

Technical data sheet

PTFE

General properties				
Material designation	PTFE			
Material colour(s)	natural (7000)			
Raw material	PTFE Polytetrafluoroethylene			
Molecular weight (Average molar mass)	-			
Mechanical properties		Unit	Test method	Value
Density	g/cm ³	DIN EN ISO 1183	2,18	
Tensile strength	MPa	DIN EN ISO 527	25 - 36	
Shore D hardness, 15s - Value	Skala D	DIN EN ISO 868	57	
Ball indentation hardness, 30s - Value	MPa	DIN ISO 2039 Teil 1	30	
Ultimate tensile strength	MPa	DIN EN ISO 527	25	
Elongation at break	%	DIN EN ISO 527	300	
Modulus of elasticity	MPa	DIN EN ISO 527	40	
Notched impact strength (Charpy)	kJ/m ²	DIN EN ISO 179	13	
Wear resistance	%	Sand Slurry method	-	
Coefficient of friction (to steel)	μ		0,08	
Thermal properties		Unit	Test method	Value
Dimensional stability under heat	°C	DIN 53461	56	
Vicat softening temperature	°C	DIN EN ISO 306	110	
Crystalline melting range	°C	DIN EN ISO 11357	-	
Thermal conductivity at 23°C	W/ (K * m)	DIN 52612	0,21	
Specific heat at 23°C	kJ / (K * Kg)		-	
Coefficient of linear expansion at 23°C	10 ⁻⁵ * (1/K)	DIN ISO 11359	10	
Fire behaviour		UL 94	V - 0	
Application temperature (min.)	°C		- 200	
Application temperature (constant)	°C		+ 260	
Moisture absorption	%		< 0,01	
Electrical properties		Unit	Test method	Value
Specific volume resistance	Ω * cm	IEC 60093	10 ¹⁸	
Specific surface resistance	Ω	IEC 60093	10 ¹⁷	
Dielectric strength	KV/mm	IEC 60243	40	
Conformity with food secure regulations				
FDA	Conforms to FDA regulations			
EU	EU 1935/2004 - EU 10/2011 [FSP quality]			

Our employees are available to answer all of your questions.

You can find additional information on our material qualities on the internet at www.wefapress.com/en/materials.

All stated information reflects our current knowledge. No agreement or guarantee regarding specific characteristics can be derived from the information contained in the datasheets. Each user is responsible for deciding on the suitability of a material for a specific purpose. The data supplied are subject to change.

The materials labelled as a "Food Secure Product" (FSP) comply with the provisions of Regulations (EU) No. 10/2011 and No. 1935/2004.