

# Technical data sheet

## Polystone® M Virgin FDA Blue (UHMW-PE)

### Product characteristics

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

### Typical field of application

- Conveyor and packaging
- Bulk material handling
- Food processing

Physical Properties	tested method	unit	value
Specific Gravity	D792	g/cm <sup>3</sup>	0.93
Water Absorption	D570	%	<0.010
Mechanical Properties	tested method	unit	value
Hardness	D785	Shore D	62-66
Tensile Strength at yield 73 °F	D638	psi	3,100
Tensile Modulus	D638	psi	125,000
Elongation at Break	D638	%	≥350
Flexural Strength	D790	psi	3,500
Compressive Strength	D695	psi	3,000
Izod Impact, Notched	D256	ft-lb/in	No Break
Coefficient of Friction, Dynamic	-	-	0.10 - 0.15
Coefficient of Friction, Static	-	-	0.15 - 0.20
Wear Resistance	Sand Slurry	-	100
Thermal Properties	tested method	unit	value
CTE, linear	D696	in/in/°F	1.1x 10 <sup>-4</sup>
Melting Point	D3418	°F	266 - 275
Maximum Service Temperature, Air	-	°F	180
Deflection Temperature at 1.8Mpa (264psi)	D648	°F	108
Flammability, UL 94	-	1/8 inch	HB
Electrical Properties	tested method	unit	value
Dielectric constant	D150	-	2.3
Surface resistivity	D257	Ohm/cm	>10 <sup>12</sup>
Dielectric strength	D149	kV/mil	900
Compliance Properties	tested method	unit	value
FDA	21CFR177.1520	-	Yes
NSF	-	-	Yes
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.