

Product information

Wefapress PTFE

PTFE is a polytetrafluorethylene which is physiologically harmless. Although it withstands temperatures from -90 up to $+250^{\circ}\text{C}$ it has only low strength and wear values. The characteristics of PTFE are as follows:

- outstanding chemical resistance
- low coefficient of friction
- good temperature resistance



Standard colours:	natural
Special colours:	--
Form of delivery:	sheets, rods (catalogue semi finished products / conveyor systems)
Finished parts:	on request
Fields of application:	<ul style="list-style-type: none">• seals• guides• light-duty machine parts

Technical Data Sheet

Material designation	PTFE		
Raw material	Polytetrafluorethylene		
Material colour(s)	natural		
Properties	Unit	Test method	Value
Molecular weight (average molar mass)	g/mol		
Mechanical properties			
Density	g/cm ³	DIN 53479	2.18
Tensile strength	N/mm ²	DIN 53455	25 - 36
Shore D hardness, 15s	D scale	DIN 53505	57
Ball indentation hardness, 30s	N/mm ²	DIN ISO 2039 part 1	30
Ultimate tensile strength	N/mm ²	DIN 53455	25
Elongation at break	%	DIN ISO / R 527	300
Modulus of elasticity	N/mm ²	DIN 53457	400
Notched impact strength (Charpy)	kJ/m ²	DIN 53453	13
Abrasion	%	Sand slurry method	
Coefficient of friction			0.08
Thermal properties			
Dimensional stability under heat	°C	DIN 53461	56
Vicat softening temperature	°C	DIN 53460	
Crystallite melting range	°C	DTA	
Thermal conductivity at 23°C	W/m * K	DIN 52612	0.21
Specific heat at 23°C	kg/kJ * K		
Coefficient of linear expansion at 23°C	K ⁻¹	DIN 53752	1 x 10 ⁻⁴
Application temperature (min.)	°C		-200
Application temperature (constant)	°C		260
Application temperature (max.)	°C		300
Electrical properties			
Volume resistivity	Ω cm	DIN 53482	10 ¹⁸
Surface resistance	Ω	DIN 53482	10 ¹⁴
Dielectric strength	kV/mm	DIN 53481	20 - 80
Relative permittivity	at 50 Hz	DIN 53485	2.0

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, August 03