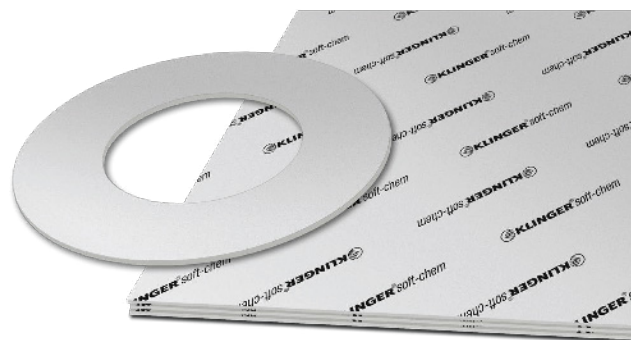


KLINGER SOFT-CHEM



DESCRIPTION

Manufactured from multi-directional expanded PTFE, this high-grade gasket material guarantees excellent corrosion resistance coupled with superior sealing capabilities. Bringing sealing technology to the next level, it represents the best choice for operating conditions up to 260 °C.

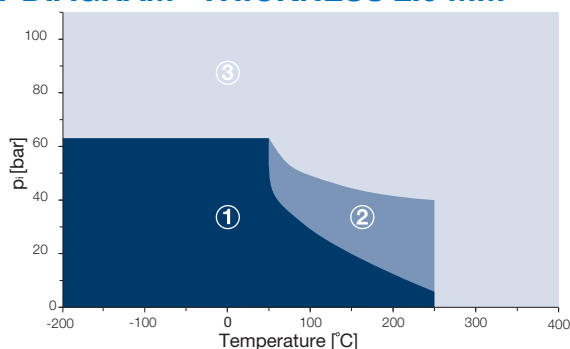


ITEM		DATA
Basic composition		Multi-directional expanded PTFE.
Sheet size		1500 x 1500 mm
Colour		White
Thickness		1.0 mm, 1.5 mm, 2.0 mm, 3.0 mm
Certificates		TA-Luft (Clean air), Conforms to the regulation (EU), No. 1935/2004 (incl. 10/2011), FDA conformity (components of KLINGER®soft-chem comply with the FDA requirements)
Tolerances	Thickness	- 10 % / + 20 %
	Width	± 50 mm
	Length	± 50 mm
Industries		General industry, Chemical, Oil & Gas, Energy, Pulp & Paper, Marine, Infrastructure, Automotive, Food & Beverage, Pharma

TECHNICAL DATA Typical values for a thickness of 2.0 mm

STRESS RELAXATION DIN 52913	30 MPa, 16 h/150°C	MPa	15
KLINGER COLD/HOT COMPRESSION 25 MPA	thickness decrease at 23°C	%	35
	thickness decrease at 150°C	%	30
TIGHTNESS	DIN 28090-2	mg/(s x m)	0.01
COMPRESSIBILITY	ASTM F36M	%	55
RECOVERY	ASTM F36M	%	15
DENSITY		g/cm3	0.9

P-T DIAGRAM- THICKNESS 2.0 MM



The area of the P-T diagram

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 technical evaluation.

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

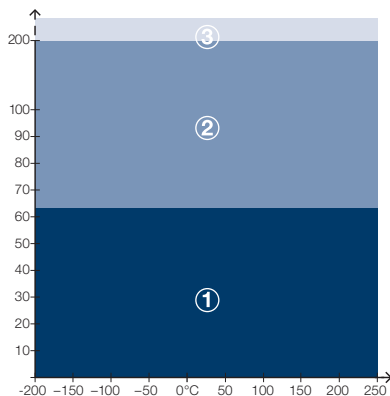
CHEMICAL RESISTANCE CHART

Simplified overview of the chemical resistance depending on the most important groups of raw materials:

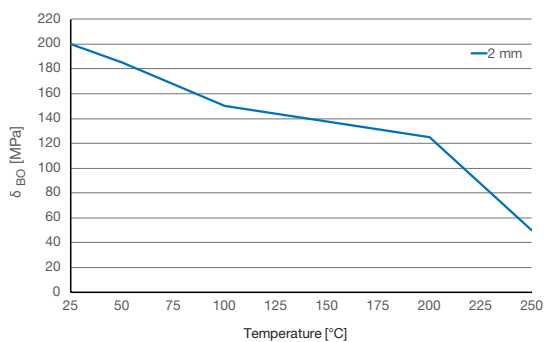
A: small or no attack **B:** weak to moderate attack **C:** strong attack

Paraffinic hydrocarbon	Motor fuel	Aromates	Chlorinated hydrocarbon fluids	Motor oil	Mineral lubricants	Alcohol	Ketone	Ester	Water	Acid (diluted)	Base (diluted)
A	A	A	A	A	A	A	A	A	A	A	A

All information is based on years of experience in production and operation of sealing elements. However, in view of the wide variety of possible installation and operating conditions one cannot draw final conclusions in all application cases regarding the behaviour in gasket joints. The data may not, therefore, be used to support any warranty claims. This edition cancels all previous issues. Subject to change without notice.



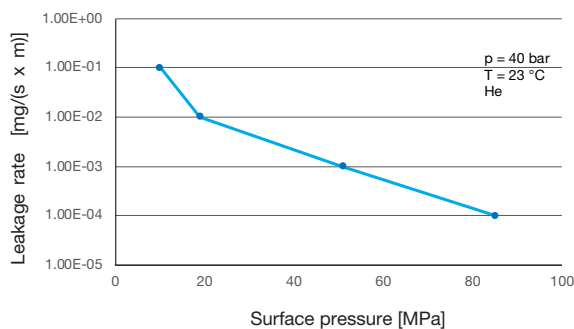
SIGMA BO



Maximum surface pressure in operating conditions of Sigma BO

This diagram shows the maximum surface pressure in MPa with which the sealing material may be loaded, depending on the operating temperature. The characteristic curves apply to the specified sealing thicknesses. In contrast to Qsmax according to EN 13555, the surface pressures specified here are based on a maximum permissible reduction in thickness.

TIGHTNESS PERFORMANCE



The tightness performance graph

The graph shows the required stress at assembly to seal a certain tightness class. The determination of the graph is based on EN13555 test procedure which applies 40 bar Helium at room temperature. The sloping curve indicates the ability of the gasket to increase tightness with raising gasket stress.