

Polytetrafluoroethylene – Stock Shapes

Chemical designation

PTFE

Colour

White

Density

2.15 g/cm³

Fillers

<i>Mechanical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Tensile strength		≥20	MPa	ISO 12086 ISO 527	
Elongation at break		≥200	%	ISO 12086 ISO 527	
Compression strength	1% deformation	4-5	N/mm ²	ASTM D695	
<i>Thermal properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Service temperature	long term	260	°C		
Thermal expansion (CLTE)	23-100°C, long.	12-13	10 ⁻⁶ *K ⁻¹	ASTM D696	
<i>Electrical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Dielectric strength	0.5mm thick	20-40	kV/mm	ASTM D149	

Our information and statements reflect the current state of our knowledge and shall inform about our products and their applications. They do not assure or guarantee chemical resistance, quality of products and their merchantability in a legally binding way. Our products are not defined for use in medical or dental implants. Existing commercial patents have to be observed. The corresponding values and information are no minimum or maximum values, but guideline values that can be used primarily for comparison purposes for material selection. These values are within the normal tolerance range of product properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes.