



Technical data sheet

Flex 88

| General properties | | | | |
|--|---|-------------|---------------------|------------------|
| Material designation | Flex 88 | | | |
| Material colour(s) | violet blue (3015) | | | |
| Raw material | PE-UHMW Ultra-high-molecular polyethylene | | | |
| Molecular weight (Average molar mass) | 9,2 Mio. | | | |
| Mechanical properties | | Unit | Test method | Value |
| Density | g/cm ³ | | DIN EN ISO 1183 | 0,96 |
| Tensile strength | | | | 23 |
| Shore D hardness, 15s - Value | Skala D | | DIN EN ISO 868 | 64 - 69 |
| Ball indentation hardness, 30s - Value | MPa | | DIN ISO 2039 Teil 1 | 48 |
| Ultimate tensile strength | MPa | | DIN EN ISO 527 | > 40 |
| Elongation at break | % | | DIN EN ISO 527 | 350 |
| Modulus of elasticity | MPa | | DIN EN ISO 527 | ~ 650 |
| Notched impact strength (Charpy) | kJ/m ² | | DIN EN ISO 179 | > 80 - 105 |
| Wear resistance | % | | Sand Slurry method | ~ 70 |
| Coefficient of friction (to steel) | μ | | | ~ 0,1 |
| Thermal properties | | Unit | Test method | Value |
| Dimensional stability under heat | °C | | DIN 53461 | 47 |
| Vicat softening temperature | °C | | DIN EN ISO 306 | 79 |
| Crystalline melting range | °C | | DIN EN ISO 11357 | 130 - 135 |
| Thermal conductivity at 23°C | W / (K * m) | | DIN 52612 | ~ 0,6 |
| Specific heat at 23°C | kJ / (K * Kg) | | | 1,8 |
| Coefficient of linear expansion at 23°C | 10 ⁻⁵ * (1/K) | | DIN ISO 11359 | 10 |
| Fire behaviour | | | UL 94 | HB |
| Application temperature (min.) | °C | | | - 260 |
| Application temperature (constant) | °C | | | + 80 |
| Moisture absorption | % | | | < 0,01 |
| Electrical properties | | Unit | Test method | Value |
| Specific volume resistance | Ω * cm | | IEC 60093 | 10 ¹² |
| Specific surface resistance | Ω | | IEC 60093 | 10 ¹² |
| Dielectric strength | KV/mm | | IEC 60243 | 45 |
| Conformity with food secure regulations | | | | |
| FDA | - | | | |
| EU | - | | | |

Our employees are available to answer all of your questions.

You can find additional information on our material qualities on the internet at www.wefapress.com/en/materials.

All stated information reflects our current knowledge. No agreement or guarantee regarding specific characteristics can be derived from the information contained in the datasheets. Each user is responsible for deciding on the suitability of a material for a specific purpose. The data supplied are subject to change.

The materials labelled as a "Food Secure Product" (FSP) comply with the provisions of Regulations (EU) No. 10/2011 and No. 1935/2004.