

# PVDF Coil

**Formula:** PVDF

**Thickness:** 0.0045mm

**Coil Width:** 660mm

**Length:** 2m

**Structure:** Biaxially Oriented

**Transparency:** Clear/Transparent

**Colour:** Clear

**CAS Number:** 24937-79-9

**UOM Code:** 019-694-43

**SKU:** 1000002345-group

**Product Code:** FV30-FM-000150

## Material Properties for Polymers

### Chemical Resistance

Element	Value
Acids - concentrated	Good
Acids - dilute	Good
Alcohols	Good
Alkalis	Fair
Aromatic hydrocarbons	Good
Greases and Oils	Good
Halogenated Hydrocarbons	Good-Fair
Halogens	Good-Poor

### Mechanical Properties

Element	Value
Coefficient of friction	0.2-0.4
Hardness - Rockwell	R77-83
Poisson's ratio	0.34
Elongation at break( % )	50
Tensile modulus( GPa )	01-Mar
Izod impact strength( J m <sup>21</sup> )	120-320
Abrasive resistance - ASTM D1044( mg/1000 cycles )	24

<b>Element</b>	<b>Value</b>
Tensile strength( MPa )	25-60

## **Electrical Properties**

<b>Element</b>	<b>Value</b>
Dielectric constant @ 1MHz	8.4
Dissipation factor @ 1kHz	0.06
Dielectric strength( kV mm <sup>-1</sup> )	13
Surface resistivity( Ohm/sq )	10 <sup>13</sup>
Volume resistivity( Ohmcm )	10 <sup>17</sup>

## **Physical Properties**

<b>Element</b>	<b>Value</b>
Flammability	V0
Radiation resistance	Fair
Refractive index	1.42
Resistance to Ultra-violet	Excellent
Limiting oxygen index( % )	44
Water absorption - over 24 hours( % )	0.04
Density( gcm <sup>-3</sup> )	1.76

## **Thermal Properties**

<b>Element</b>	<b>Value</b>
Heat-deflection temperature - 0.45MPa( C )	120-150
Heat-deflection temperature - 1.8MPa( C )	80-115
Lower working temperature( C )	-40
Upper working temperature( C )	135-150
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	0.1-0.25@23°C
Coefficient of thermal expansion( x10 <sup>-4</sup> K <sup>-1</sup> )	80-140