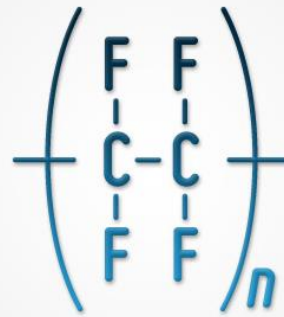


PTFE



PTFE (polytetrafluoroethylene)

PTFE is often required for critical applications in which a.o. high temperatures, chemical resistance, low friction are important.

The main difference in the fluoropolymers is that PTFE is not melt-processable while all other fluoropolymers are. Standard PTFE is not suitable for injection molding, blow molding or vacuum forming (though Moldflon is).

Key properties

- Excellent chemical resistance
- Working temperature -190°C to +260°C
- Greatest resistance to fatigue (Wöhler curve)
- FDA approved
- Flame resistant - UL94V0
- No stick
- Low coefficient of friction
- UV-resistant (does not age)
- Not hygroscopic (water absorption < 0,01%)
- Very good dielectric dielectric insulation properties

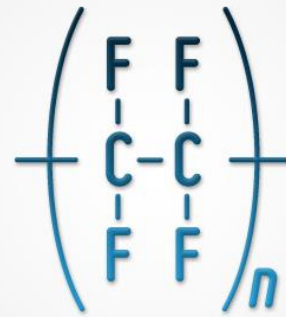
Possibilities

- PTFE tubing
 - Cleanroom PTFE tubing
 - Special PTFE profiles
 - PTFE Monofilament/rod
 - PTFE Spirals
 - Multilumen
 - Filled: glass, carbon, graphite, pigment
 - Etched PTFE
 - PTFE Paste
 - PTFE Spray
 - PTFE welding liners
 - PTFE sheets
 - PTFE film/foil
 - PTFE rod
 - PTFE pipes
 - Coating with PTFE
- etc.

Technical information

PTFE is often used in the Medical industry, Aerospace, Oil&Gas/Petrochemical, Semi-conductor, Packing&Food industry and other demanding industries.

PTFE



General properties PTFE

	Property	Specification	Unit	Value
General	Continuous working temp.	Maximum	°C	260
	Chemical resistance		-	Excellent
	Specific gravity	D 792	g/cm ³	2.14-2.20
	Flammability	UL94	-	V0
Electrical	Dielectric constant	D 150 at 10 ³ Hz	-	2.1
		D 150 at 10 ⁶ Hz	-	2.1
	Dielectric dissipation factor	D 150 at 10 ³ Hz	-	0.0002
		D 150 at 10 ⁶ Hz	-	0.0002
	Dielectric strength	D 149	kV/mm	48
	Volume resistivity	D 257	Ohm·cm	>10 ¹⁸
Mechanical	Tensile strength	D 1708, D 638	Mpa	25
	Elongation	D 1708, D 638	%	>260
	Compressive strength	D 695	MPa	4
	Impact strength	D 256 bij +23°C	J/m	No break
	Flexural Modulus	D 790 bij +23°C	Mpa	620
	Tensile Modulus	D 638	Mpa	550
	Static coefficient of friction	D 1894	-	0,08 – 0,10
	Dynamic coefficient of friction	D 1894	-	0,06 – 0,08
	Hardness	D 2240	-	55-72
Thermal	Melting point		°C	327
	Thermal conductivity	+23°C	W/Kg.m	0.25
	HDT	DIN 75	°C	
	method A			122
	method B			55

Actual properties may change due to processing method, compound type, extruded dimensions and other variables. It is the user's responsibility to evaluate and fully test the suitability of the product for their specific application.