

Technical data sheet



ENZINRON (UHMWPE 500)

	METHOD	UNIT	VALUE
Mechanical Properties			
Specific gravity	ASTM D792	g/cm3	0.93
Tensile yield strength	ASTM D638	Mpa	0.51±0.09
Breaking elongation	ASTM D638	%	50
Bending strength	ASTM 790	Mpa	680
Flexural modulus	ASTM 790	Mpa	17
Shore hardness	ASTM D2240	D	61
Impact strength	ASTM D256	J/M	130
Thermal Properties			
Melting point	DSC	°C	130
Heat distortion temperature	ASTM D648	°C	42
Operating temperature	-	°C	
Maximum operating temperature	-	°C	
Thermal conductivity	DIN 52612- 1	W/(K-M)	0.41
Coefficient of linear thermal	ASTM D696	10-5- 1/K	20
Electrical Properties			
Dielectric strength	ASTM D150	KV-mm	45
Dielectric loss factor	ASTM D150	-	-
Volume resistivity	ASTM D257	Ω.cm	10 ¹²
Surface resistivity	ASTM D257	Ω	10 ¹²
Dielectric constant	ASTM D149	-	-
Chemical Properties			
Water absorption	23°C 60%RH	%	
Acid resistance	23°C 60%RH		+
Alkali resistance			+
Acid and alkali resistance			+
Resistance to sodium chlorate			+
Resistance to aromatic compounds			0
Resistance to ketone	23°C 60%RH		+
Resistance to hot water	23°C 60%RH		+
Others			
Flammability	UL 94	HB	
Viscosity	-		+
Non toxic	EEC 90/128 FDA	0	
Coefficient of friction	DIN 53375	0.38	
Anti-ultraviolet	-		

Remarks:

- “+”: positive “-”: negative “0”: depends.
- All the parameters above are based on raw material but not finished products.