Technical Data Sheet

Polystone® PVDF GK natural

PVDF

Typical characteristics

- Good weldability
- Easy processing
- Good resistance to acids
- Heat resistant
- Good heat ageing resistance

Typical industries

- Chemical Processing Industry
- Galvanic plants
- Chemical storage tanks
- Steel-pickling plants

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm^3	>1,75
Water absorption	DIN EN ISO 62	%	<0,4
Flammability (Thickness 3 mm / 6 mm)	UL 94		V0
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	>50
Elongation at break	DIN EN ISO 527	%	>30
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>2100
Notched impact strength	DIN EN ISO 179	kJ / m^2	>13
Shore hardness	DIN EN ISO 868	scale D	>75
Thermal properties			
Melting temperature	ISO 11357-3	°C	172 ... 175
Thermal conductivity	DIN 52612-1	W / (m * K)	0,19
Thermal capacity	DIN 52612	kJ / (kg * K)	1,20
Coefficient of linear thermal expansion	DIN 53752	10^{-6} / K	100 ... 140
Service temperature, long term	Average	°C	0 ... 140
Service temperature, short term (max.)	Average	°C	>145
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	140
Electrical properties			
Dielectric constant	IEC 60250		8,0
Dielectric dissipation factor (10^6 Hz)	IEC 60250		0,02

	Test method	Unit	Guideline value
Volume resistivity	DIN EN 62631-3-1	Ω * cm	$>10^{14}$
Surface resistivity	DIN EN 62631-3-2	Ω	$>10^{14}$
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV / mm	20

The data stated above are average values ascertained by statistical tests on a regular basis. They are in accordance with DIN EN 15860. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale. *Values depend on the resin types used for the reinforcement