

Product information

Wefapress PETP-SP

PETP-SP is a polyethylene terephthalate modified with special, homogeneously distributed solid lubricants. This composition makes it a “self-lubrication” material with even better sliding properties and wear resistance than pure PETP. This speciality also results in a higher load bearing capacity, while it also avoids the slip-stick effect. The characteristics of PETP-SP are as follows:

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



Standard colours:	light grey
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.• sliding elements, etc.

Technical Data Sheet

Material designation	PETP-SP		
Raw material	Polyethylene terephthalate modified		
Material colour(s)	light grey		
Properties	Unit	Test method	Value
Molecular weight (average molar mass)	g/mol		
Mechanical properties			
Density	g/cm ³	DIN 53479	1.43
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	
Ultimate tensile strength	N/mm ²	DIN 53455	5
Elongation at break	%	DIN ISO / R 527	
Modulus of elasticity	N/mm ²	DIN 53457	2200
Notched impact strength (Charpy)	kJ/m ²	DIN 53453	2
Abrasion	%	Sand slurry method	
Coefficient of friction			0.20
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	0.23
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		110
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	
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