



# 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
- » BAM-tested
- » DIN-DVGW
- » DIN-DVGW W 270
- » Elastomer-Guideline
- » ÖVGW Reg.No. G 2.143
- » DNV GL
- » TA-Luft (Clean air)
- » Fire-Safe acc. to DIN EN ISO 10497

## AVAILABILITY

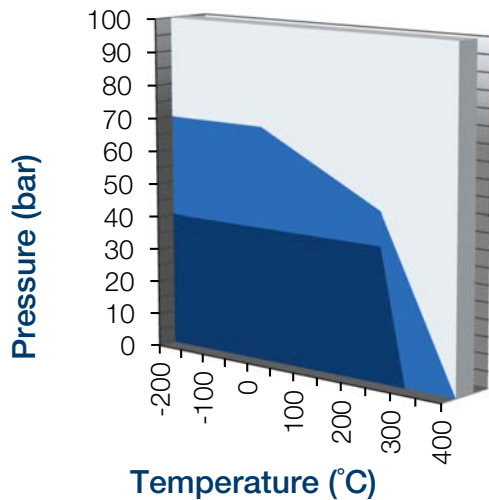
- » Sheeting (m): 2.0 x 1.5\*, 4.0 x 1.5
- » Thickness (mm): 0.4, 0.5, 0.75, 1.0, 1.5, 2.0, 3.0

\* - Denotes standard sheet size

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

## APPLICATION GUIDELINES

# KLINGERSIL C-4500



- Caution: May be suitable but essential that you refer to Klinger for advice
- Usually Satisfactory, but suggest you refer to Klinger for advice
- Usually Satisfactory to Use Without Reference

NOTE: Chemical compatibility must be considered in all cases

## TYPICAL SPECIFICATIONS

(Typical values for 2.0mm thick material)

PROPERTIES	CONDITIONS	VALUES
Compressibility ASTM F 36 J		11 %
Recovery ASTM F 36 J		60 %
Stress relaxation DIN 52913	50MPa, 16h/175°C	38MPa
	50MPa, 16h/300°C	30MPa
Stress relaxation BS 7531	40MPa, 16h/300°C	30MPa
Klinger cold/hot compression 50MPa	Thickness decrease 23°C	10 %
	decrease at 300°C	15 %
Tightness	DIN 28090-2	0.05 mg/s.m
Thickness increase after fluid immersion ASTM F 146	Oil IRM 903 5h/150°C	3 %
	Fuel B:5h/23°C	5 %
Density		1.6g/cm <sup>3</sup>
Average surface resistance	P <sub>o</sub>	8.0x10 <sup>4</sup> Ω
Heat conductivity	λ	0.43W/mK

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FM 602916

FM 10571

OHS 570166

EMS 570165