

Technical Data Sheet

Polystone® M Flametech AST black

PE-UHMW / PE 1000

Typical characteristics

- Self-extinguishing
- Antistatic
- High temperature resistance
- Good wear properties

Typical industries

- Bulk Material Handling
- Mechanical Engineering Industry

	Test method	Unit	Guideline value
General properties			
Density	DIN EN ISO 1183-1	g / cm ³	>0,99
Water absorption	DIN EN ISO 62	%	<0,1
Flammability (Thickness 3 mm / 6 mm)	UL 94		V0
Molecular weight	-	10 ⁶ g/mol	~ 9
Mechanical properties			
Yield stress	DIN EN ISO 527	MPa	>20
Elongation at break	DIN EN ISO 527	%	>50
Tensile modulus of elasticity	DIN EN ISO 527	MPa	>900
Notched impact strength	DIN EN ISO 11542-2	kJ / m ²	>40
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	-200 ... 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 ⁹
Surface resistivity	DIN EN 62631-3-2	Ω	<10 ⁹

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

Print: 05/12/2025 • Release: 24/04/2025 • Version: 3.0
 PIM-Version: 7 • PIM-ID: 775062 • PIM-Code: 7-985-12.16.11.126-6.5-5
 Company-IDs: 23070

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



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: 05/12/2025 • Release: 24/04/2025 • Version: 3.0
PIM-Version: 7 • PIM-ID: 775062 • PIM-Code: 7-985-12.16.11.126-6.5-5
Company-IDs: 23070

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

