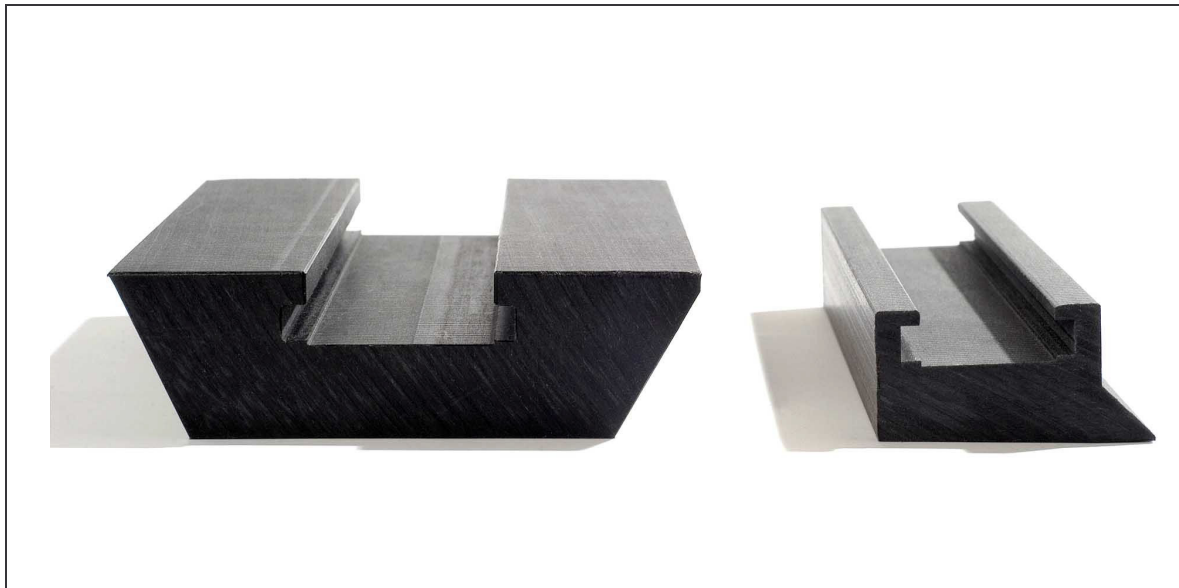


Product information

Wefapress PS 1004[®]

PS 1004[®] is an ultrahigh molecular weight low pressure polyethylene with a molecular weight of approx. 9.2 million g/mol. By using specially selected carbon black and graphite materials as well as the influence of micro-crystal balls it is possible to enhance and customise the properties of the PS 1000[®] material. The characteristics of PS 1004[®] are as follows:

- high mechanical loadbearing capacity
- extremely low wear and good sliding properties
- high bending- and impact strength



Standard colours:	black
Special colours:	RAL 1027 curry yellow /RAL 3020 traffic red
Form of delivery:	sheets, rods ^(pressed) (catalogue semi finished products)
Finished parts:	on request
Fields of application:	<ul style="list-style-type: none">• paper industry• mechanical engineering• transport- and conveyor systems• agriculture• filter industry

Technical Data Sheet

Material designation	PS 1004[®]		
Raw material	PE-UHMW		
Material colour(s)	black		
Properties	Unit	Test method	Value
Molecular weight (average molar mass)	g/mol		approx. 9.2 mill.
Mechanical properties			
Density	g/cm ³	DIN 53479	0.97
Tensile strength	N/mm ²	DIN 53455	23
Shore D hardness D, 15s	D scale	DIN 53505	64 - 68
Ball indentation hardness, 30s	N/mm ²	DIN ISO 2039 part 1	47
Ultimate tensile strength	N/mm ²	DIN 53455	35
Elongation at break	%	DIN ISO / R 527	340
Modulus of elasticity	N/mm ²	DIN 53457	700
Notched impact strength (Charpy)	kJ/m ²	DIN 53453	>80 -120
Abrasion	%	Sand slurry method	~80
Coefficient of friction			0.1
Thermal properties			
Dimensional stability under heat	°C	DIN 53461	47
Vicat softening temperature	°C	DIN 53460	79
Crystallite melting range	°C	DTA	130 ~135
Thermal conductivity at 23°C	W/m * K	DIN 52612	0.42
Specific heat at 23°C	kg/kJ * K		1.8
Coefficient of linear expansion at 23°C	K ⁻¹	DIN 53752	1 x 10 ⁻⁴
Application temperature (min.)	°C		-200
Application temperature (constant)	°C		80
Application temperature (max.)	°C		100
Electrical properties			
Dielectric strength	kV/mm	DIN 53481	45

Notes for the user:

Data sheet specifications are made to our today's knowledge. This information does not mean that certain properties are agreed upon or assured. Whether or not a material is suitable for a given application is the user's decision. All specifications are subject to change.

Vreden, October 2005