

## UHMW Natural or Black

### General Properties

Characteristics	Method	Units	Values
Density	ASTM D792	g/cm <sup>3</sup>	0,93
Average Molecular Weight		g/mol	> 7,0 x 10 <sup>6</sup>
Water Absorption	ASTM D570	%	<0,01
Flammability	UL94	-	HB

### Mechanical Properties

Characteristics	Method	Units	Values
Tensile Strength at Yield	ASTM D638	Mpa	17
Tensile Strength at Break	ASTM D638	Mpa	>30
Ultimate Elongation	ASTM D638	%	>300
Flexural Modulus of Elasticity	ASTM D790	MPa	480
Flexural Strength	ASTM D790	MPa	22
Abrasion Resistance (Sand Slurry Test)	ABNT NBR 14922	-	30
IZOD Impact (notched)	ASTM D256	-	No Break
Compressive Strength, 10% deformation	ASTM D695	MPa	20
Compressive Modulus of Elasticity	ASTM D695	Mpa	550
Hardness	ASTM D2240	Shore D	61
Static Friction Coefficient	ASTM D1894	-	0,13
Kinetic Friction Coefficient	ASTM D1894	-	0,11

### Thermal Properties

Characteristics	Method	Units	Values
Melt Temperature	ASTM D3418	°C	133
Thermal Conductivity @ 23°C	ASTM D177	W / (m * K)	0,4
Specific Heat @ 23°C	ASTM E1269	Cal/ g °C	0,48
Coefficient of Linear Expansion (30 - 100°C)	ASTM D696	10 <sup>-4</sup> / °C	1,5
Service Temperature (Continuous, in air)	Média	°C	80
Service Temperature (short period)	Média	°C	130
Heat Deflexion Temperature	ASTM D648	°F	116

### Electrical Properties

Characteristics	Method	Units	Values
Dielectric Strength	ASTM D149	kV/cm	900
Dielectric Constant @ 1Khz	ASTM D150	-	2,3
Surface Resistivity	ASTM D257	Ω	>10 <sup>15</sup>
Dissipation Factor, 10-Hz	ASTM D150	-	< 0,5 x 10 <sup>3</sup>

- 1- The mentioned values in this report can be changed at any moment without Baron previous communication.
- 2 -The informations presented in this data sheet reflects typical values of the resin specificatios, and tests in our laboratories, and should not be considered as absolute or warranted values. Only the properties and values mentioned on the certificate of quality are considered as guarantee of the product.
- 3- Does not contain the substance Bisphenol A (BPA, CAS# No.80-05-7)
- 4- The content of this Data Sheet replaces revisions published for this product.