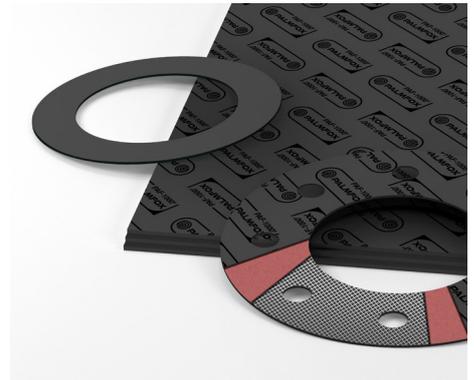


PAF-1000 gaskets offer high corrosion, pressure, and temperature resistance. A soft yet incredibly strong material. PAF-1000 is made of top grade Non asbestos fiber material with NBR binder which coated with graphite layer and reinforced with wire mesh steel. This jointing sheet with excellent mechanical properties is suitable for many applications including fuel, oil, coolants, hydrocarbons, gas and steam.



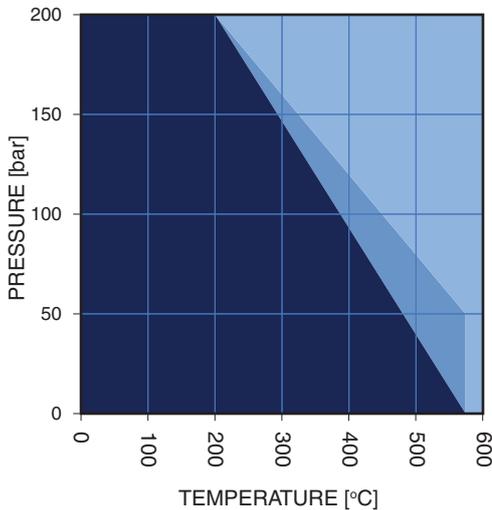
TECHNICAL DATA:

TYPICAL VALUES FOR A THICKNESS OF 2.0 MM				
Compressibility	ASTM F 36 A	-	%	10
Recovery	ASTM F 36 A	-	%	55
Stress relaxation	DIN 52913	50 MPa, 16 hours at 175°C 50 MPa, 16 hours at 300°C	MPa MPa	31
Tensile Strength	ASTM F 152	-	MPa (psi)	34
Thickness increase after fluid immersion	ASTM F 146 ASTM F 146	Oil IRM 903: 5 hours at 150°C Fuel B: 5 hours at 23°C	% %	20 17
Thickness decrease	-	At 23°C At 300°C	% %	10 18
Density	-	-	g/cm ³	2.2
Creep Relaxation	F38B	22 hours at 100°C 22 hours at 200°C	% %	8 15
Thermal conductivity	-	-	W/mK	0.38
Temperature (Max.)	-	-	°C (°F)	550
Temperature (Min.)	-	-	°C (°F)	-20
Continuous temperature (Max.)	-	-	°C (°F)	450
Pressure (Max.)	-	-	bar (psi)	200
Gas leak rate	-	At internal pressure of 580 psi (40 bar) and gasket load equal to 4640psi (32 MPa)	ml/min	3

APPLICATIONS:

General Purpose, Automotive & Engine building industries, Chemical Industries, Compressors & Pumps, Heating Systems, High-Temperature applications, Petrochemical industries, Steam Supply and Oil & Fuels.

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):	1000*1500 mm 1500*1500 mm 2000*1500 mm 3000*1500 mm
Thickness (mm):	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: Graphite finish

