

UHMWPE

Ultra-high-molecular-weight polyethylene

Color: White/Black

Density: 0.94-0.98g/cm³



...We pay more attention to after-sales!

Material Data Sheet

Mechanical Properties	Value	Unit	DIN/EN/ISO
Tensile strength at yield	80	MPa	527/D638
Elongation at yield	50	%	527
Modulus of elasticity in tension	680	MPa	527/D638
Impact strength	No br.	KJ/m ²	179/D256
Creep rupture strength after 1000hrs with static load	-	MPa	-
Time yield limit for 1% elongation after 1000hrs	-	MPa	-
Frictional coefficient	0.25	-	-
Rockwell hardness	62	-	-

Thermal Properties	Value	Unit	DIN/EN/ISO
Glass transition temperature (TG)	-	°C	53736
Crystalline melting point	140	°C	53736
Service temperature (short term)	95	°C	-
Service temperature (long term)	80	°C	53736
Coefficient of thermal expansion	200×10 ⁻⁶	m/(m*k)	53483/D696
Specific heat	1.84	J/(g*K)	-
Coefficient of thermal conductivity	0.41	W(k*m)	-

Electrical properties	Value	Unit	DIN/IEC
Surface resistivity	≥10 ¹²	Ω	60093
Volume resistivity	≥10 ¹²	Ω *cm	60093
Dielectric strength	>45	kv/mm	60243

Other properties	Value	Unit	DIN/EN/ISO
Water absorption @ saturation @ 23°C	0.01	%	62
Resistance to hot water , washing soda	Resistant	-	-
Resistance to weathering	No	-	-
Flammability (UL94)	HB	-	4589

FORETH INDUSTRIAL CO., LIMITED | Room6-1101, Dongfangmingzhu Building, Longgang District, Shenzhen, Guangdong China

<http://www.fore-plastics.com>

arion@fore-plastics.com

<http://www.hongfutech.com/>

86-755-28329102

The following information corresponds with our current knowledge and indicates our products and possible applications; We cannot give a legally binding guarantee of certain properties or the suitability for a specific application, Existing commercial patents must be observed.

A definitive quality guarantee is given in our general conditions of sales. Unless otherwise stated, these values represent averages taken from injection moulding samples, We reserve the right of technical alterations.