

Technical Data Sheet

Polystone[®] M virgin - ASTM

[PE-UHMW / PE 1000]

Product characteristics

- High abrasion and wear resistance
- Low coefficient of friction
- High impact strength

Product applications

- Food processing
- Bulk material handling
- Conveyor and packaging

	Test method	Unit	Guideline Value
General properties			
Specific Gravity	ASTM D792	g/cm ³	0,93
Water Absorption	ASTM D570	%	<0,10
Mechanical properties			
Wear resistance	Sand-slurry		100
Hardness	ASTM D2240	Shore D	62 - 66
Tensile Strength at yield 73°F	ASTM D638	psi	3100
Tensile Modulus	ASTM D638	psi	100000
Elongation at Break	ASTM D638	%	>350
Flexural Strength	ASTM D790	psi	3500
Compressive Strength	ASTM D695	psi	3000
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
Izod Impact Strength	ASTM D4020	KJ/m ²	125
Thermal properties			
CTE, linear	ASTM D696	in/in/°F	1,1x 10 ⁻⁴
Melting Point	ASTM D3418	°F	266 - 275
Vicat Softening Point	ISO306	°F	176
Maximum Service Temperature, Air		°F	180
Heat Deflection Temperature 264psi	ASTM D648	°F	108
Flammability, UL94		1/8 inch	HB
Electrical properties			
Volume Resistivity	ASTM D257	Ωcm	>10 ¹⁵
Dielectric constant	ASTM D150	1 MHz	2,3
Dielectric strength	ASTM D149	KV/mm	45
Surface resistivity	ASTM D257	Ω/cm	>10 ¹²
Compliance Properties			
FDA			Yes
NSF			No
USDA			Yes

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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.

