

Technical Data Sheet: Standard virgin PTFE

MATERIAL

- PTFE

FEATURES & BENEFITS

Service temperature

- **PTFE has excellent resistance** to continuous service temperatures between -150°C up to 260°C and, for short time, even to higher temperatures.

Chemical Properties

- **PTFE has a very high inertness to most chemicals.** It is only sensitive to elemental fluorine, molten alkali metals and chlorine trifluoride at high temperature and pressures. Permeation occurs with helium, chloride and bromine.

TYPICAL PROPERTIES

Properties	Standard Test	Units	Typical Value
Color	Visual	NA	Milky white Grey or yellow discoloration Transparent zone
Specific gravity	ASTM D792	g/cm ³	2.14 – 2.19
Elongation at break	ASTM D4894	%	> 200
Tensile strength	ASTM D4894	MPa	> 20
Hardness	ASTM D2240	Shore D	50 - 60
Deformation under load (15MPa for 24hours at 23°C)	ASTM D621	%	16
Coefficient of linear expansion in the range 23 - 200 °C	DIN 53752	°C ⁻¹	15.10 ⁻⁵
Dielectric strength	ASTM D149	kV/mm	> 30
UL 94 flame rating	UL 94	NA	V0
Water absorption , 24 hours	ASTM D570	%	< 0.01
Coefficient of dynamic friction	Cold-finished steel	NA	< 0.1