

# Physical properties PTFE +25% CF

## Product characteristics:

- 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

General properties	Test method	Unit	Value
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>Thermal properties</b>			
Thermal conductivity	ASTM C177	W/(m·K)	0.59
Coefficient of linear thermal expansion (25 - 100°C)	ASTM D696	10 <sup>-5</sup> /°C	7 - 12.5
<b>Mechanical properties</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
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>Electrical properties</b>			
Volume resistivity	ASTM D257	Ohm·cm	10 <sup>4</sup>
Surface resistivity	ASTM D257	Ohm	10 <sup>3</sup>

This table is a valuable help in the choice of a material. The data listed here fall within the normal range of products properties, but they should not be used to establish material specification limits nor used alone as the basis of design.