

## Rochling Engineered Plastics Polystone® XL Cross linked (UHMW-PE)

Category : Polymer , Thermoplastic , Polyethylene (PE) , HDPE , High Density Polyethylene (HDPE), UHMW PE Ultra High Molecular Weight

### Material Notes:

Polystone® M is a highly versatile polymer that features: Low coefficient of friction Excellent abrasion resistance High-impact strength Chemical resistance Complies with FDA regulations under the Food, Drug and Cosmetic Act of 1958 Approval by the USDA for meat and poultry handling applications Broad temperature range (-450 - 180°F) Little or no moisture absorption Noise resistance Easy machinability Information provided by Röchling Engineered Plastics.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Rochling-Engineered-Plastics-Polystone-XL-Cross-linked-UHMW-PE.php](http://www.lookpolymers.com/polymer_Rochling-Engineered-Plastics-Polystone-XL-Cross-linked-UHMW-PE.php)

Physical Properties	Metric	English	Comments
Density	0.932 g/cc	0.0337 lb/in <sup>3</sup>	ASTM D792

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	62 - 66	62 - 66	ASTM D785
Tensile Strength, Yield	20.0 MPa	2900 psi	ASTM D638
Elongation at Break	330 %	330 %	ASTM D638
Izod Impact Resistance	12.0 J/cm <sup>2</sup>	57.1 ft-lb/in <sup>2</sup>	@ 73°F; ASTM D420-96
Coefficient of Friction, Static	0.080 - 0.18	0.080 - 0.18	Dynamic Coefficient @ 73°F on steel
Abrasion	85	85	Volumetric abrasion loss, %, relative to Natural Grade (100%)

Thermal Properties	Metric	English	Comments
CTE, linear	100 µm/m-°C	55.6 µin/in-°F	ASTM D696
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Melting Point	135 - 138 °C	275 - 280 °F	ASTM D789
Maximum Service Temperature, Air	82.2 °C	180 °F	Continuous

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+16 ohm-cm	>= 1.00e+16 ohm-cm	ASTM D257
Dielectric Constant	2.3	2.3	ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	35.4 kV/mm	899 kV/in	ASTM D149

## **Contact Songhan Plastic Technology Co.,Ltd.**

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