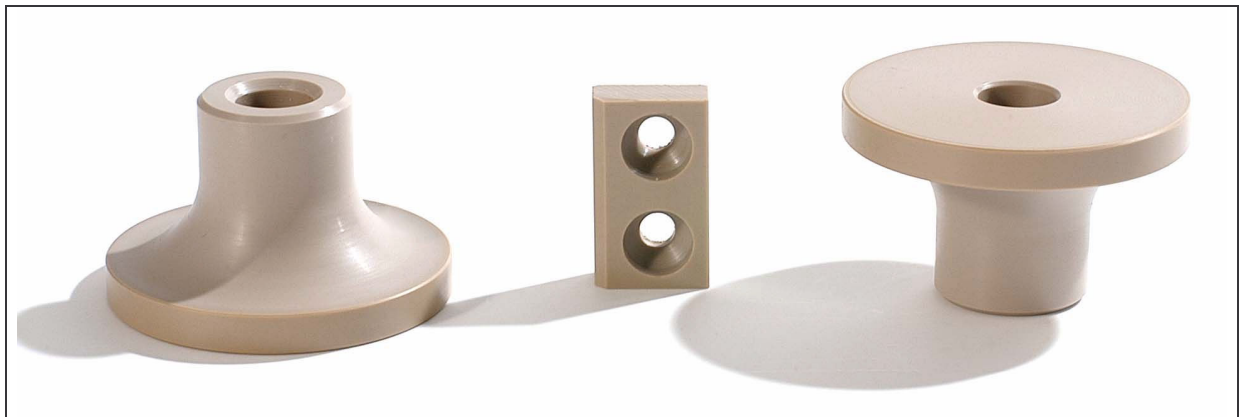


## Product information

### Wefapress PEEK

PEEK is a semi-crystalline thermoplastic. Its optimal ratio of mechanical properties makes this material a high-performance plastic. Due to its good resistance against various liquids this material is physiologically harmless. PEEK builds the lowest smoke emission compared with other thermoplastics. The characteristics of PEEK are as follows:

- high dimensional stability
- good deformation resistance under heat
- good chemical resistance
- low flammability



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"><li>• transport technology</li><li>• aircraft and aerospace industries</li><li>• shock absorbers</li><li>• valve linings</li><li>• seals</li></ul>

## Technical Data Sheet

Material designation	<b>PEEK</b>		
Raw material	Polyetheretherketone		
Material colour(s)	natural		
<b>Properties</b>	Unit	Test method	Value
Molecular weight (average molar mass)	g/mol		
<b>Mechanical properties</b>			
Density	g/cm <sup>3</sup>	DIN 53479	1.32
Tensile strength	N/mm <sup>2</sup>	DIN 53455	
Shore D hardness, 15s	D scale	DIN 53505	
Ball indentation hardness	Mpa	DIN 53456	230
Ultimate tensile strength	N/mm <sup>2</sup>	DIN 53455	
Elongation at break	%	DIN 53455	45
Modulus of elasticity	Mpa	DIN 53457	3600
Notched impact strength (Charpy)	kJ/m <sup>2</sup>	DIN 53453	7
Abrasion	%	Sand slurry method	
Coefficient of friction			
<b>Thermal properties</b>			
Dimensional stability under heat	°C	DIN 53461	
Vicat softening temperature	°C	DIN 53460	
Crystallite melting range	°C	DTA	
Thermal conductivity	W/m * K	DIN 52612	0.25
Specific heat	J/g*K		1.06
Coefficient of linear expansion at 23°C	10 <sup>-5</sup> *K <sup>-1</sup>		4-5
Application temperature (min.)	°C		-40
Application temperature (constant)	°C		250
Application temperature (max.)	°C		310
<b>Electrical properties</b>			
Volume resistivity	Ω cm	DIN 53482	10 <sup>16</sup>
Surface resistance	Ω	DIN 53482	10 <sup>16</sup>
Dielectric strength	KV/mm	DIN 53481	
Relative permittivity		DIN 53483	3.2

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