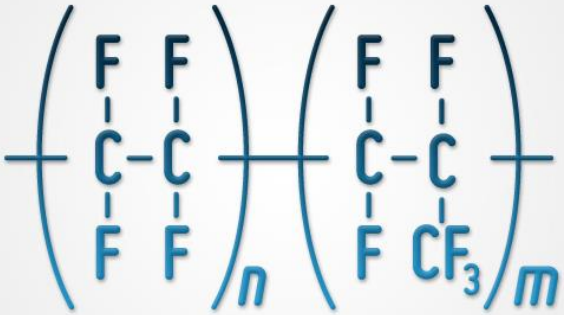
FEP



FEP (fluorinated ethylene propylene)

PTFE and FEP are similar in their material properties. The main difference between PTFE and FEP lies in the maximum operating temperature and the colour. PTFE is milky/white and FEP is clear transparent.

Key properties

- Lower melting temperature than PTFE
- More flexible than PTFE
- Transparent/clear
- Low dielectric constant (insulating)
- Chemically inert
- Very low coefficient of friction
- No stick
- UV resistant (does not age)
- Not hygroscopic (water absorption <0.01%)
- FDA approval
- Working temperature from -200°C to +205°C

Possibilities

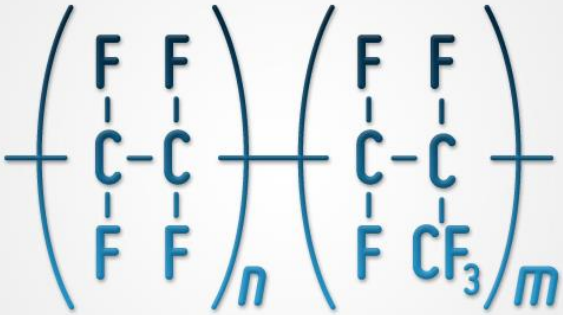
- FEP tubing
- FEP gas sampling bags
- FEP heat shrink tubing
- FEP bellows
- FEP welding liners
- FEP film/foil
- Coating with FEP

etc.

Technical information

FEP is typically used in applications where clarity is required (soil analysis/sight glasses, etc.).

FEP



General properties FEP

	Property	Specification	Unit	Value
General	Continuous working temp.	Maximum	°C	205
	Chemical resistance		-	Excellent
	Specific gravity	D 792	g/cm³	2.15
Electrical	Dielectric constant	D 150 at 10^3 Hz	-	2
		D 150 at 10^6 Hz	-	2
	Dielectric dissipation factor	D 150 at 10^3 Hz	-	0.0001
		D 150 at 10^6 Hz	-	0.0008
	Dielectric strength	D 149	kV/mm	50
	Volume resistivity	D 257	Ohm·cm	$>10^{18}$
Mechanical	Tensile strength	D 1708, D 638	Mpa	30
	Elongation	D 1708, D 638	%	300
	Compressive strength	D 695	Mpa	15
	Impact strength	D 256 bij +23°C	J/m	No break
	Flexural Modulus	D 790 bij +23°C	Mpa	660
	Tensile Modulus	D 638	Mpa	350
	Hardness	D 2240	-	55-60
Thermal	Melting (gel)point		°C	270
	Thermal conductivity	+23°C	W/Kg.m	0.25
	HDT	DIN 75	°C	
	method A			59
	method B			57

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.