APSOplast® PVDF

Angst+Pfister

Engineering plastics 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

Material name, short description	PVDF
Material name, based on technical standards	Polyvinylidene fluoride
Density	1.78 g/cm³
Color	
Compound code	PVDF 00.001-00

Mechanical properties

Modulus of elasticity & tension 1	2100 N/mm² DIN EN ISO 527
Yield stress	55 N/mm² DIN EN ISO 527
Elongation at rupture	30 % DIN EN ISO 527
Ball indentation hardness	130 N/mm² DIN EN ISO 2039-1
Notch impact strength	12.00 kJ/m² DIN EN ISO 179 Charpy

Electrical attributes

Comparative tracking index	600 IEC 60112
Dielectric dissipation factor 1	0.02 IEC 60250 50 Hz
Dielectric constant 1	9 IEC 60250
Dielectric constant 2	9
Dielectric strength 1	21 kV/mm IEC 60243
Surface resistivity	10^{14} Ω IEC 60093
Volume resistivity	10^{14} Ω*cm IEC 60093

Thermal attributes

Min. operating temperature	-20 °C
Max. operating temperature long term	140 °C
Max. operating temperature short term	150 °C
Coefficient of linear thermal expansion 1	140 * 10^{-6} K^{-1} DIN 53752
Crystalline melting point	178 °C ISO 11357-3
Heat deflection temperature 1	115 °C DIN EN ISO 75 / A
Specific heat capacity	1.2 J/(g·K) DIN 52612
Thermal conductivity	0.2 W/(m·K) DIN 52612-1

Other attributes

Water absorption	0.04 % DIN EN ISO 62

In compliance with **RoHS** and **REACH** directives.
This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.

Approvals / Compliance

Food & Beverage	FDA CFR 21 - 177.2510 "Polyvinylidene fluoride resins"
	Regulation EU 10/2011
	Japan Food Sanitation Act positive list.

EC No.1935:2004

In compliance with **RoHS** and **REACH** directives.
This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.