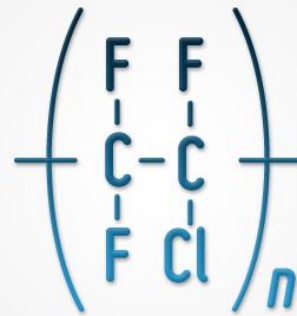


PCTFE



PCTFE (polychlorotrifluoroethylene)

The addition of a chlorine atom, is partly responsible for a lower melt index.

As a result, PCTFE can be used for extruding, injection molding and hot pressing. It contributes to the transparency of the material as well, the exceptional resistance to creep, and the stiffness of the polymer.

Material Properties

- Especially suitable for cryogenic applications
- Excellent resistance to creep
- Dimensionally stable over a wide temperature range
- Extremely low gas permeability
- FDA approval • Transparent and coloured compounds

- Working temperature from -240°C to +180°C
 - UL 94 flammability V-0

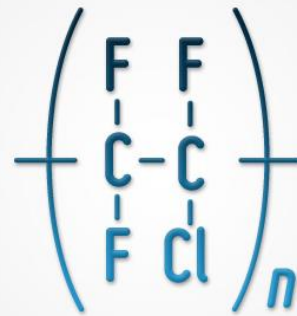
Possibilities

- PCTFE rod
 - PCTFE pipe
 - PCTFE sheet/plate
 - PCTFE film/foil
- etc.

Technical information

PCTFE is widely used in Aerospace (seals), Semi-conductor, Oil&Gas/Petrochemical and Machinery&Equipment Industry. Polyfluor guarantees the highest quality PCTFE with excellent combination of properties.

PCTFE



General properties PCTFE

	Property	Specification	Unit	Value
General	Temperature range	Maximum	°C	-240° C -> + 150° C
	Mold shrinkage, along flow	ASTM D 955	%	1,5 - 2
	Specific gravity	D 792	g/cm ³	2,1 – 2,16
Electrical	Dielectric constant	ASTM D 257	-	2,3
	Dielectric strength	ASTM D 149	kV/mm	21
	Volume resistivity	ASTM D 257	Ohm-cm	>10 ¹⁸
Mechanical	Tensile strength, at 23° C	ASTM D 638	Mpa	31-45
	Tensile modulus, at 23° C	ASTM D 638	GPa	1 – 1,6
	Elongation at break	ASTM D 638	%	50 - 150
	Impact strength, notched	ASTM D 256	J/m	>75
	Deformation under load, 7MPa for 24h at 25° C	ASTM D 621	%	1
	Deformation under load, 7MPa for 24h at 125° C	ASTM D 621	%	12
	Hardness Shore	D 2240	Shore D	70 - 80
Thermal	Peak Melting Temperature	ASTM D 3418	°C	210 - 212
	Thermal conductivity at 23° C	ASTM E 1530	W/mK	0,35
	Specific heat capacity, at 23° C	DSC	kJ kg ⁻¹ °C ⁻¹	0,9
	Maximum service temperature, air		°C	150
	Oxygen Index, LOI	ASTM D 2863	%	76

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.