

PRODUCT

10% CAR

(90% Virgin ptfе + 10% carbon coke)

Property	Method	Units	Specification
Specific gravity	ASTM D792	g/cm ³	2,140 – 2,170
Tensile strength	ASTM D4894	MPa	≥ 20
Elongation	ASTM D4894	%	≥ 200
Hardness	ASTM D2240	Shore D	≥ 62
Compression strength at 1% deformation		MPa	≥ 10
Deformation under load (140 Kg/cm ² for 24 hrs. At 23°C)	ASTM D621	%	9 - 11
Permanent deformation (after 24 hrs. Relaxation at 23°C)	ASTM D621	%	3 - 5
Coefficient of linear thermal expansion (T= 25 - 100 °C)		10 ⁻⁵ /°C	10,5 – 12,5
Coefficient of static friction			0,14 – 0,15
Coefficient of dynamic friction			0,10 – 0,11
Volume resistivity	ASTM D257	Ohm cm	10 ⁷
Ageing and weatherability			Stable over 20 years of exposure
Radiations resistance (gamma rays)	low:		Electrical properties unchanged, mechanical properties decreased
Service Temperature		C°	-200/ +260

Properties:

- Excellent compression and wear resistance; good thermal conductivity, low permeability; improved coefficient of thermal expansion when combined with ceramic.

Main applications:

- Widely used in seal applications where high wear resistance is required under high compression (eg. piston rings for dry compressors, bearings, grooved mechanical support).

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