

Technical Data Sheet

Robacer®

PE-UHMW / PE 1000

Typical characteristics

- UV-resistant
- Good sliding properties
- Good wear properties
- Low specific weight
- High impact resistance
- High stiffness
- Chemical resistant

Typical industries

- Industrie papetière

| | Test method | Unit | Guideline value |
|---|-------------------------|----------------------|-----------------------|
| General properties | | | |
| Densité | DIN EN ISO 1183-1 | g / cm ³ | 1,00 |
| Water absorption | DIN EN ISO 62 | % | <0,01 |
| Flammability (Thickness 3 mm / 6 mm) | UL 94 | | HB / HB |
| Molecular weight | | g/mol | 9,2 * 10 ⁶ |
| Couleur | | | black |
| Mechanical properties | | | |
| Yield stress | DIN EN ISO 527 | MPa | 19 |
| Elongation at break | DIN EN ISO 527 | % | 200 |
| Tensile modulus of elasticity | DIN EN ISO 527 | MPa | 550 |
| Notched impact strength | DIN EN ISO 179/1eA | kJ / m ² | >80 |
| Shore hardness | DIN EN ISO 868 / 15 sec | scale D | 64 |
| Thermal properties | | | |
| Melting temperature | DIN EN ISO 3146 | °C | 135 |
| Thermal conductivity | DIN EN ISO 8302 | W / (m * K) | 0,41 |
| Thermal capacity | DIN 51005 | kJ / (kg * K) | 1,84 |
| Coefficient of linear thermal expansion | DIN 53752 | 10 ⁻⁶ / K | 200 |
| Service temperature, long term | Average | °C | -200 ... 80 |
| Service temperature, short term (max.) | Average | °C | 110 |
| Electrical properties | | | |

ri-inquiry@roechling.com • www.roechling.com/industrial/materials



| | Test method | Unit | Guideline value |
|---------------------|------------------|----------|-----------------|
| Surface resistivity | DIN EN 62631-3-2 | Ω | $>10^{10}$ |

The data given are standard values which are based on our experience & previous technical studies. These values are influenced by the design, processing conditions and environmental influences out of our control. The sustainability of the material for a given application is the responsibility of the user. Typing and printing errors reserved.

Chemical properties: chemically resistant to all aggressive media with the exception of highly oxidising acids. High resistant to corrosion. This material is resistant to all standard chemicals used in paper production, felt/wire cleaning and corrosion inhibition.



ri-inquiry@roechling.com • www.roechling.com/industrial/materials

Print: 15/06/2026 • Release: 20/09/2023
PIM-ID: 709718 • PIM-Code: 50-9-15.223.126.17.18.132.33-8-6
Company-IDs: 21510

Page 2 / 2 (Dates in DD/MM/YYYY)

