



GRAFILIT® SP is a gasket material which combines the excellent properties of expanded graphite and the strength of tanged stainless steel. This type of material features has very good strength and creep resistance, chemical stability and high tightness.

PROPERTIES

Composition	Flexible graphite sheets mechanically bonded to a tanged stainless-steel insertion (AISI 316; 0.1mm).
Colour	Black
Properties	Suitable to be used in the chemical and petrochemical industries, at high surface loads or high operating pressures.
Appropriate industries	Chemical industry, petrochemical industry, power generation industry.
Approvals	BAM (Oxygen), Germanischer Lloyd, DIN-DVGW DIN 3535-6, DVGW KTW, Fire safe API 607, DVGW VP 401

DIMENSIONS OF STANDARD SHEETS

Sizes (mm): 1000 x 1000 | 1500 x 1500

Thickness (mm): 1.0 | 1.5 | 2.0 | 3.0

Other dimensions and thicknesses are available on request.

Tolerances:

+/- 5 % on length and width

On thickness up to 1.0 mm +/- 0.1 mm

On thickness above 1.0 mm +/- 10 %

TECHNICAL DATA Typical values for a thickness of 1.5 mm

Density	DIN 28090-2	g/cm ³	1.5
Compressibility	ASTM F36A	%	35
Recovery	ASTM F36A	%	17
Stress resistance	DIN 52913		
16 h, 50 MPa, 300 °C		MPa	49
Specific leak rate	DIN 3535-6	mg/(s·m)	0.05
Leachable chloride content	FSA NMG 202	ppm	20
Leachable fluoride content	FSA NMG 203	ppm	20
Ash content of graphite	DIN 51903	%	< 1
Compression modulus	DIN 28090-2		
At room temperature: ϵ_{KSW}		%	34
At elevated temperature: $\epsilon_{WSW/300\text{ °C}}$		%	1.2
Percentage creep relaxation	DIN 28090-2		
At room temperature: ϵ_{KRW}		%	4.2
At elevated temperature: $\epsilon_{WRW/300\text{ °C}}$		%	3.3
Max. operating conditions			
Minimum temperature		°C/°F	-200/-328
Continuous temperature			
- air or oxidizing atmosphere		°C/°F	450/842
- reducing or inert atmosphere		°C/°F	700/1292
Pressure		bar/psi	200/1450

All information, and data quoted are based on years of experience in production and operation of sealing elements. The data may not be used to support any warranty claims. This edition cancels all previous issues, and is a subject to change without further notice.