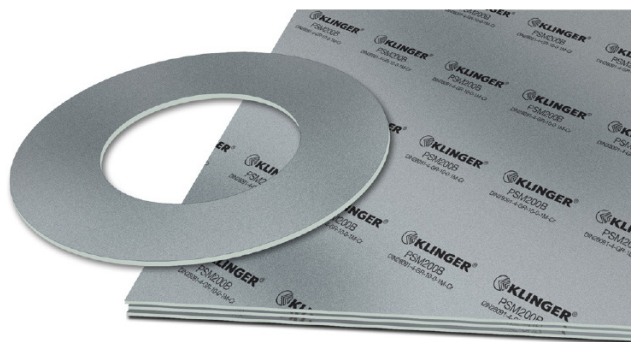


KLINGER GRAPHITE LAMINATE PSM



DESCRIPTION

Made of expanded graphite with an 0.1 mm thick insert of tanged stainless steel and featuring adhesive-free bonding, this gasket material is ideal for hot water and steam applications at temperatures of up to 450 °C, in which it displays no change to its physical properties. Furthermore, it is free of resins, impregnations, and other organic substances.



ITEM		DATA
Basic composition		Expanded graphite with a 0.1 mm thick tanged stainless steel insert.
Sheet size		1000 x 1000 mm, 1500 x 1500 mm, 2000 x 1000 mm
Colour		Grey
Thickness		0.6 mm, 0.8 mm, 1.0 mm, 1.5 mm, 2.0 mm, 3.0 mm, 4.0 mm, 5.0 mm, 6.0 mm
Certificates		DIN-DVGW, KTW, Fire Safe acc. to DIN EN ISO 10497, German Lloyd, BAM tested
Tolerances	Thickness	± 5 %
	Width	± 5 mm
	Length	± 5 mm
Industries		General industry, Chemical, Oil & Gas, Energy, Pulp & Paper, Marine, Automotive

TECHNICAL DATA Typical values for a thickness of 2.0 mm

DENSITY OF GRAPHITE LAYER	DIN 28090-2	g/cm ³	1.0
PURITY OF GRAPHITE*	DIN 51903	%	≥ 99.0
METALLIC REINFORCEMENT	Tanged metal		AISI 316 (L)
	Thickness	mm	0.10
	Number of sheets		1
COMPRESSIBILITY	ASTM F36A	%	35-45
RECOVERY	ASTM F36A	%	12-18
COMPRESSION CREEP DIN 52913	16h/ 50MPa/ 300°C	MPa	≥ 46
KLINGER COLD/HOT COMPRESSION 50 MPA	thickness decrease at 23°C	%	35-45
	thickness decrease at 300°C	%	1-3
SPECIFIC LEAKRATE	DIN 28090-2	mg/s x m	< 0.10
CHLORIDE CONTENT OF GRAPHITE LAYER	DIN 28090-2	ppm	≤ 40

*High purity graphite with a purity of ≥99.8 with low sulphur and chloride levels available per request.

CHEMICAL RESISTANCE CHART

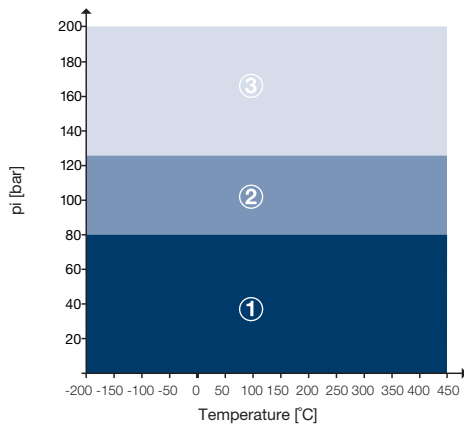
Simplified overview of the chemical resistance depending on the most important groups of raw materials:

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	B	B

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.

P-T DIAGRAM- THICKNESS 2.0 MM

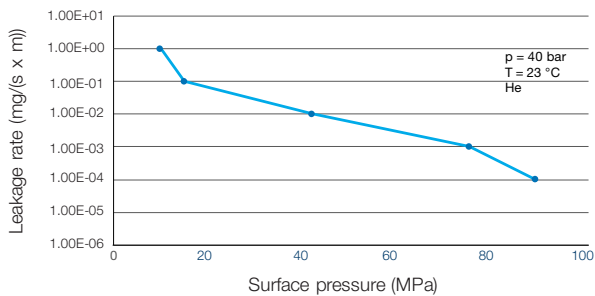


The area of the P-T diagram

1. In area one, the gasket material is normally a 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 gasket's chemical resistance to the media.

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.