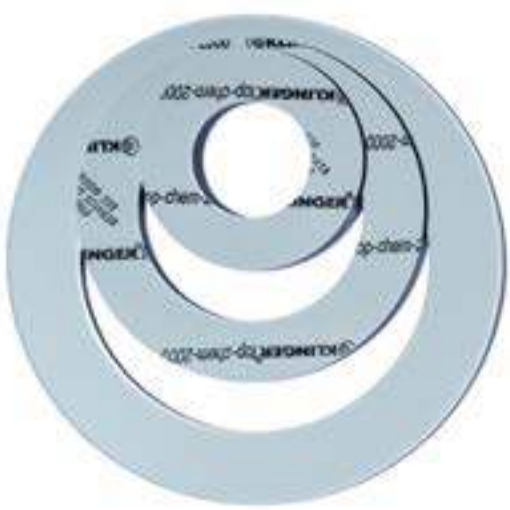
KLINGER®top-chem 2000

KLINGER®top-chem 2000 is a universal heavy-duty gasket, which offers an exceptional performance in applications with high mechanical requirements at high temperatures. The only PTFE gasket with a Fire-safe-certificate.

PTFE gasket filled with SiC (Silicon carbide).
Excellent resistance in strongly acidic and alkaline applications as well as to steam and oxygen. Suitable for an extremely wide range of applications in the chemical and petrochemical industry, as well as in the ship building industry for the transport of chemicals.



Key features:

» Mechanically stable
» Resistant to creep and cold flow
» Consistent material composition

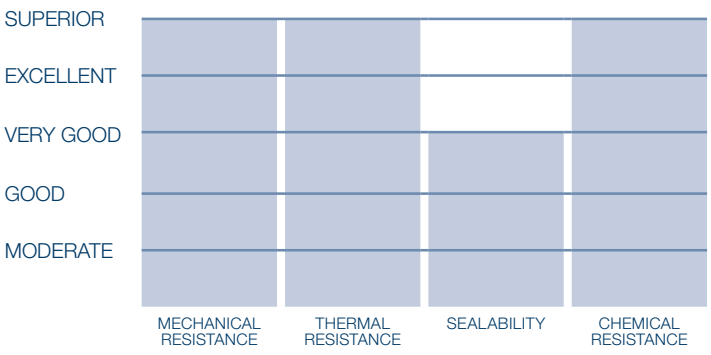
Benefits:

» Resists high surface pressure also at elevated temperatures
» High retention of the bolt load
» Superior chemical resistance
» No ageing of the material

Certificates and approvals:

» BAM-tested
» DIN-DVGW
» DIN-DVGW W 270
» KTW-Guideline
» German Lloyd
» TA-Luft (Clean air)
» Fire-Safe acc. DIN EN ISO 10497
» FDA conformity (for details please see our website)
» Regulation (EU) No. 1935/2004 (incl. 10/2011)

Properties: referring to KLINGER®top-chem product range



Industries:

INDUSTRY | CHEMICAL | OIL & GAS | ENERGY | INFRASTRUCTURE | PULP & PAPER | TRANSPORT | FOOD & BEVERAGES | PHARMA

Typical technical data for thickness 2.0 mm:

Compressibility ASTM F 36 M		%	4
Recovery ASTM F 36 M		%	50
Stress relaxation DIN 52913	30 MPa, 16 h/150°C	MPa	28
	50 MPa, 16 h/300°C	MPa	35
KLINGER cold/hot compression	thickness decrease at 23°C	%	5
50 MPa	thickness decrease at 250°C	%	11
Tightness	DIN 28090-2	mg/s x m	0.08
Specific leakrate λ	VDI 2440	mbar x l/s x m	4.46E-06
Thickness/weight increase	H_2SO_4, 100%: 18 h/23°C	%	1/1
	HNO_3, 100%: 18 h/23°C	%	1/2
	NaOH, 33%: 72 h/110°C	%	1/3
Density		g/cm³	2.5
Average surface resistance	ρO	Ω	6.9x10E12
Average specific volume resistance	ρD	Ω cm	2.2x10E12
Average dielectric strength	E_d	kV/mm	3.6
Average power factor	50 Hz	tan δ	0.166
Average dielectric coefficient	50 Hz	εr	10.6
Thermal conductivity	λ	W/mK	0.60
ASME-Code sealing factors			
for gasket thickness 1.0 mm	tightness class 0.1mg/s x m	MPa	y 12
			m 2.8
for gasket thickness 2.0 mm	tightness class 0.1mg/s x m	MPa	y 15
			m 3.2
for gasket thickness 3.0 mm	tightness class 0.1mg/s x m	MPa	y 18
			m 3.8

Dimensions of the standard sheets:

Sizes:

1500 x 1500 mm

Thicknesses:

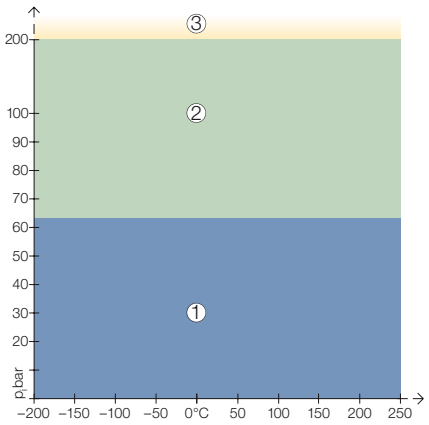
1.0 mm, 1.5 mm, 2.0 mm, 3.0 mm

Tolerances:

Thickness acc. DIN 28091-1
Length ± 50 mm, width ± 50 mm

Other thicknesses, sizes and tolerances on request.

pT diagram for thickness 2.0 mm:



① In area one, the gasket material is normally suitable subject to chemical compatibility.

② In area two, the gasket material may be suitable but a technical evaluation is recommended.

③ In area three, do not install the gasket without a technical evaluation.

Always refer to the chemical resistance of the gasket to the media.

Certified acc. to DIN EN ISO 9001:2008 Subject to technical alterations. Status: March 2016

Rich. Klinger Dichtungstechnik GmbH & Co KG » Am Kanal 8-10 » A-2352 Gumpoldskirchen, Austria
Tel +43 (0) 2252/62599-137 » Fax +43 (0) 2252/62599-296 » e-mail: marketing@klinger.co.at
www.klinger.co.at