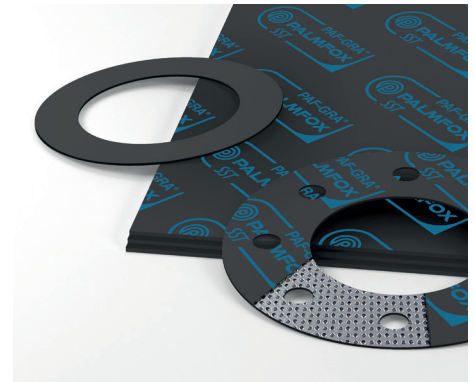


PAF-GRA SST is a sealing system made from expanded flexible pure graphite layers having a thickness of 0.1 mm reinforced by tanged stainless steel plates. Excellent sealability function besides outstanding thermal and mechanical resistance have enabled it an ideal gasket to be used in hot water and steam supply, chemical, and petrochemical industries. Additionally, this style is thorough without any resins and impregnations.



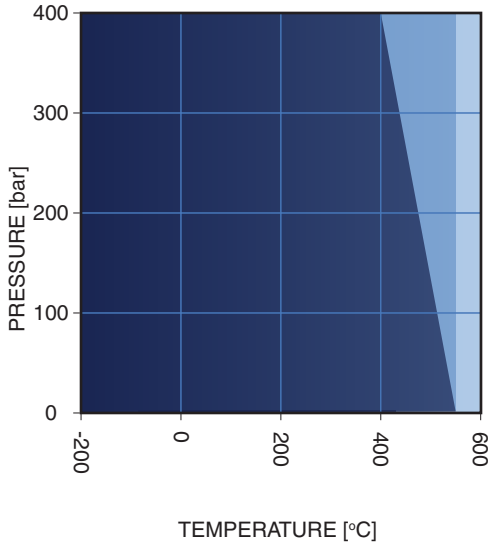
TECHNICAL DATA:

TYPICAL VALUES FOR A THICKNESS OF 1.5 MM				
Compressibility	ASTM F 36 A	-	%	35
Recovery	ASTM F 36 A	-	%	17
Stress resistance	DIN 52913	50 MPa, 16 hours at 300°C	MPa	48
Specific leak rate	DIN 5535-6	-	mg/[s.m]	0.05
Compression Modulus	DIN 28090-2	At 23°C	%	35
		At 300°C	%	1.2
Creep relaxation	DIN 28090-2	At 23°C	%	4.2
		At 300°C	%	3.5
Density	DIN 28090-2	-	g/m ³	1.5
Temperature (Min.)	-	-	°C (°F)	-200 (-330)
Continuous temperature (Max.)	-	In oxidizing atmosphere	°C (°F)	600 (1100)
		In reducing or inert atmosphere	°C (°F)	700 (1300)
Pressure (Max.)	-	For demanding gasses	bar (psi)	60 (870)
		For steam and gasses	bar (psi)	150 (2175)
		For liquids	bar (psi)	170 (2465)

APPLICATIONS:

Gas, Steam, Potable water supply, Heating systems, Valves, Compressors and Pumps, Chemical and Petrochemical Industry, Applications with elevated temperatures, Heating and Cooling systems.

P-T DIAGRAM



■ In the darker shaded region (dark blue) the gasket is generally applicable for different chemical substances and is highly able to offer chemical compatibility.

■ In workplaces with the conditions this area, technical assessment of gasket material is recommended.

■ In the light blue region, installation of gasket without technical assessment should not be carried out.

DIMENSIONS

Size (mm):	1520*1520 mm 2020*1520 mm
Thickness (mm):	0.5, 0.8, 1.0, 1.5, 2.0, 3.0, 4.0, 5.0
Tolerances (mm):	Up to 1.0 mm thickness: ± 0.1 mm Above 1.0 mm thickness: $\pm 10\%$ Length & Width: $\pm 5\%$
Surface finish:	Color: Black

CHEMICAL RESISTANCE CHART

PAFGRA SST		PAFGRA SST	
Acetamide	?	Black liquor	?
Acetic acid, 10%	✓	Borax	✓
Acetic acid, 100% (Glacial)	?	Boric acid	✓
Acetone	✓	Butadiene (gas)	✓
Acetonitrile	✓	Butane (gas)	✓
Acetylene (gas)	✓	Butyl alcohol (Butanol)	✓
Acid chlorides	?	Butyric acid	✓
Acrylic acid	✓	Calcium chloride	?
Acrylonitrile	✓	Calcium hydroxide	✓
Adipic acid	✓	Carbon dioxide (gas)	✓
Air (gas)	✓	Carbon monoxide (gas)	✓
Alcohols	✓	Cellosolve	✓
Aldehydes	✓	Chlorine (gas)	?
Alum	?	Chlorine (in water)	✗
Aluminium acetate	?	Chlorobenzene	✓
Aluminium chlorate	?	Chloroform	✓
Aluminium chloride	✗	Chloroprene	✓
Aluminium sulfate	✓	Chlorosilanes	?
Amines	✓	Chromic acid	✗
Ammonia (gas)	✓	Citric acid	?
Ammonium bicarbonate	✓	Copper acetate	✓
Ammonium chloride	?	Copper sulfate	✓
Ammonium hydroxide	✓	Creosote	✓
Amyl acetate	✓	Cresols (Cresylic acid)	✓
Anhydrides	✓	Cyclohexane	✓
Aniline	✓	Cyclohexanol	✓
Anisole	✓	Cyclohexanone	✓
Argon (gas)	✓	Decalin	✓
Asphalt	✓	Dextrin	✓
Barium chloride	?	Dibenzyl ether	✓
Benzaldehyde	✓	Dibutyl phthalate	✓
Benzene	✓	Dimethylacetamide (DMA)	✓
Benzoic acid	✓	Dimethylformamide (DMF)	✓
Bio-diesel	✓	Dioxane	✓
Bio-ethanol	✓	Diphyl (Dowtherm A)	✓

