

Technical Data Sheet

Polystone[®] M Virgin HCL Conductive Black

PE-UHMW / PE 1000

	Test method	Unit	Guideline value
General properties			
Specific Gravity	ASTM D792	g / cm ³	0.935
Water Absorption	ASTM D570	%	≤0.01
Mechanical properties			
Wear resistance	Sand-slurry		100
Hardness	ASTM D785	Shore D	63-69
Tensile Strength at yield 73°F	ASTM D638	psi	3000
Tensile Modulus	ASTM D638	psi	100,000
Elongation at Break	ASTM D638	%	≥290
Flexural Strength	ASTM D790	psi	3200
Compressive Strength	ASTM D695	psi	2900
Izod Impact, Notched	ASTM D256	ft-lb/in	No Break
Coefficient of Friction, Dynamic			0.10-0.15
Coefficient of Friction, Static			0.15-0.2
Thermal properties			
CTE, linear	ASTM D696	in/in/°F	1.1x10 ⁻⁴
Melting Point	ASTM D3418	°F	275
Maximum Service Temperature, Air		°F	180
Deflection Temperature at 1.8Mpa (264psi)	ASTM D648	°F	108
Flammability, UL94		1/8 inch	HB
Electrical properties			
Surface resistivity	ASTM D257	Ω/sq	10 ¹ - 10 ⁵
Compliance properties			
FDA			No
NSF			No
USDA			No

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