

Polystone® P homopolymer

Product characteristics

- High strength
- High weldability
- Excellent chemical and corrosion resistance

Typical field of application

- Chemical engineering and tank building
- Ventilation and equipment manufacturing
- Pump engineering

	Test method	Unit	Value
General properties			
Density	DIN EN ISO 1183-1	g/cm ³	0,91
Water absorption	DIN EN ISO 62	%	<0,1
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
Mechanical properties			
Yield stress	DIN EN ISO 527	N/mm ²	32
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	1300
Notched impact strength (charpy)	DIN EN ISO 179	kJ/m ²	4
Shore hardness	DIN EN ISO 868	scale D	72
Thermal properties			
Melting temperature	ISO 11357-3	°C	162-167
Thermal conductivity	DIN 52612-1	W / (m * K)	0,20
Thermal capacity	DIN 52612	kJ / (kg * K)	1,70
Coefficient of linear thermal expansion	DIN 53752	10 ⁻⁶ K ⁻¹	120-190
Service temperature, long term	Average	°C	0 ... 100
Service temperature, short term (max.)	Average	°C	150
Heat deflection temperature	DIN EN ISO 306, Vicat B	°C	90
Electrical properties			
Dielectric constant	IEC 60250		2,4
Dielectric dissipation factor (10 ⁶ Hz)	IEC 60250		0,00019
Volume resistivity	IEC 60093	Ω *cm	>10 ¹⁴
Surface resistivity	IEC 60093	Ω	>10 ¹⁴
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV/mm	45

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.