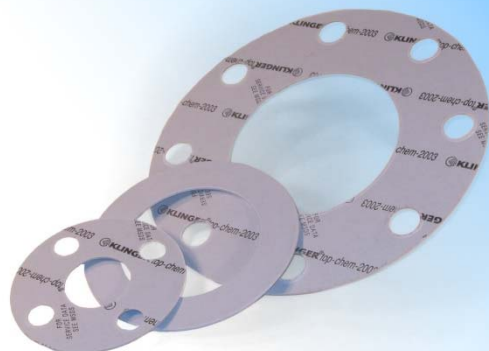




# KLINGER TOP-CHEM 2003



Highly compressible, modified PTFE material with outstanding chemical resistance. Ideal for applications where bolt load is limited or where flanges are delicate e.g. glass-lined equipment.

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

- » Excellent sealing characteristics at low to medium temperatures and pressures
- » Ideal for aggressive chemicals
- » Excellent gas tightness properties
- » Suitable for glass-lined and enamel flanges

## TESTS AND CERTIFICATIONS

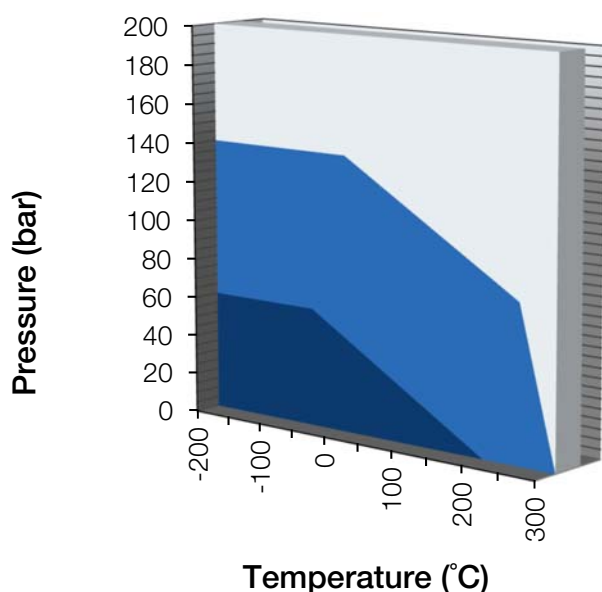
- » KTW-Guideline
- » DIN DVGW
- » DIN DVGW W 270
- » FDA Conformity
- » BAM Approval
- » TA Luft (Clean Air)
- » DNV GL
- » Regulation (EU) No. 1935/2004 (incl. 10/2011)

## AVAILABILITY

- » Sheet (m): 1.5 x 1.5 \*
- » Thickness (mm): 1.5, 2.0, 3.0

\* Can be welded to form gaskets larger than sheet size

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- 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 based on 2.0mm thickness material)

PROPERTIES	TEST CONDITIONS	VALUES
Compressibility ASTM F 36 J		18%
Recovery ASTM F 36 J		35%
Stress relaxation DIN 52913	30MPa, 16h/150°C	13 MPa
Klinger cold/hot compression (25MPa)	Thickness decrease at 23°C Thickness decrease at 250°C	10% 39%
Tightness	DIN 28090-2	0.01 mg/s.m
Specific leakrate	VDI 2440	3.29 <sup>-06</sup> mbar.l/s.m
Thickness/weight increase after fluid Immersion ASTM F 146	H <sub>2</sub> SO <sub>4</sub> 100%:18h/23°C HNO <sub>3</sub> 100%, 18h/23°C NaOH 33%, 72h/110°C	1/1 0/5 1/5
Thermal conductivity		0.18 W/mK
Density		1.7 g/cm <sup>3</sup>

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