Technical Data Sheet

Polystone® M Natural - ASTM

PE-UHMW / PE 1000

Typical characteristics

- Low coefficient of friction
- Good wear properties
- Good impact strength

Typical industries

- Bulk Material Handling
- Conveyor Technology & Automation
- Food Industry

	Test method	Unit	Guideline value
General properties			
Specific Gravity	ASTM D792	g / cm^3	0.93
Water Absorption	ASTM D570	%	0.01
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

	Test method	Unit	Guideline value
Electrical properties			
Volume Resistivity	ASTM D257	Ωcm	$>10^{15}$
Dielectric constant	ASTM D150	1MHz	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

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.