

## Data sheet Murdotec 2000 green

- very good wear resistance
- very good sliding properties
- very good shock and impact absorption
- very good antiadhesion properties

**Applications:** wear-resistant bearings, profiles and segments, chain guides

Technical properties	(PE-UHMW 2000 green)	Values	Units	DIN	ISO/EC
Colour		coloured			
Molecular weight		9x10 <sup>6</sup>	g/mol	7728	
Code		1.1			15527:2013
Density		≤0,94	kg/dm <sup>3</sup>	53479	1183
Water absorption – saturation at 23°C		<0,01	%		
<b>Mechanical properties</b>					
Yield/ break stress		-20	MPa	53455	527-2
Breaking elongation		>250	%	53455	527-2
Coefficient of elasticity (pulling test)		>600	MPa		527-2
Notch impact strength - Charpy		≥170	kJ/m <sup>2</sup>	53453	179
Shore hardness D		61-64	°	53505	868
Ball hardness		>30	N/mm <sup>2</sup>		2039
Sand-Slurry-Test		80	%		15527
Coefficient of sliding friction Steel (0,25m/s, 0,25N/mm <sup>2</sup> )		-0,2	μ		
Coefficient of sliding friction POM (0,25m/s, 0,25N/mm <sup>2</sup> )					
<b>Thermal properties</b>					
Heat conductivity 23°C		0,4	W/(K x m)	52612	
Linear thermal coefficient of expansion α (average value between 23 und 60 °C)		20x10 <sup>-5</sup>	m/(K x m)	53752	11359-2
Upper service temperature in air	short term	90	°C		
	constant (5000h)	80	°C		216
Lower service temperature		-200	°C		
Burning behavior per UL 94 – sample thickness 3/6 mm		HB			
Melting Point		130-135	°C		3146 method C
<b>Electrical properties</b>					
Electrical strength		≤45	kV/mm	53481	60243
Specific constant resistance		>10 <sup>12</sup>	Ω x cm	53482	60093
Surface resistance		>10 <sup>12</sup>	Ω	53482	60093
<b>Physiological properties</b>					
Approved for use in food industry (FDA)		Yes			
Approved for use in food industry (EU)		Yes			

The values, shown in this table, enable to compare materials faster. These values are short-term values, which can be influenced by processing, environmental as well as application conditions. Therefore, these values do not represent assured properties. It is due to the customer's responsibility whether the chosen material is suitable for its specific application.

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