC / 80 Bar
- KTW A 528/88/G
- SVGW 89-053-7
- Germanischer Lloyd 98 952 – 97 HH
- TA-Luft (Clean Air) certificate acc. VDI 2440

Availability

- **Sheeting (m):** 2.0 x 1.5*, 4.0 x 1.5, 1.5 x 1.0
- **Thickness (mm):** 0.25, 0.4, 0.5, 0.75, 1.0, 1.5, 2.0, 2.5, 3.0

* - Denotes standard sheet size

Also available with re-inforcements:
KLINGERSil C-4408, mild steel mesh
KLINGERSil C-4409, expanded mild steel

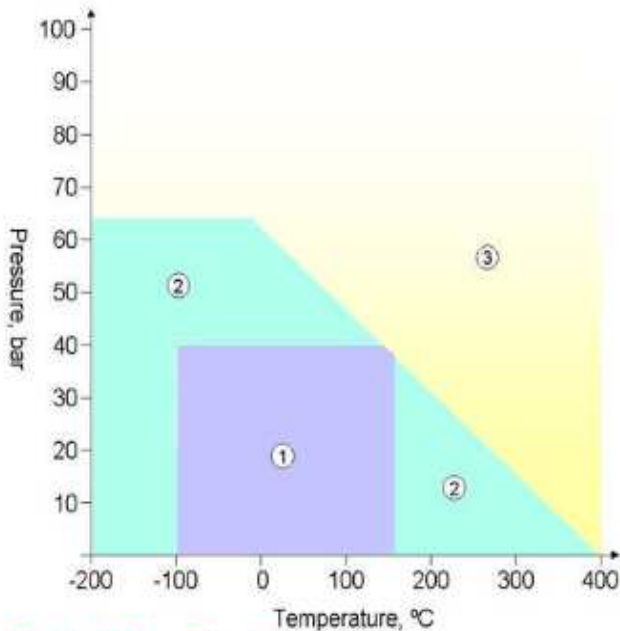


aerospace
sector
certification
scheme

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		11%
Recovery ASTM F 36 A		55%
Stress relaxation DIN 52913	50MPa, 16h/175°C	32MPa
	50MPa, 16h/300°C	25MPa
Stress relaxation BS 7531		23MPa
Klinger cold/hot compression, 50MPa	Thickness decrease 23°C	10%
	Thickness decrease at 300°C	20%
Gas leakage according to DIN 3535/6		0.02ml/min
Thickness increase after fluid immersion ASTM F 146	Oil no.3:5h/150°C	3%
	Fuel B:5h/23°C	5%
Chlorides (soluble)		150ppm
Density		1.6g/cm ³
Average surface resistance	R _{OA}	1.4x10E12 Ω
Average specific volume resistance	ρ _D	1.2x10E12 Ω cm
Average dielectric strength		21.6 kV/mm
Average power factor	1kHz, ca. 2mm thick	0.075 tan δ
Average dielectric constant	1kHz, ca. 2mm thick	7.7 ε _r
Thermal conductivity		0.4-0.42W/mK

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Disclaimer

Please note, failure to select the correct materials or products we supply ("the Products") may result in damage to plant, equipment or property. In some instances, it may cause death or personal injury. We are not designers and do not give advice about design related matters concerning the Products. We can help and assist with the technical specifications for the Products. In specific applications, particularly where critical conditions exist, we will try to assist you within the limitations of the services that we offer. All information supplied by us is intended as technical co-operation outlining the specifications of the different Products which we supply. To the extent permitted in law, no warranty is given in respect of any information supplied by us. The customer must satisfy themselves as to the suitability of the Products for their intended application and use. The correct fitting of Products is the responsibility of the customer. Your statutory rights remain unaffected. Save in respect of death, personal injury or fraud, our entire liability to you, however arising from the supply of Products shall be limited to the £10M indemnity amount provided by our insurers.