



UHMWPE

Properties	Norm	Value	Unit
Mechanical properties			
Hardness Shore D	ISO 868	60	Sh. D.
Ball pressure hardness	DIN 53 456	45	N/mm ²
Tensile strength (23°C)	DIN 53 455	20	N/mm ²
Elongation at break (23°C)	DIN 53 455	400	%min
Tensile modulus	DIN 53 457	1600	N/mm ²
Coëff. of friction v-steel – dynamic	--	0,2	--
Physical properties			
Water absorption	DIN 53 495	0,03	%
Water absorption in air 50%rh	DIN 53 715	--	%
Compr. strength at 1% deformation (23°C)	DIN 53 454	--	N/mm ²
Electrical properties			
Dielectric strength	DIN 53 481	60	KV/mm
Thermal properties			
Coefficient of thermal expansion (20-100°C)	--	16	1/K.10 ⁻⁵
Thermal conductivity (23°C)	DIN 52 612	0,32	W/K.m
Maximum Continuous operating temperature	--	90	°C
Minimum Continuous operating temperature	--	-250	°C

Disclaimer: Information contained in this data sheet is up-to-date and correct as at the date of issue. The given information is only informative and we cannot guarantee the accuracy nor can we take any accountability for the use of this information. The customer is responsible for the quality of products and has to test usage and processing to use. Some values are based on the datasheet of the supplier, internal tests and research. The values are guideline values that can be used for comparison for material selection.