

## PTFE + Carbon Compound

### Product Description.

PTFE Carbon Compound is a filled compound based on Virgin PTFE containing 25% Carbon Coke for Ram Extrusion, Compression and Isostatic moulding.

### Product Properties:

- Improved thermal dimensional stability
- Improved creep resistance
- Improved compression strength
- Good cold flow reduction
- Exceptional temperature resistance
- Excellent chemical stability
- Good thermal and electrical conductivity
- Excellent wear resistance
- Excellent resistance to abrasion
- Improved surface hardness

	Property	Method	Units	Specification
<b>Physical</b>	Color	-	-	Black
	Specific gravity	ASTM D792	g/cm <sup>3</sup>	2,050 – 2,120
	Water absorption	ASTM D570	%	0,03
	Flamability	UL 94		V-0
<b>Mechanical</b>	Tensile strength	ASTM D4745	MPa	≥ 13
	Elongation	ASTM D4745	%	≥ 60
	Hardness	ASTM D2240	Shore D	≥ 62
	Ball Hardness	ASTM D785	MPa	≥ 30
	Deformation under load (140 Kg/cm <sup>2</sup> for 24 hrs. At 23°C)	ASTM D621	%	5 – 7,5
	Permanent deformation (after 24 hrs. Relaxation at 23°C)	ASTM D621	%	2 – 4
	Coefficient of static friction	ASTM D1894		0,14 – 0,16
	Coefficient of dynamic friction	ASTM D1894		0,12 – 0,14
	Wear coefficient		cm <sup>3</sup> min 10 <sup>-8</sup> Kg m h	35
<b>Thermal</b>	Thermal conductivity	ASTM C177	W/m·K	0,59
	Coefficient of linear thermal expansion From 25 to 100 °C	ASTM D696	10 <sup>-5</sup> / °C	7 – 12,5
<b>Electrical</b>	Volume resistivity	ASTM D257	Ohm·cm	10 <sup>4</sup>
	Surfaceresistivity	ASTM D257	Ohm	10 <sup>3</sup>