CHEMICAL RESISTANCE CHART

PAF1000		PAF1000	
Acetaldehyde CH ₃ CHO	✓	Butanone (M.E.K)	✓
Acetamide CH ₃ CO NH ₂	✓	Butyl acetate CH ₃ COO C ₄ H ₉	✓
Acetic acid 10% CH ₃ COOH	✓	Butyl alcohol (butanol) C ₄ H ₉ OH	✓
Acetic acid 100% CH ₂ COOH	✓	Butyric acid C ₃ H ₇ COOH	✓
Acetic Ether CH ₃ COO C ₂ H ₅	✓	Calcium chloride CaCl ₂	✓
Acetone CH ₃ CO CH ₃	✓	Calcium hydroxide (lime water)Ca(OH) ₂	✓
Acetylene C ₂ H ₂	✓	Calcium hypochlorite Ca(OCl) ₂	✓
Adipic acid COOH(CH ₂) ₄ COOH	✓	Calcium sulphate CaSO ₄	✓
Air	✓	Carbolic acid 100% (Phenol)C ₆ H ₅ OH	?
Alum KAl (SO ₄) ₂	✓	Carbon dioxide CO ₂	✓
Aluminium acetate Al (CH ₃ COO) ₃	✓	Carbon disulfide CS ₂	✗
Aluminium chlorate Al (ClO ₃) ₃	✓	Carbon tetrachloride CCl ₄	?
Aluminium chloride AlCl ₃	✓	Castor oil	✓
Ammonia NH ₃	✓	Chlorine (dry) Cl ₂	✓
Ammoniumbicarbonate NH ₄ HCO ₃	✓	Chlorine (wet)Cl ₂	?
Ammonium chloride NH ₄ Cl	✓	Chlorine water (ca. 0.5%)	✓
Ammonium hydroxide NH ₄ OH	✓	Chloroform CHCl ₃	?
Amyl acetate CH ₃ COOC ₅ H ₁₁	✓	Chloromethane (Methylchloride)CH ₃ Cl	✗
Aniline C ₆ H ₅ NH ₂	✓	Chromic acid, H ₂ CrO ₄	✗
Arcton 12 (Freon 12, Frigen 12)	✗	Citric acid (CH ₂ COOH) ₂ C(OH)COOH	✓
Arcton 22 (Freon 22, Frigen 22)	✗	Clophen T 64	✗
Asphalt (Tar)	✓	Copper acetate Cu (CH ₃ COO) ₂	✓
ASTM Oil No. 1	✓	Copper Sulphate CuSO ₄	✓
ASTM Oil No. 3	?	Creosote	?
Aviation fuel (Kerosene)	?	Cresol C ₆ H ₄ (OH)CH ₃	✓
Barium chloride BaCl ₂	✓	Cyclohexanol C ₆ H ₁₁ OH	✓
Benzene (Benzol) C ₆ H ₆	?	Cyclohexanone C ₅ H ₁₀ O	✗
Benzoic acid C ₆ H ₅ COOH	✓	Decalin C ₁₀ H ₁₈	?
Blast furnace gas	✓	Di-ammonium phosphate (NH ₄) ₂ HPO ₄	✓
Bleach liquor Ca (OCl) ₂	✓	Di-benzyl ether (C ₆ H ₅ CH ₂) ₂ O	✓
Boiler feed water (alkaline)	✓	Di-butyl phthalate C ₆ H ₄ (COO C ₄ H ₉) ₂	✓
Borax Na ₂ B ₄ O ₇ (H ₂ O) ₁₀	✓	Diesel oil	?
Boric acid H ₃ BO ₃	✓	Dimethyl formamide HCON (CH ₃) ₂	✓
Brine NaCl	✓	Diphyl (Dowtherm A)	✗
Butane C ₄ H ₁₀	?	Dye loquor (alkaline, neutral, acidic)	✓



Suitable



Depends on operating conditions



Unsuitable



No data or insufficient evidence

CHEMICAL RESISTANCE CHART

PAF1000		PAF1000	
Ethane C ₂ H ₆	✓	Linseed oil	✓
Ethyl acetate CH ₃ COO C ₂ H ₅	✓	Magnesium sulphate MgSO ₄	✓
Ethyl alcohol (ethanol) C ₂ H ₅ OH	✓	Malic acid HOOC CH ₂ CHOH COOH	✓
Ethyl chloride C ₂ H ₅ Cl	✗	Methane CH ₄	✓
Ethylene chloride (CH ₂ Cl) ₂	✓	Methyl alcohol CH ₃ OH	✓
Ethylene glycol (CH ₂ OH) ₂	✓	Methylated spirits	✓
Ethyl ether C ₂ H ₅ O C ₂ H ₅	✓	Methyl chloride CH ₃ Cl	✓
Fluosilicic acid H ₂ SiF ₆	✓	Methylene chloride CH ₂ Cl ₂	?
Formaldehyde HCHO	✓	Methyl ethyl ketone (M.E.K.)CH ₃ CO C ₂ H ₅	✓
Formamide H CO NH ₂	✓	Mineral oil-ASTM No. 1	✓
Formic acid 10% HCOOH	✓	Mineral oil-ASTM No. 3	?
Formic acid 85% HCOOH	✓	Naptha	?
Freon 12 Frigen 12 CC1 ₂ F ₂	?	Natural gas (Methane) CH ₄	✓
Freon 22 Frigen 22	✗	Nitric acid 20% HNO ₃	?
Glacial acetic acid CH ₃ COOH	✓	Nitric acid 40% HNO ₃	✗
Glycerine (CH ₂ OH) ₂ CHO	✓	Nitric acid 96% HNO ₃	✗
Heating oil	?	Nitrobenzene C ₆ H ₅ NO ₂	✗
Heptane C ₇ H ₁₆	?	Nitrogen N ₂	✓
Hydraulic oil (Glycol based)	✓	Octane C ₈ H ₁₈	?
Hydraulic oil (mineral)	?	Oleic acid C ₁₇ H ₃₃ COOH	✓
Hydraulic oil (phosphate ester)	✓	Oleum (Fuming Sulphuric Acid)	✗
Hydrazine hydrate (NH ₂) ₂ H ₂ O	✓	Oxalic acid (COOH) ₂	?
Hydrochloric acid 20% HCl	?	Oxygen O ₂ (check local regulations for use)	✓
Hydrochloric acid 37% HCl	?	Palmitic acid C ₁₅ H ₃₁ COOH	✓
Hydrofluoric acid 10% HF	✗	Paraffin (Kerosene)	?
Hydrogen H ₂	✓	Pentane C ₅ H ₁₂	?
Hydrogen chloride (dry) HCl	✓	Perchloroethylene C ₂ Cl ₄	?
Hydrogen peroxide (up to 6% W.W.)	✓	Petrol	?
Iso-octane (CH ₃) ₃ C CH ₂ (CH ₃) ₂	✓	Petroleum ether	✓
Iso-propyl alcohol (CH ₃) ₂ CHOH	✓	Phenol C ₆ H ₅ OH	✓
Kerosene	?	Phosphoric acid (all concs)H ₃ PO ₄	✓
Lactic acid 50% CH ₃ CHOH COOH	✓	Phthalic acid (C ₆ H ₄ (COOH) ₂)	✓
Lead acetate Pb (CH ₃ COO) ₂	✓	Potassium acetate CH ₃ COOK	✓
Lead arsenate Pb ₃ (AsO ₄) ₂	✓	Potassium carbonate K ₂ CO ₃	✓
Lime water Ca(OH) ₂	✓	Potassium chlorate KClO ₃	✓



