

# TECHNICAL DATA SHEET

## 25% Carbon

(75% Virgin PTFE + 25% Carbon coke)

Property	Method	Units	Specification
<b>Physical</b>			
Color	-	-	Black
Specific gravity	ASTM D792	g/cm <sup>3</sup>	2.050 – 2.120
<b>Mechanical</b>			
Tensile strength	ASTM D4894	MPa	≥ 13
Elongation	ASTM D4894	%	≥ 60
Hardness	ASTM D2240	Shore D	≥ 62
Compression strength at 1% deformation		MPa	≥ 10
Deformation under load (140 Kg/cm <sup>2</sup> 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 dynamic friction			0.12 – 0.14
Ageing and weatherability		Stable over 20 years of exposure	
<b>Thermal</b>			
Coefficient of linear thermal expansion from 25 to 100 °C	ASTM D696	10 <sup>-5</sup> /°C	7 – 12.5
Service Temperature		°C	-200 / +260
<b>Electrical</b>			
Volume resistivity	ASTM D257	Ohm.cm	10 <sup>4</sup>
Radiations resistance (gamma rays)		Electrical properties unchanged, mechanical properties decreased	

