Röchling

Industrial

# Technical Data Sheet

# Matrox®

### Product characteristics

- Extremely low coefficient of friction
- Very good abrasion and wear resistance
- High temperature resistance

### Product applications

- Lining technology
- Environment and disposal technology

| | 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 |
| Molecular weight | - | $10^6$ g/mol | ~ 9 |
| **Mechanical properties** | | | |
| Elongation at break | DIN EN ISO 527 | % | >50 |
| Tensile modulus of elasticity | DIN EN ISO 527 | MPa | >650 |
| Notched impact strength | DIN EN ISO 11542-2 | kJ / m² | >100 |
| Shore hardness | DIN EN ISO 868 | scale D | >63 |
| Wear resistance | Sand-slurry | | 80 |
| Sand Slurry | 1018 Steel =10 | | ~ 80 |
| **Thermal properties** | | | |
| Melting temperature | ISO 11357-3 | °C | 130 ... 135 |
| Thermal conductivity | DIN 52612-1 | W / (m * K) | 0,40 |
| Thermal capacity | DIN 52612 | kJ / (kg * K) | 1,90 |
| Coefficient of linear thermal expansion | DIN 53752 | $10^{-6}$ / K | 150 ... 230 |
| Service temperature, long term | Average | °C | -250 ... 80 |
| Service temperature, short term (max.) | Average | °C | 130 |
| Vicat softening temperature | DIN EN ISO 306, Vicat B | °C | 79 |
| **Electrical properties** | | | |
| Dielectric constant | IEC 60250 | | 2,3 |
| Dielectric dissipation factor ($10^6$ Hz) | IEC 60250 | | 0,0001 |
| Volume resistivity | DIN EN 62631-3-1 | Ω * cm | >$10^{14}$ |
| Surface resistivity | DIN EN 62631-3-2 | Ω | >$10^{14}$ |
| Comparative tracking index | IEC 60112 | | 600 |
| Dielectric strength | IEC 60243 | kV / mm | >40 |

The data stated above are average values ascertained by statistical tests on a regular basis. They are in accordance with DIN EN 15860. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale.

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