

Product information

Wefapress PETP

PETP is a semi-crystalline thermoplastic polyethylene terephthalate. This material stands out for better abrasion rating und lower moisture absorption compared to POM. PETP is highly suited for complex precision parts. The characteristics of PETP are as follows:

- high hardness, rigidity and solidity
- excellent sliding properties
- low sliding wear
- outstanding dimensional stability
- very low moisture absorption



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">• mechanical engineering• gearwheels• frame- and pump components• cam discs etc.

Technical Data Sheet

Material designation	PETP		
Raw material	Polyethylene terephthalate		
Material colour(s)	natural		
Properties	Unit	Test method	Value
Molecular weight (average molar mass)	g/mol		
Mechanical properties			
Density	g/cm ³	DIN 53479	1.38
Tensile strength	N/mm ²	DIN 53455	
Shore D hardness, 15s	D scale	DIN 53505	
Ball indentation hardness, 30s	N/mm ²	DIN ISO 2039 part 1	140
Ultimate tensile strength	N/mm ²	DIN 53455	40
Elongation at break	%	DIN ISO / R 527	
Modulus of elasticity	N/mm ²	DIN 53457	3000
Notched impact strength (Charpy)	kJ/m ²	DIN 53453	>4
Abrasion	%	Sand slurry method	
Coefficient of friction			0.25
Thermal properties			
Dimensional stability under heat	°C	DIN 53461	
Vicat softening temperature	°C	DIN 53460	
Crystallite melting range	°C	DTA	255
Thermal conductivity at 23°C	W/m * K	DIN 52612	0.24
Specific heat at 23°C	kg/kJ * K		
Coefficient of linear expansion at 23°C	K ⁻¹	DIN 53752	0.8 x 10 ⁻⁴
Application temperature (min.)	°C		-20
Application temperature (constant)	°C		100
Application temperature (max.)	°C		160
Electrical properties			
Volume resistivity	Ω cm	DIN 53482	10 ¹⁶
Surface resistance	Ω	DIN 53482	10 ¹⁴
Dielectric strength	kV/mm	DIN 53481	60
Relative permittivity	at 50 Hz	DIN 53485	3.6

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