

Tekalen® A 6000

short mark. PE - UHMW

properties: very high molecular weight, very good wear resistance, good noise damping, high impact resistance, no water absorption, physiologically harmless

standard colours: natural, black, green (RAL 6024), blue (RAL 5015/5017)

special colours: special colours on request

**physical properties**

properties	test methods	units	results
molecular weight (average molecular weight)	-	g/mol	Ca. 4 - 6*10 <sup>6</sup>
density	ISO 1183	g/cm <sup>3</sup>	0,93
water absorption	ISO 62	%	< 0,01
flame classification	UL94	-	HB

**mechanical properties**

yield stress	ISO 527	N/mm <sup>2</sup>	≥ 19
elongation at yield	ISO 527	%	≥ 8
modulus of elasticity	ISO 527	MPa	≥ 700
impact strength (Charpy)	ISO 179	kJ/m <sup>2</sup>	Without breakage
notched impact strength (Charpy)	ISO 11542-2	kJ/m <sup>2</sup>	> 180
ball indentation hardness	ISO 2039-1	N/mm <sup>2</sup>	40
shore D hardness of 15-s value	ISO 868	-	60 - 65
dynamic coefficient of friction	-	-	0,2
wear (Sand-Slurry)	ISO 15527	%	100

**thermal properties**

melting range DSC, 10K/min.	ISO 3146	°C	130 - 135
coefficient of thermal expansion between 23 °C and 60 °C	ISO 11359	K <sup>-1</sup>	ca. 2*10 <sup>-4</sup>
thermal conductivity	ISO 52612	$\frac{W}{m \cdot K}$	0,4
usage temperature (max.)	-	°C	80
usage temperature short term	-	°C	100
usage temperature (min.)	-	°C	- 200

**electrical properties**

surface resistivity	IEC 60093	Ohm	> 10 <sup>12</sup>
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Conformances according to: EU-plastics directive 10/2011/EG  
 FDA-directive 21CFR177.1520  
 FDA-directive 21CFR178.3297

**TERBRACK**

August 2020

Notes for the user: The values given in this data sheet are based on a sheet with a 40mm thickness. Depending on the thickness the technical values may vary during processing. The technical data given in this sheet correspond to our current state of knowledge and should not be construed as an agreement or guarantee regarding certain properties of our products. The decision on the suitability of a particular material for a specific application is up to the user. We reserve the right to modify the given data. Errors of the given data are reserved. The document was produced by machine and is valid without signature.

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