

Technical Data Sheet

Polystone[®] P (Homopolymer) EHS natural

Typical characteristics

- High rigidity
- Very good weldability
- Corrosion resistance
- Very high heat resistance

Typical industries

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

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm ³	>0,90
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	>30
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>1500
Notched impact strength	DIN EN ISO 179	kJ / m ²	>4
Shore hardness	DIN EN ISO 868	scale D	>70
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	120 ... 190
Service temperature, long term	Average	°C	0 ... 120
Service temperature, short term (max.)	Average	°C	150
Vicat softening 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	DIN EN 62631-3-1	Ohm * cm	>10 ¹⁴

	Test method	Unit	Guideline value
Surface resistivity	DIN EN 62631-3-2	Ohm	$>10^{14}$
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.



Röchling Industrial SE & Co. KG

Röchlingstr. 1 • 49733 Haren (Ems)/Germany (DE) • Tel. +49 5934 701-0
info@roechling-plastics.com • www.roechling.com/industrial/haren

Print: 30/04/2024 • Release: 20/09/2023 • Version: 1.0
PIM-Version: 249 • PIM-ID: 718584 • PIM-Code: 249-6-10.11.15.9-7.3.5-5

Page 2 / 2 (Dates in DD/MM/YYYY)