 Suitable
  Depends on operating conditions
  Unsuitable
  No data or insufficient evidence

CHEMICAL RESISTANCE CHART

PAFGRA SST		PAFGRA SST	
Esters	✓	Iron sulfate	✓
Ethane (gas)	✓	Isobutane (gas)	✓
Ethers	✓	Isooctane	✓
Ethyl acetate	✓	Isoprene	✓
Ethyl alcohol (Ethanol)	✓	Isopropyl alcohol (Isopropanol)	✓
Ethyl cellulose	✓	Kerosene	✓
Ethyl chloride (gas)	✓	Ketones	✓
Ethylene (gas)	✓	Lactic acid	?
Ethylene glycol	✓	Lead acetate	✓
Formaldehyde (Formalin)	✓	Lead arsenate	✓
Formamide	✓	Magnesium sulfate	✓
Formic acid, 10%	?	Maleic acid	✓
Formic acid, 85%	?	Malic acid	?
Formic acid, 100%	?	Methane (gas)	✓
Freon-12 (R-12)	✓	Methyl alcohol (Methanol)	✓
Freon-134a (R-134a)	✓	Methyl chloride (gas)	✓
Freon-22 (R-22)	✓	Methylene dichloride	✓
Fruit juices	✓	Methyl ethyl ketone (MEK)	✓
Fuel oil	✓	N-Methyl-pyrrolidone (NMP)	✓
Gasoline	✓	Milk	✓
Gelatin	✓	Mineral oil (ASTM no.1)	✓
Glycerine (Glycerol)	✓	Motor oil	✓
Glycols	✓	Naphtha	✓
Helium (gas)	✓	Nitric acid, 10%	?
Heptane	✓	Nitric acid, 65%	?
Hydraulic oil (Glycol based)	✓	Nitrobenzene	✓
Hydraulic oil (Mineral type)	✓	Nitrogen (gas)	✓
Hydraulic oil (Phosphate ester based)	✓	Nitrous gases (NOx)	?
Hydrazine	✓	Octane	✓
Hydrocarbons	✓	Oils (Essential)	✓
Hydrochloric acid, 10%	✗	Oils (Vegetable)	✓
Hydrochloric acid, 37%	✗	Oleic acid	✓
Hydrofluoric acid, 10%	✗	Oleum (Sulfuric acid, fuming)	✗
Hydrofluoric acid, 48%	✗	Oxalic acid	?
Hydrogen (gas)	✓	Oxygen (gas)	✓

 Suitable
  Depends on operating conditions
  Unsuitable
  No data or insufficient evidence

CHEMICAL RESISTANCE CHART

PAFGRA SST		PAFGRA SST	
Palmitic acid	✓	Sodium hydroxide	✓
Paraffin oil	✓	Sodium hypochlorite (Bleach)	✗
Pentane	✓	Sodium silicate (Water glass)	✓
Perchloroethylene	✓	Sodium sulfate	✓
Petroleum (Crude oil)	✓	Sodium sulfide	?
Phenol (Carbolic acid)	✓	Starch	✓
Phosphoric acid, 40%	?	Steam	✓
Phosphoric acid, 85%	?	Stearic acid	✓
Phthalic acid	✓	Styrene	✓
Potassium acetate	✓	Sugars	✓
Potassium bicarbonate	✓	Sulfur	✓
Potassium carbonate	✓	Sulfur dioxide (Gas)	✓
Potassium chloride	✓	Sulfuric acid 20%	✗
Potassium cyanide	✓	Sulfuric acid 98%	✗
Potassium dichromate	?	Sulfuryl chloride	✗
Potassium hydroxide	✓	Tar	✓
Potassium iodide	✓	Tartaric acid	?
Potassium nitrate	✓	Tetrahydrofuran (THF)	✓
Potassium permanganate	?	Titanium tetrachloride	✗
Propane (gas)	✓	Toluene	✓
Propylene (gas)	✓	2,4-Toluenediisocyanate	✓
Pyridine	✓	Transformer oil (Mineral type)	✓
Salicylic acid	✓	Trichloroethylene	✓
Seawater/brine	?	Vinegar	✓
Silicones (oil/grease)	✓	Vinyl chloride (gas)	✓
Soaps	✓	Vinylidene chloride	✓
Sodium aluminate	✓	Water	✓
Sodium bicarbonate	✓	White spirits	✓
Sodium bisulfite	✓	Xylenes	✓
Sodium carbonate	✓	Xylenol	✓
Sodium chloride	✓	Zinc sulfate	✓
Sodium cyanide	✓		



Suitable



Depends on operating conditions



Unsuitable



No data or insufficient evidence