

### Technical Data Sheet

# Polystone<sup>®</sup> P (Homopolymer) black extruded

#### Typical characteristics

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

#### Typical industries

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

	Test method	Unit	Guideline value
<b>General properties</b>			
Density	DIN EN ISO 1183-1	g / cm <sup>3</sup>	>0,90
Water absorption	DIN EN ISO 62	%	<0,1
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
<b>Mechanical properties</b>			
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 <sup>2</sup>	>4
Shore hardness	DIN EN ISO 868	scale D	>70
<b>Thermal properties</b>			
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 <sup>-6</sup> / K	120 ... 190
Service temperature, long term	Average	°C	0 ... 100
Service temperature, short term (max.)	Average	°C	150
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	90
<b>Electrical properties</b>			
Dielectric constant	IEC 60250		2,4
Dielectric dissipation factor (10 <sup>6</sup> Hz)	IEC 60250		0,00019

	Test method	Unit	Guideline value
Volume resistivity	DIN EN 62631-3-1	Ohm * cm	>10 <sup>14</sup>
Surface resistivity	DIN EN 62631-3-2	Ohm	>10 <sup>14</sup>
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](mailto:info@roechling-plastics.com) • [www.roechling.com/industrial/haren](http://www.roechling.com/industrial/haren)

Print: 27/04/2024 • Release: 20/09/2023 • Version: 1.0  
 PIM-Version: 419 • PIM-ID: 591282 • PIM-Code: 419-30-10.11.15.9-7.6.3.3.3-5

