

RHONDAMA LIMITED PTFE CARBON

PTFE E CARBON Hardness 60° Shore D Black

Composition % weight \pm 1:

Virgin PTFE + Carbon Fillers + Additives

Mechanical, physical and thermal properties

Properties	Condition	Standard	Unit			
Colour				Cream		Cream
Density/specific gravity	23°C	DIN 53479	Kg/m ³	2130	g/cm ³	2,13
Hardness	23°C	ISO 868	Shore D	60 \pm 3	Shore D	60 \pm 3
Ball indentation hardness	23°C	DIN 53456 H135/30	MPa	\geq 34	Psi	\geq 4930
Tensile strength	23°C	ASTM D 4745-79	MPa	\geq 29	Psi	\geq 4206
Elongation at break	23°C	ASTM D 4745-79	%	\geq 282	%	\geq 282
Compressive strength	23°C	DIN 53455	MPa		Psi	
Thermal conductivity	23°C	DIN 52612	$\frac{J \times 10^3}{m \times h \times K}$	3,5	$\frac{J \times 10^3}{m \times h \times K}$	3,5
Coefficient of thermal expansion	25°C-200°C		K ⁻¹ \times 10 ⁻⁵	10,9	K ⁻¹ \times 10 ⁻⁵	10,9
Coefficient of friction	*		μ	0,18	μ	0,18
Minimum service temperature			°C	-200	°F	-328
Maximum service temperature			°C	260	°F	500
Young's modulus		DIN 53457	MPa		Psi	

* dynamic coefficient of friction, dry, steel 16MnCr5: v=0,6 m/s; p=0,05 MPa; t=5h

Chemical Properties

Filled PTFE

Resistant to: almost all chemicals

Not resistant to: halogenides, elemental fluorine, CF₃, molten alkali metals

Detailed information concerning chemical resistance see Rhondama Compatibility Chart