



## PTFE Carbon, Graphite

75% PTFE  
22% Carbon  
3% Graphite

Properties	Norm	Value	Unit
<b>Mechanical properties</b>			
Hardness shore D	DIN 53 505	60 – 69	Sh. D.
Tensile strength (23°C)	DIN 53 455	11 – 15	N/mm <sup>2</sup>
Elongation at break (23°C)	DIN 53 455	60 – 100	%min
Tensile modulus	DIN 53 457	1250	N/mm <sup>2</sup>
PV – limit 3m/min	--	32	<u>N.M</u> mm <sup>2</sup> .min
PV – limit 30m/min	--	32	<u>N.M</u> mm <sup>2</sup> .min
PV – limit 300m/min	--	35	<u>N.M</u> mm <sup>2</sup> .min
Coëff. of friction – statical	--	0,14	--
Diametric shrinkage	UPM PROC16	1 – 4	%
Wear K.10 <sup>-8</sup>	--	7	<u>cm<sup>3</sup>.min</u> kg.m.h
<b>Physical properties</b>			
Deformation after 24h at 23°C – 15N/mm <sup>2</sup>	ASTM D621	6,50	%
Deformation after 24h at 260°C – 4N/mm <sup>2</sup>	ASTM D621	2,10	%
Compr. strength at 1% deformation (23°C)	DIN 53 454	11,00	N/mm <sup>2</sup>
<b>Thermal properties</b>			
Coefficient of thermal expansion (20-150°C)	--	8,5	1/K.10 <sup>-5</sup>
Coefficient of thermal expansion (150-260°C)	--	11,6	1/K.10 <sup>-5</sup>
Thermal conductivity (23°C)	DIN 52 612	0,54	W/K.m
Maximum Continuous operating temperature	--	250	°C
Minimum Continuous operating temperature	--	-200	°C
Maximum operating temperature	--	370	°C

**Disclaimer:** Information contained in this data sheet is up-to-date and correct as at the date of issue. The given information is only informative and we cannot guarantee the accuracy nor can we take any accountability for the use of this information. The customer is responsible for the quality of products and has to test usage and processing to use. Some values are based on the datasheet of the supplier, internal tests and research. The values are guideline values that can be used for comparison for material selection.