



25% Carbon PTFE Datasheet

Typical properties of 25% carbon coke PTFE:

Property	Method	Units	Specification
Specific gravity	ASTM D792	g/cm ³	2.050 - 2.120
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 ² for 24 h at 23° C)	ASTM D621	%	5 - 7
Permanent deformation (after 24 h relaxation at 23° C)	ASTM D621	%	2 - 4
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
Aging and weatherability			Stable over 20 years of exposure

Radiation resistance (gamma rays)	low:	Electrical properties unchanged, mechanical properties decreased
Service temperature	C°	-200 / +260

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Vital Polymers, LLC • 3651 Wright Way Road • Dayton, OH 45424
Phone: (937) 235-6311 • Fax: (937) 235-9223 • www.vitalpolymers.com