

Technical datasheet

PTFE (Polytetrafluorethylene)

| Example of application | |
|-------------------------------------|--|
| > sliding component; seals; linings | |

| Advantages | Disadvantages |
|---|-----------------------------|
| excellent anti-friction properties very high temperature resistance excellent chemical resistance | › bad mechanical properties |

| Basic information | Specification |
|-------------------|--|
| Format | round material: 5 mm up to 200 mm available in 2 m length sheets: 1 mm up to 150 mm available in 1.2 m x 1.2 m |

| Physical properties | Standard term/Specification* | Unit | Testing method |
|---------------------|------------------------------|-------|----------------|
| Density | 2.14 | g/cm³ | ISO 1183 |
| Moisture ingress | n.sp. | % | DIN EN ISO 62 |

| Mechanical properties | Standard term/Specification* | | 11-24 | T-ath |
|-----------------------|------------------------------|----------|-------|-----------------|
| | compressed | extruded | Unit | Testing method |
| Tensile strength | 20 | 26,5 | MPa | DIN EN ISO 527 |
| Elongation at break | 190 | 300 | % | DIN EN ISO 527 |
| E-Module | n.sp. | | МРа | DIN EN ISO 527 |
| Notch toughness | 0.154 | | kJ/m² | ISO 179 |
| Rochwellhardness | 22 | | МРа | DIN EN ISO 2039 |

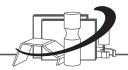
| Thermal properties | Standard term/Specification* | Unit | Testing method |
|--|------------------------------|------------|--|
| Thermal conductivity | 0.23 | W/(m·K) | DIN 52612 |
| Linear thermal expansion coefficient | 1.22 | K-1 · 10-4 | DIN 53752 |
| based on a fixed initial length | 2.44 | mm | At initial length of 1.000 mm and a temperature difference of 20 °C. |
| Max. operating temperature, long-term | 260 | °C | |
| Max. operating temperature, short-term | n.sp. | °C | |
| Min. operating temperature, long-term | -200 | °C | |

| Electrical properties | Standard term/Specification* | Unit | Testing method |
|---------------------------|------------------------------|-------|----------------|
| Resistance | 1018 | Ω·cm | DIN IEC 60093 |
| Outer surface coefficient | 1017 | Ω | DIN IEC 60093 |
| Puncture resistance | 20 | kV/mm | DIN EN 60243 |

| Legend | |
|-----------------------|--|
| n.sp. = not specified | |

Should you require binding and exact values, please ask for the appropriate factory certificate. This may incur additional costs. Please note that all specifications are standard values only, which are subject to production-related fluctuations.
*Higher specification on request.

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technical plastics