

## Polystone® PVDF

### Product characteristics

- High temperature resistance
- Outstanding chemical resistance
- Excellent ageing properties

### Typical field of application

- Clean room and semiconductor industry
- Chemical engineering and tank building
- Bottling and food industry

	Test method	Unit	Value
<b>General properties</b>			
Density	DIN EN ISO 1183-1	g/cm <sup>3</sup>	1,78
Water absorption	DIN EN ISO 62	%	<0,04
Flammability (Thickness 3 mm / 6 mm)	UL 94		V0
<b>Mechanical properties</b>			
Yield stress	DIN EN ISO 527	N/mm <sup>2</sup>	55
Elongation at break	DIN EN ISO 527	%	30
Tensile modulus of elasticity	DIN EN ISO 527	MPa	2200
Notched impact strength (charpy)	DIN EN ISO 179	kJ/m <sup>2</sup>	15
Shore hardness	DIN EN ISO 868	scale D	77
<b>Thermal properties</b>			
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 <sup>-6</sup> K <sup>-1</sup>	100-140
Service temperature, long term	Average	°C	-20 ... 140
Service temperature, short term (max.)	Average	°C	150
Heat deflection temperature	DIN EN ISO 306, Vicat B	°C	140
<b>Electrical properties</b>			
Dielectric constant	IEC 60250		8,0
Dielectric dissipation factor (10 <sup>6</sup> Hz)	IEC 60250		0,02
Volume resistivity	IEC 60093	Ω *cm	>10 <sup>14</sup>
Surface resistivity	IEC 60093	Ω	<10 <sup>14</sup>
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.