

MATERIAL SPECIFICATION
(TYPICAL PROPERTIES)

PRODUCT: PTFE +25% CARBON

*23% Carbon
2% Graphite
75% Virgin ptfe*

<u>Property</u>	<u>Method</u>	<u>Units</u>	<u>Specification</u>
Specific gravity	ASTM D792	-	2,050 – 2,120
Tensile strenght	ASTM D4894	MPa	13 - 18
Elongation	ASTM D4894	%	60 - 120
Hardness	ASTM D2240	Shore D	62 – 66
Deformation under load (140 Kg/cm ² for 24 hrs. At 23° C)	ASTM D695	%	5 – 7
Permanent deformation (after 24 hrs. Relaxation at 23° C)	ASTM D695	%	2 – 4
Coefficient of static friction			0,14 – 0,16
Coefficient of dynamic friction			0,12 – 0,14
Volume resistivity	ASTM D257	Ohm cm	10 ⁴
Service Temperature		C°	-200 / +260

Outstanding 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).