

## Technical Data Sheet

## PTFE virginal

- PTFE (Polytetrafluorethylen)
- Excellent chemical resistance
- Good electrical insulation
- Anti-adhesion effect due to very low coefficient of friction
- High dielectric properties
- RoHS compliant
- Certificated for food contact according to FDA 21 CFR 175.300

### Technical Data

Polymer		PTFE
Colour		white
Density	[g/cm <sup>3</sup> ]	2,20 - 2,40
Temperature resistance heat	[°C]	+ 260
Temperature resistance cold	[°C]	- 180
Melting point	[°C]	327
Thermal conductivity	[W/mK]	1,9
Coefficient of linear thermal expansion	[10 <sup>-5</sup> /°C]	9,9
Index of refraction		1,35
Tensile strength	[MPa]	≥ 15
Elongation	[%]	≥ 150
Compressive strength	[MPa]	≥ 11,8
Bending strength	[MPa]	0,55
Hardness Shore D		≥ 55
Specific volume resistivity	[Ω·cm]	> 10 <sup>18</sup>
Surface resistivity	[Ω]	> 10 <sup>16</sup>
Dielectric breakdown voltage	[kV/mm]	19,2
Dielectric constant	[10 <sup>6</sup> Hz]	< 2,1
Dielectric loss tangent	[10 <sup>6</sup> Hz]	< 0,0002
Arc resistance	[s]	> 300

### Applications:

Production of high temperature seals, isolators and bearings of semiconductors, in aviation and chemical industries



















### Further information see page 2

The technical data (average values) as well as material information are based on our present knowledge and experiences. They free the user because of the fullness of possible influences by the application of our products, however, not from own tests and attempts in the approach of the real application. Because of the peculiarities of every individual case we can take over no liability for our indications. On request we are available gladly with information.

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### Resistances:

 heat resistance	 cold flexibility	 weather / ozone	 light	 tensile strength	 impact resilience
 abrasion resistance	 fuel resistance	 diesel resistance	 drinking water quality	 water at 100°	 fire resistance
 oil resistance	 bases resistance	 acid resistance	 gas permeability	 antistatic	 plexiglass compatibility

### Delivery forms:

The material is available in rolls.

- Length                      max 20 m
- Width                        1,000 ± 20 mm
- Thickness                  0.5 ± 0.02 mm  
                                       1.0 ± 0.02 mm  
                                       1.5 ± 0.02 mm

Other sizes and cut-to-size pieces upon request.