



15% Carbon PTFE Datasheet

Typical properties of 15% carbon-filled PTFE:

Property	Method	Units	Specification
Specific gravity	ASTM D792	g/cm ³	2.100 - 2.160
Tensile strength	ASTM D4894	MPa	≥ 14
Elongation	ASTM D4894	%	≥ 150
Hardness	ASTM D2240	Shore D	≥ 62
Compression strength at 1% deformation		MPa	≥ 9
Deformation under load (140 Kg/cm ² for 24 h at 23° C)	ASTM D621	%	7 - 9
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	10.0 - 11.5
Coefficient of static friction			0.14 - 0.15
Coefficient of dynamic friction			0.10 - 0.11
Volume resistivity	ASTM D257	Ohm cm	10 ⁷
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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