

**APSOplast® PVDF**
**Engineering Plastic Technology  
Technical Data Sheet**
**Application purpose and characteristics**

Chemical industry, electrical and semiconductor industry, food processing industry  
Very good UV resistance, high purity, excellent chemical resistance

**Product description**

Material name, long description	Polyvinylidene fluoride
Material name, short description	PVDF
Material Code	PVDF 00.001-00
Density	1.78 g/cm <sup>3</sup>

**Mechanical characteristics**

Charpy impact strength	Test value: 12.0 kJ/m <sup>2</sup> Test norm: DIN EN ISO 179 Test parameter: Charpy
Ball indentation hardness	Test value: 130 MPa Test norm: DIN EN ISO 2039-1
Elongation at break	Test value: 30 % Test norm: DIN EN ISO 527
Shore hardness	Test value: 80 Shore D Test norm: DIN EN ISO 868
Yield stress	Test value: 55 MPa Test norm: DIN EN ISO 527
Modulus of elasticity and tension	Test value: 2100 MPa Test norm: DIN EN ISO 527

**Thermal characteristics**

Min. operating temperature	Test value: -20 °C
Max. operating temperature long term	Test value: 140 °C
Max. operating temperature short term	Test value: 150 °C
Coefficient of linear thermal expansion	Test value: 140 10 <sup>-6</sup> K <sup>-1</sup> Test norm: DIN 53752
Crystalline melting point	Test value: 178 °C Test norm: ISO 11357-3
Specific heat capacity	Test value: 1.2 kJ/kg*K Test norm: DIN 52612
Heat deflection temperature	Test value: 115 °C Test norm: DIN EN ISO 75 / A
Thermal conductivity	Test value: 0.20 W/m·K Test norm: DIN 52612-1

**Electrical characteristics**

Dielectric loss factor	Test value: 0.02 Test norm: IEC 60250 Test parameter: 50 Hz
Dielectric constant	Test value: 9 Test norm: IEC 60250
Dielectric strength	Test value: 21 kV/mm Test norm: IEC 60243
Volume resistivity	Test value: 10 <sup>14</sup> Ohm·cm Test norm: IEC 60093
Surface resistivity	Test value: 10 <sup>14</sup> Ohm Test norm: IEC 60093
Comparative tracking index	Test value: 600 Test norm: IEC 60112

**Other characteristics**

Flammability	Test value: V0 / V0 Test norm: UL 94 Test parameter: Thickness 3 mm / 6 mm
Water absorption at saturation	Test value: 0.04 % Test norm: DIN EN ISO 62