

# Technical data sheet

## St 500®

<b>General properties</b>			
Material designation	St 500®		
Material colour(s)	natural (7000), green (4004), black (6000), Colours according to RAL-K7		
Raw material	PE-HMW   High-molecular polyethylene		
Molecular weight (Average molar mass)	0,5 Mio.		
<b>Mechanical properties</b>			
	<b>Unit</b>	<b>Test method</b>	<b>Value</b>
Density	-	DIN EN ISO 1183	0,96
Tensile strength	-	DIN EN ISO 527	27
Shore D hardness, 15s - Value	Skala D	DIN EN ISO 868	~ 70
Ball indentation hardness, 30s - Value	MPa	DIN ISO 2039 Teil 1	46
Ultimate tensile strength	MPa	DIN EN ISO 527	25
Elongation at break	%	DIN EN ISO 527	100
Modulus of elasticity	MPa	DIN EN ISO 527	1.060
Notched impact strength (Charpy)	kJ/m <sup>2</sup>	DIN EN ISO 179	o.Br.
Wear resistance	%	Sand Slurry method	> 250
Coefficient of friction (to steel)	μ		0,1 - 0,2
<b>Thermal properties</b>			
	<b>Unit</b>	<b>Test method</b>	<b>Value</b>
Dimensional stability under heat	°C	DIN 53461	47
Vicat softening temperature	°C	DIN EN ISO 306	-
Crystalline melting range	°C	DIN EN ISO 11357	-
Thermal conductivity at 23°C	W/ (K * m)	-	-
Specific heat at 23°C	kJ / (K * Kg)	-	-
Coefficient of linear expansion at 23°C	10 <sup>-5</sup> * (1/K)	DIN ISO 11359	-
Fire behaviour	-	UL 94	-
Application temperature (min.)	°C	-	-
Application temperature (constant)	°C	-	-
Moisture absorption	%	-	-
<b>Electrical properties</b>			
	<b>Unit</b>	<b>Test method</b>	<b>Value</b>
Specific volume resistance	-	-	-
Specific surface resistance	-	-	-
Dielectric strength	-	-	-
<b>Conformity with food secure regulations</b>			
FDA	Conforms to FDA regulations		
EU	EU 1935/2004 - EU 10/2011 [FSP quality]		

Our employees are available to answer all of your questions.

You can find additional information on our material qualities on the internet at [www.wefapress.com/en/materials](http://www.wefapress.com/en/materials).

All stated information reflects our current knowledge. No agreement or guarantee regarding specific characteristics can be derived from the information contained in the datasheets. Each user is responsible for deciding on the suitability of a material for a specific purpose. The data supplied are subject to change.

The materials labelled as a "Food Secure Product" (FSP) comply with the provisions of Regulations (EU) No. 10/2011 and No. 1935/2004.