

Technical Data Sheet

Polystone[®] Safe-Tec C black

PE-HD (PE 100)

Typical characteristics

- TPE in the top layer
- Good weldability
- Chemical resistant

Typical industries

- Chemical Processing Industry

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm ³	>0,95
Water absorption	DIN EN ISO 62	%	0,01
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
Flammability (Thickness 3 - 10 mm)	DIN 4102		B2
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	>22
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	>38
Thermal properties			
Melting temperature	ISO 11357-3	°C	130 ... 135
Thermal conductivity	DIN 52612-1	W / (m * K)	0,40
Thermal capacity	DIN 52612	kJ / (kg * K)	1,90
Coefficient of linear thermal expansion	DIN 53752	10 ⁻⁶ / K	150 ... 230
Service temperature, long term	Average	°C	-50 ... 80
Service temperature, short term (max.)	Average	°C	100
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	67
Electrical properties			
Dielectric constant	IEC 60250		2,4
Dielectric dissipation factor (10 ⁶ Hz)	IEC 60250		0,0004
Volume resistivity	DIN EN 62631-3-1	Ω * cm	>10 ¹⁴

ri-inquiry@roechling.com • www.roechling.com/industrial/materials

Print: 04/06/2026 • Release: 24/04/2025 • Version: 2.0

PIM-ID: 775072 • PIM-Code: 7-1119-9.16.33-9-10.5

Company-IDs: 23070

Page 1 / 2 (Dates in DD/MM/YYYY)



	Test method	Unit	Guideline value
Surface resistivity	DIN EN 62631-3-2	Ω	$>10^{14}$
Comparative tracking index	IEC 60112		600
Dielectric strength	IEC 60243	kV / mm	>40

The data given are standard values which are based on our experience & previous technical studies. These values are influenced by the design, processing conditions and environmental influences out of our control. The sustainability of the material for a given application is the responsibility of the user. Typing and printing errors reserved.

One-sided coating can lead to unpreventable material distortion under certain circumstances.



ri-inquiry@roechling.com • www.roechling.com/industrial/materials

Print: 04/06/2026 • Release: 24/04/2025 • Version: 2.0
 PIM-ID: 775072 • PIM-Code: 7-1119-9.16.33-9-10.5
 Company-IDs: 23070

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