Suitable



Depends on operating conditions



Unsuitable



No data or insufficient evidence

CHEMICAL RESISTANCE CHART

PAF1000	PAF1000		
Potassium chloride KCl	✓	Spinning baths (up to 10%) H ₂ SO ₄	?
Potassium chromium sulphate (K Cr(SO ₄) ₂ 12H ₂ O)	✓	Starch (C ₆ H ₁₀ O ₅)X	✓
Potassium cyanide KCN	✓	Steam H ₂ O	✓
Potassium dichromate K ₂ Cr ₂ O ₇	✓	Steam condensate H ₂ O	✓
Potassium hydroxide KOH	✓	Stearic acid C ₁₇ H ₃₅ COOH	✓
Potassium hypochlorite KClO	✓	Sugar	✓
Potassium iodide KI	✓	Sulphur dioxide SO ₂	?
Potassium nitrate (saltpetre) KNO ₃	✓	Sulphuric acid 30% H ₂ SO ₄	?
Potassium permanganate KMnO ₄	✓	Sulphuric acid 50% H ₂ SO ₄	?
Producer gas (generator gas)	✓	Sulphuric acid 96% H ₂ SO ₄	?
Propane C ₃ H ₈	✓	Sulphurous acid H ₂ SO ₃	?
Pydrol	✗	Tannic acid C ₇₆ H ₅₂ O ₄₆	✓
Pyridine C ₅ H ₅ N	✓	Tar (asphalt)	✓
Rapeseed oil	✓	Tartaric acid (CHOH COOH) ₂	✓
Salicylic acid C ₆ H ₄ (OH) COOH	✓	Tetrachloroethane C ₂ H ₂ Cl ₄	?
Sea Water	✓	Tetralin C ₁₀ H ₁₂	?
Silicone oil	✓	Toluene C ₆ H ₅ CH ₃	?
Skydrol 500	✗	Town's gas	✓
Soap	✓	Transformer oil	✓
Soda (sodium carbonate) Na ₂ CO ₃	✓	Trichloroethylene C ₂ HCl ₃	?
Sodium aluminate Na ₃ AlO ₃	✓	Triethanolamine N(CH ₂ CH ₂ OH) ₃	✓
Sodium bicarbonate NaHCO ₃	✓	Turpentine	?
Sodium bisulphite NaHSO ₃	✓	Urea (NH ₂) ₂ CO	✓
Sodium chloride (Salt) NaCl	✓	Vinyl acetate CH ₃ COO C ₂ H ₃	?
Sodium cyanide NaCN	✓	Water H ₂ O	✓
Sodium hydroxide NaOH	✓	Water glass Na ₂ SiO ₃ K ₂ SiO ₃	✓
Sodium silicate (water glass)	✓	White Spirit	?
Sodium sulphate Na ₂ SO ₄	✓	Xylol C ₆ H ₄ (CH ₃) ₂	?
Sodium sulphide Na ₂ S	✓		



Suitable



Depends on operating conditions



Unsuitable



No data or insufficient evidence