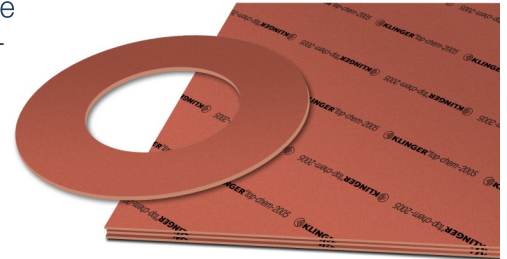


# KLINGER®top-chem 2005

High chemical resistance in strong acidic applications

KLINGER®top-chem 2005 offers an outstanding performance and a high chemical resistance in strong acidic applications. The material is suitable for a wide range of applications in the chemical industry. KLINGER®top-chem 2005 is resistant to cold flow and has very good mechanical properties at medium temperatures. This material also meets FDA conformity.

Basis: PTFE filled gasket material with inorganic fillers.



## TYPICAL VALUES REFER TO 2.0 MM THICK MATERIAL UNLESS NOTED

Compressibility ASTM F36 M	4 %
Recovery ASTM F36 M	40 %
Stress relaxation DIN 52913 30 MPa, 16 h/150°C	25 MPa
KLINGER Cold/Hot Compression Test 50 MPa Thickness Decrease 73°F (23°C) Thickness Decrease 500°F (260°C)	5 % 35 %
Tightness DIN 28090-2	0.02 mg/s x m
Thickness/Weight Increase H <sub>2</sub> SO <sub>4</sub> , 100%, 18 h/23°C HNO <sub>3</sub> , 100%, 18 h/23°C	1 / 1 % 1 / 2 %
Density	2.2 g/cm <sup>3</sup>
Average surface resistance ρO	3.1 x 10E13 Ω
Average specific volume resistance ρD	3.2 x 10E13 Ω cm
Average dielectric strength E <sub>d</sub>	23.8 kV/mm
Average power factor 50 Hz	0.071 tanδ
Average dielectric coefficient 50 Hz	3.2 εr
Thermal conductivity λ	0.42 W/mK
Color	Orange

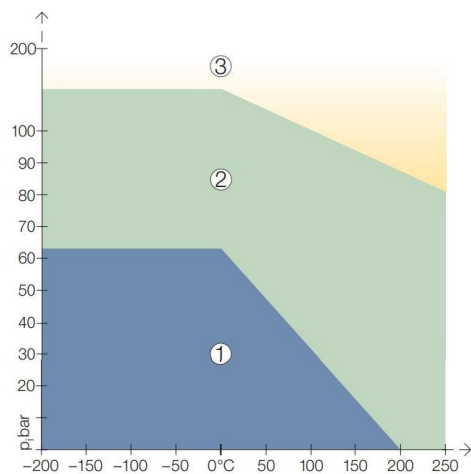
## KLINGER®top-chem 2005

- CERTIFICATES & APPROVALS**
- » BAM tested
  - » DIN-DVGW
  - » WRAS approval
  - » KTW-Guideline
  - » DNV GL
  - » TA-Luft (Clean air)
  - » FDA conformity
  - » Regulation (EU) No. 1935/2004

- KEY FEATURES & BENEFITS**
- » Mainly for use in acids
  - » Consistent material composition
  - » Resistant to cold flow
  - » No ageing of the material

The pressure/temperature graphs shown are the most current method of determining the suitability of a gasket material in a known environment. However, chemical compatibility must also be considered.

pT diagram for thickness 2.0 mm:



In area ① the gasket material is suitable using common installation practices subject to chemical compatibility.

In area ② appropriate measures are necessary for installation of the gasket to ensure maximum performance. Please call or refer to KLINGERexpert for assistance.

In area ③ do not install gaskets in these applications without first referring to KLINGERexpert or contacting KLINGER's technical support service.

The ability of a gasket to make and maintain a seal depends not only on the style and quality of the gasket material, but also on medium being sealed, the flange design, the amount of pressure applied to the gasket by the bolts and how the gasket is assembled onto the flanges and tightened. These factors are beyond the manufacturer's control.

**KLINGER Thermoseal**

2350 Campbell Road, Sidney, Ohio 45365

Tel: +1 937 498 2222