PVDF



PVDF (polyvinylidene fluoride)

PVDF is mainly used in critical applications requiring an excellent chemical resistance, a high degree of purity and excellent mechanical properties.

PVDF has a very good creep resistance that is superior to that of other fluoropolymers.

Material Properties

- Excellent resistance to creep and fatigue
- Excellent thermal stability
- Excellent resistance to radiation
- Often used as insulation and protection cover in chemical applications
- UV resistant (does not age)
- High dielectric constant
- Working temperature from -20°C to +130°C

Possibilities

- PVDF tubing
- Cleanroom PVDF tubing
- PVDF film/foil
- PVDF sheets
- PVDF couplings
- PVDF rod
- PVDF pipes
- PVDF rings

etc.



Technical information

PVDF is often used as an insulation or a protective barrier in the chemical industry.



PVDF



General properties PVDF

	Property	Specification	Unit	Value
General	Continuous working temp.	Maximum	°C	150
	Chemical resistance		-	Good
	Specific gravity	D 792	g/cm³	1.78
Electrical	Dielectric constant	D 150 at 10 ³ Hz	-	7.2
		D 150 at 10 ⁶ Hz	-	8.5
	Dielectric dissipation factor	D 150 at 10 ³ Hz	-	0.030
		D 150 at 10 ⁶ Hz	-	9 x 10-2
	Dielectric strength	D 149	kV/mm	50
	Volume resistivity	D 257	Ohm·cm	>1014
Mechanical	Tensile strength	D 1708, D 638	Мра	50
	Elongation	D 1708, D 638	%	>30
	Compressive strength	D 695	Мра	80
	Impact strength	D 256 bij +23°C	J/m	No break
	Flexural Modulus	D 790 bij +23°C	Мра	1660
	Tensile Modulus	D 638	Мра	1380
	Hardness	D 2240		73-85
Thermal	Melting (gel)point		°C	160
	Thermal conductivity	+23°C	W/Kg.m	0.11
	HDT	DIN 75	°C	
	method A			140
	method B			95

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

