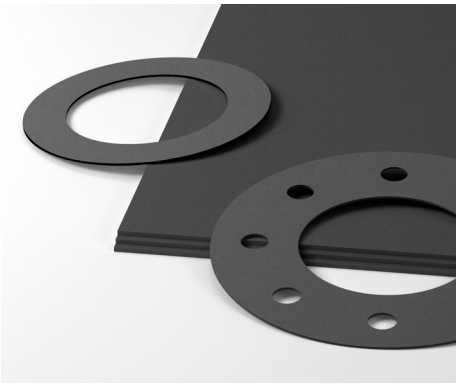
PALMFOX
All Sealling Solution

PTFE Sheet
PAFLON-CARB ®
(PTFE with 25% CARBON Filler)

PAFLON CARB is a sealing system manufactured from carbon-filled PTFE. Regarding the content of carbon in the gasket, this product has two different types including PAFLON CARB 15% and 25%. Adding carbon to PTFE has dedicated exceptional chemical and wear resistance besides compressive strength to this product. High thermal and electrical conductivity as well as relatively low permeability enables this gasket increasingly applicable in several industries.



TECHNICAL DATA:

TYPICAL PHYSICAL AND MECHANICAL PROPERTIES FOR COMPOSITION OF 75% PTFE - 25% CARBON			
Tensile Strength	ASTM D 4894	MPa	28
Elongation	ASTM D 4894	%	250
Hardness	ASTM D 2240	Shore D	62
Deformation Under Load	ASTM D 695	%	5
Permanent Deformation	ASTM D 695	%	4
Static Friction Coefficient	-	%	0.15
Dynamic Friction Coefficient	-	%	0.13
Flexural Modulus	-	MPa	1100
Temperature (Max.)	-	˚C (˚F)	+270(+520)
Temperature (Min.)	-	˚C (˚F)	-200(-330)
Pressure (Max.)	-	Bar	150

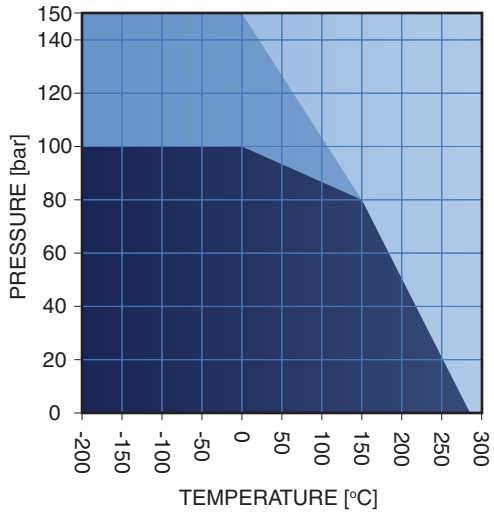
TYPICAL PHYSICAL AND MECHANICAL PROPERTIES FOR COMPOSITION OF 85% PTFE- 15% CARBON			
Tensile Strength (At break point)	ASTM D 1457	MPa	20-25
Elongation (At break point)	ASTM D 1457	%	300
Hardness	ASTM D 2240	Shore D	68
Density	ASTM D 1457	g/cm3	2.10
Temperature (Max.)	-	˚C (˚F)	+270(+520)
Temperature (Min.)	-	˚C (˚F)	-200(-330)
Pressure (Max.)	-	bar	150

PTFE Sheet
PAFLON-CARB® (PTFE with 25% CARBON Filler)

APPLICATIONS:

Water, Steam, Hydrofluoric acid with high concentration, Heat Exchangers, Pipe & Flange Joint.

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*1000 mm I 1500*1500 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: ±0.1mm Above 1.0 mm thickness: ±10% Length & Width: ±5%
Surface finish:	Color: Black

PALMFOX
All Sealing Solution

PTFE Sheet
PAFLON-CARB® (PTFE with 25% CARBON Filler)

CHEMICAL RESISTANCE CHART

PAFLON-CARB		PAFLON-CARB	
Acetaldehyde	✓	Maleic acid	✓
Acetone	✓	Mercury salts	✓
Aluminum Sulphate	✓	Molasses	✓
Ammonium chloride	✓	Naphtha	✓
Ammonium hydroxide	✓	Naphthalene	✓
Aniline	✓	Nickel salts	✓
Benzene	✓	Nitric acid	✗
Brine	✓	Nitro benzene	✓
Bromine (anhydrous)	✗	Phenol	✓
Carbon Disulphide	✓	Phosphoric acid	✓
Chloroacetic acid	✓	Picric acid	✓
Chlorobenzene	✓	Pyridine	✓
Chloroform	✓	Salicylic acid	✓
Chromic acid	?	Silver nitrate	✓
Citric acid	✓	Sodium carbonate	✓
Diethyl ether	✓	Sodium hydroxide	✓
Ethylene glycol	✓	Sodium nitrite	✓
Fatty acids	✓	Sodium peroxide	?
Ferric Chloride	✓	Sodium silicate	✓
Ferric sulphate	✓	Sodium sulphide	✓
Fluorosilicic acid	?	Starch	✓
Formic acid	✓	Sulphuric acid	?
Freon (liquid)	✓	Tallow	✓
Hydro boric acid	✓	Tannic acid	✓
Hydrochloric acid	✓	Tartaric acid	✓
Hydrocyanic acid	✓	Trichloroethylene	✓
Hydrogen sulphide (solution)	✓	Zinc chloride	✓
Lead acetate	✓		

✓ Suitable ? Depends on operating conditions ✗ Unsuitable ⓘ No data or insufficient evidence