



Wefapress® St 500® (DIN 16972 TG3)

Standard colour(s): natural, black, green

Special colour(s): RAL-K7

Fields of application:

- food industry
- mechanical engineering
- transport and conveyor systems
- brewery technology

Properties: • good sliding properties

• high bending and impact strength

Material designation		St 500®	
Raw material	PE-HMW		
Material colour(s)	natural, black, green		
Properties	Unit	Test method	Value
Molecular weight (average molar mass)	g/mol		0,5 Mio.
Mechanical properties			
Density	g/cm ³	DIN 53479	0,96
Tensile strength	N/mm ²	DIN 53455	27
Shore D hardness, 15s - Value	Skala D	DIN 53505	~ 70
Ball indentation hardness, 30s - Value	N/mm ²	DIN ISO 2039 Part 1	46
Ultimate tensile strength	N/mm ²	DIN 53455	25
Elongation at break	%	DIN ISO / R 527	100
Modulus of elasticity	N/mm ²	DIN 53457	1.060
Notched impact strength (Charpy)	kJ/m ²	DIN 53453	o.Br.
Abrasion	%	Sand slurry method	> 250
Coefficient of friction	μ		0,1 - 0,2
Thermal properties			
Dimensional stability under heat	°C	DIN 53461	47
Vicat softening temperature	°C	DIN 53460	80
Crystalline melting range	°C	DTA	130 – 135
Thermal conductivity at 23 °C	W/ (K * m)	DIN 52612	0,41
Specific heat at 23 °C	kJ/ (K * Kg)		1,8
Coefficient of linear expansion at 23 °C	10 ⁻⁵ * (1/K)	DIN 53752	~ 20
Fire behaviour		UL 94	HB
Application temperature (min.)	°C		- 100
Application temperature (constant)	°C		+ 80
Moisture absorption	%		< 0,01
Electrical properties			
Specific volume resistance	Ω * cm	DIN 53482	< 10 ¹⁵
Surface resistance	Ω	DIN 53482	< 10 ¹³
Dielectric strength	kV/mm	DIN 53481	40
Dielectric constant at 50 Hz		DIN 53485	2,9
• approved for foodstuffs according to FDA Guidelines 21CFR177.1520 and 21 CFR178.3297			
On request, available with:			
• complies with regulations (EC) No. 10/2011, 1282/2011 and No. 1935/2004			