

Technical Data Sheet

Polystone[®] M XL Crosslinked - ASTM

PE-UHMW / PE 1000

Typical characteristics

- Long lifetime
- Chemical resistant
- Good wear resistance

	Test method	Unit	Guideline value
General properties			
Density	ASTM D792	g / cm ³	0.93
Water Absorption	ASTM D570	%	0.01
Mechanical properties			
Wear resistance	Sand-slurry		85
Hardness	ASTM D2240	Shore D	62 - 66
Tensile Strength at yield 73°F	ASTM D638	psi	2900
Tensile Modulus	ASTM D638	psi	100000
Elongation at Break	ASTM D638	%	>330
Izod Impact, Notched	ASTM D256	ft-lb/in	No Break
Coefficient of Friction, Dynamic			0.10-0.22
Coefficient of Friction, Static			0.15-0.20
Thermal properties			
CTE, linear	ASTM D696	1/K	2.0 x 10 ⁻⁴
Melting Point		°F	266 - 275
Maximum Service Temperature, Air		°F	180
Flammability, UL94		1/8 inch	HB
Electrical properties			
Dielectric constant	ASTM D150	1MHz	2.3
Surface resistivity	ASTM D257	Ω/cm	>10 ¹²
Compliance properties			
FDA			No
NSF			No

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



	Test method	Unit	Guideline value
USDA			No

The data stated above are average values ascertained by statistical tests on a regular basis. 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: 20/04/2026 • Release: 20/09/2023
PIM-ID: 717951 • PIM-Code: 39-19-15.33,143-2
Company-IDs: 23070

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

