

# Technical Properties for PTFE

	Norm	Unit i.e.	Value
<b><u>Mechanical properties</u></b>			
Density	527/ D792	g/cm <sup>3</sup>	2.18
Tensile strength at yeild	527/ D638	MPa	25
Tensile strength at break	527/ D638	MPa	-
Elongation at break	527/ D638	%	>50
Modululus of elesticity in tension	527/ D638	MPa	700
Modulus in elasticity in flexure	178/ D790	MPa	-
Ball indentation hardness	2039/1	MPa	30
Impact strength	179/ D256	kJ/m <sup>2</sup>	no br
Creep rupture strength	-	MPa	5
Time yeild limit for 1% elongation	-	MPa	1.58
Coefficient friction	-	-	0.08-
0.10			
Wear	-	um/km	21
<b><u>Thermal properties</u></b>			
Crystalline melting point	DIN 53736	degreesC	327
Glass transition temp	DIN 53736	degrees C	-20
Heat distortion temp	R 75	degrees C	55
Max servive temp			
short term	-	degrees C	260
long term	-	degrees C	260
Coefficient thermal conduct	-	W/(m K)	0.25
Specific heat	-	J/(g K)	1
Coefficient thermal expansion	DIN53 483	105/K	12
<b><u>Electrical Properties</u></b>			
Dielectric constant	DIN53 483	-	2.1
Dielectric loss factor	DIN53 483	-	0.0002
Specific volume resistance	DIN 60093	ohm cm	10 16
Surface resistance	DIN 60093	ohm	10 16
Dielectric strength 1mm	ASTM 149	kv/mm	48
Tracking resistance	53 480	-	KA3c
KB>600			
<b><u>Miscellaneous Properties</u></b>			
Moisture absorption	62	%	<0.05
Water absorption at saturation	62	%	-
Resistance to hot water	-	-	ok
Flamability	UL94	-	VO
Resistance to weathering	-	-	ok