

Technical Data Sheet

Polystone[®] MR black

PE-UHMW / PE 1000

Typical characteristics

- Good wear resistance
- Good sliding properties

Typical industries

- Ingegneria meccanica e impiantistica
- Tecnologia di trasporto e automazione
- Ingegneria idraulica e portuale

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm ³	>0,94
Water absorption	DIN EN ISO 62	%	0,01
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
Molecular weight	-	10 ⁶ g/mol	≥4
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	>19
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>700
Notched impact strength	DIN EN ISO 11542	kJ / m ²	>70
Shore hardness	DIN EN ISO 868	scale D	>63
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	-100 ... 80
Service temperature, short term (max.)	Average	°C	130
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	79
Electrical properties			
Volume resistivity	DIN EN 62631-3-1	Ω * cm	>10 ¹⁴
Surface resistivity	DIN EN 62631-3-2	Ω	>10 ¹⁴

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



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.



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

Print: 01/05/2026 • Release: 21/01/2026 • Version: 7.0
PIM-ID: 591006 • PIM-Code: 1128-33-143.223-5.11.5-5
Company-IDs: 20000-1

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

