Technical Data Sheet

Polystone® P random copolymer natural

PP-R

Typical characteristics

- High rigidity
- Good weldability
- Corrosion resistant
- Heat resistant

Typical industries

- Chemical Processing Industry
- Galvanic plants
- Exhaust-air cleaning plants
- Chemical storage tanks
- Ventilation plants
- Hydrogen Energy

	Test method	Unit	Guideline 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	MPa	>23
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>1000
Notched impact strength	DIN EN ISO 179	kJ / m^2	>10
Shore hardness	DIN EN ISO 868	scale D	>64
Thermal properties			
Melting temperature	ISO 11357-3	°C	146 ... 152
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	120 ... 190
Service temperature, long term	Average	°C	-10 ... 100
Service temperature, short term (max.)	Average	°C	135
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	65
Electrical properties			
Dielectric constant	IEC 60250		2,5

	Test method	Unit	Guideline value
Dielectric dissipation factor (10^6 Hz)	IEC 60250		0,00019
Volume resistivity	DIN EN 62631-3-1	Ω * cm	$>10^{14}$
Surface resistivity	DIN EN 62631-3-2	Ω	$>10^{14}$
Dielectric strength	IEC 60243	kV / mm	>40

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.