

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

colour: natural

**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	$\frac{W}{m * K}$	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

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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.  
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