

PRODUCT

25% CAR B

(75% Virgin ptfе + 25% soft carbon graphite)

Property	Method	Units	Specification
Specific gravity	ASTM D792	g/cm ³	2,080 – 2,120
Tensile strength	ASTM D4894	MPa	≥ 17
Elongation	ASTM D4894	%	≥ 150
Hardness	ASTM D2240	Shore D	≥ 60
Deformation under load (140 Kg/cm ² for 24 hrs. At 23°C)	ASTM D621	%	5 - 7
Permanent deformation (after 24 hrs. Relaxation at 23°C)	ASTM D621	%	2 - 4
Coefficient of static friction			0,14 – 0,16
Coefficient of linear thermal expansion (T= 25 - 100 °C)		10 ⁻⁵ /°C	7 – 12,5
Coefficient of static friction			0,14 – 0,16
Coefficient of dynamic friction			0,12 – 0,14
Volume resistivity	ASTM D257	Ohm cm	10 ⁴
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.

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).