



## Rhondama Material Data Sheets for Manufactured Parts

# PTFE 25% CARBON 5% GRAPHITE

This material has excellent chemical, sliding and wear properties. The range of temperature (-200°C to +260°C) and mechanical properties make this a suitable material for many sealing applications, especially where the medium is water or water based.

### Resistant against

Water up to 90°C, HFA Fluids, HFB Fluids, HFC Fluids, HFD Fluids, Mineral Oils, Vegetable Oils, Fuels, Ozone and Air up to 200°C

### Applicable for

Guide Rings, Bushes, Composite Seals, Low friction applications, water based applications

### Mechanical, Physical & Thermal Properties

Properties	Condition	Standard	Unit	Value	Unit	value
density/specific gravity	23 °C	DIN 53479	kg/m <sup>3</sup>	2130	g/cm <sup>3</sup>	2,13
hardness	23 °C	ISO 868	Shore D	60 ±3	Shore D	60 ±3
ball indentation hardness	23 °C	DIN 53456 H135/30	MPa	26 ±5	psi	3770 ±725
tensile strength	23 °C	ASTM D 4745-79	MPa	≥ 16	psi	≥ 2320
elongation at break	23 °C	ASTM D 4745-79	%	≥ 140	%	≥ 140
compressive strength	23 °C	DIN 53455	MPa		psi	
coefficient of thermal expansion	25 °C - 200 °C		K-1 * 10-5	≥ 11,2	K-1 * 10-5	≥ 11,2
coefficient of friction *	23 °C		μ	≥ 0,14	μ	≥ 0,14
minimum service temp			°C	-200	°F	-328
maximum service temp			°C	260	°F	500

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

