



PTFE

Chemical Designation PTFE (Polytetrafluorethylene) **Colour** white opaque **Density** 2.15 g/cm³

<i>Mechanical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Tensile strength		22	MPa	ASTM D 4894	1)
Elongation at break		220	%	ASTM D 4894	2)
Compression strength	1% strain	5	MPa	ASTM D 695	3)
Shore hardness	Shore D	55		ASTM D 2240	3)
<i>Thermal properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Glass transition temperature		- 20	°C	DIN 53765	1)
Service temperature	short term	260	°C	-	2)
Service temperature	long term	260	°C	-	Individual testing regarding application conditions is mandatory.
Thermal expansion (CLTE)	23-100°C, long.	13	10 ⁻⁵ K ⁻¹	ASTM D 696	
Thermal conductivity		0.20	W/(K*m)	ASTM C 177	
<i>Electrical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Specific surface resistance		10 ¹⁶	Ω	ASTM D 257	1)
Specific volume resistance		10 ¹⁷	Ω*cm	ASTM D 257	
Dielectric strength	In air, 0.125mm thick	80	kV/mm	ASTM D 149	
Dielectric constant	50-109Hz	2.1		ASTM D 150	
<i>Other properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Water absorption	23°C	< 0.01	%	ASTM D 570	
Flammability (UL94)	corresponding to	V0		DIN IEC 60695-11-10;	1)

(1) Without defects
(1) Corresponding means no listing at UL (yellow card). The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.