# Technical datasheet

## PET-P low-friction (Polyethylene terephtalate)

| Example of application |
|---|
| › conveyor technology; mechanical engineering; electrical engineering |

| Advantages | Disadvantages |
|---|---|
| › good sliding behaviour<br>› high tensile strength<br>› good dimensional stability | › not hydrolysis resistant<br>› non-bondable<br>› restricted range of semi-finished products |

| Basic information | Specification |
|---|---|
| Format | **round material:** 20 mm up to 210 mm available in 3 m length<br>**sheets**: 10 up to 80 mm available in 3 m x 0.62 m |

| Physical properties | Standard term/Specification* | Unit | Testing method |
|---|---|---|---|
| Density | 1.44 | g/cm$^3$ | ISO 1183 |
| Moisture ingress | 0.23 | % | DIN EN ISO 62 |

| Mechanical properties | Standard term/Specification* | Unit | Testing method |
|---|---|---|---|
| Tensile strength | 70 | MPa | DIN EN ISO 527 |
| Elongation at break | 10 | % | DIN EN ISO 527 |
| E-Module | 2600 | MPa | DIN EN ISO 527 |
| Notch toughness | 2.0 | kJ/m$^2$ | ISO 179 |
| Rochwellhardness | 160 | MPa | DIN EN ISO 2039 |

| Thermal properties | Standard term/Specification* | Unit | Testing method |
|---|---|---|---|
| Thermal conductivity | 0.28 | W/(m·K) | DIN 52612 |
| Linear thermal expansion coefficient based on a fixed initial length | 0.65 | K$^{-1}$ · 10$^{-4}$ | DIN 53752 |
| | 1.3 | mm | At initial length of 1.000 mm and a temperature difference of 20 °C. |
| Max. operating temperature, long-term | 115 | °C | |
| Max. operating temperature, short-term | 180 | °C | |
| Min. operating temperature, long-term | -20 | °C | |

| Electrical properties | Standard term/Specification* | Unit | Testing method |
|---|---|---|---|
| Resistance | 10$^{18}$ | Ω·cm | DIN IEC 60093 |
| Outer surface coefficient | 10$^{16}$ | 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.

All information based on current knowledge and experience. Information provided shall not exempt the contractor or user from conducting own tests. A legally binding warranty as to product features or its suitability for specific purposes may not be derived therefrom. Compliance with any proprietary rights as well as existing laws or regulations is the responsibility of the recipient of our products. No liability assumed for printing and any other errors. Technical data subject to change without notice. Reproduction or duplication of this document or its contents - whole or in part - is only permitted with express approval by company noltewerk. The German version of this data shall prevail. As of 1219.

technical plastics

noltewerk GmbH & Co. KG · Mergenthalerstr. 15 · 48268 Greven · Germany · t +49 (25 71)16-0 · f +49 (25 71)16-402 · info@noltewerk.de · www.noltewerk.de