

KLINGER®top-chem 2005

KLINGER®top-chem 2005 offers an outstanding performance and a high chemical resistance in strongly acidic applications.

PTFE filled with inorganic fillers.
Suitable for a wide range of applications in the chemical industry. Economical alternative at the usage of filled PTFE gaskets.



Key features:

- » Mainly for use in acids
- » Consistent material composition
- » Resistant to cold flow

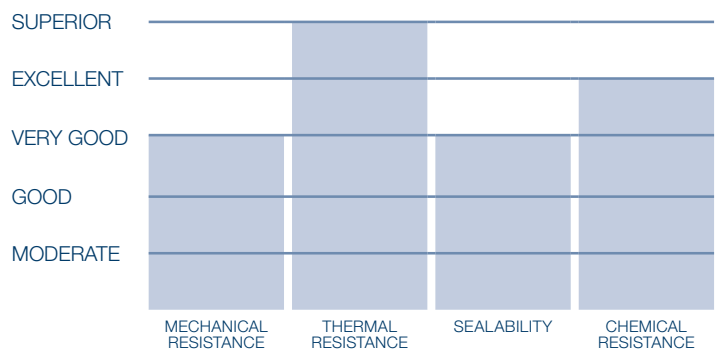
Benefits:

- » Excellent chemical resistance
- » Very good mechanical properties at medium temperatures
- » No ageing of the material

Certificates and approvals:

- » BAM-tested
- » DIN-DVGW
- » WRAS approval
- » KTW-Guideline
- » German Lloyd
- » TA-Luft (Clean air)
- » FDA conformity (components of KLINGER®topchem 2005 comply with the FDA requirements)
- » Regulation (EU) No. 1935/2004 (incl. 10/2011)

Properties: referring to KLINGER®top-chem product range



Industries:



Typical technical data for thickness 2.0 mm:

Compressibility ASTM F 36 M		%	4
Recovery ASTM F 36 M		%	40
Stress relaxation DIN 52913	30 MPa, 16 h/150°C	MPa	25
KLINGER cold/hot compression	thickness decrease at 23°C	%	5
50 MPa	thickness decrease at 250°C	%	33
Tightness	DIN 28090-2	mg/s x m	0.02
Specific leakrate λ	VDI 2440	mbar x l/s x m	8.75E-07
Thickness/weight increase	H ₂ SO ₄ , 100%: 18 h/23°C	%	1/1
	HNO ₃ , 100%: 18 h/23°C	%	1/2
	NaOH, 33%: 72 h/110°C	%	–
Density		g/cm ³	2.2
Average surface resistance	ρO	Ω	3.1x10E13
Average specific volume resistance	ρD	Ω cm	3.2x10E13
Average dielectric strength	E_d	kV/mm	23.8
Average power factor	50 Hz	tan δ	0.071
Average dielectric coefficient	50 Hz	ϵ_r	3.2
Thermal conductivity	λ	W/mK	0.42
ASME-Code sealing factors			
for gasket thickness 1.0 mm	tightness class 0.1mg/s x m	MPa	y 10 m 2.2
for gasket thickness 2.0 mm	tightness class 0.1mg/s x m	MPa	y 12 m 2.8
for gasket thickness 3.0 mm	tightness class 0.1mg/s x m	MPa	y 12 m 3.8

Dimensions of the standard sheets:

Sizes:

1500 x 1500 mm

Thicknesses:

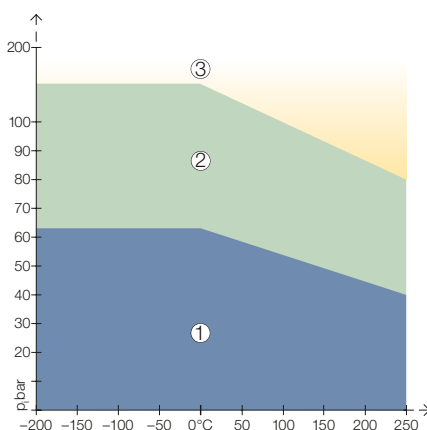
1.0 mm, 1.5 mm, 2.0 mm, 3.0 mm

Tolerances:

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

