

Technical Data Sheet

Robadur®

PE-UHMW / PE 1000

Typical characteristics

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

Typical industries

- Paper Industry

| | Test method | Unit | Guideline value |
|---|-------------------------|----------------------|-----------------------|
| General properties | | | |
| Density | DIN EN ISO 1183-1 | g / cm ³ | 0,93 |
| 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 |
| Color | | | black |
| Mechanical properties | | | |
| Yield stress | DIN EN ISO 527 | MPa | 18 |
| 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 | >90 |
| Shore hardness | DIN EN ISO 868 / 15 sec | scale D | 63 |
| 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 | | | |

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| | Test method | Unit | Guideline value |
|----------------------------|------------------|--------------------------|-----------------|
| Volume resistivity | DIN EN 62631-3-1 | $\Omega \cdot \text{cm}$ | 10^{10} |
| Surface resistivity | DIN EN 62631-3-2 | Ω | 10^{10} |
| Comparative tracking index | IEC 60112 | | 600 |

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.



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