

Polystone® M saphir

Product characteristics

- Extreme abrasion and wear resistance
- No moisture absorption

Typical field of application

- Mechanical engineering
- Bottling and food industry
- Bearing and packing industry

| | Test method | Unit | 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 |
| Mechanical properties | | | |
| Yield stress | DIN EN ISO 527 | MPa | 20 |
| Elongation at break | DIN EN ISO 527 | % | >200 |
| Tensile modulus of elasticity | DIN EN ISO 527 | MPa | 650 |
| Notched impact strength (charpy) | DIN EN ISO 179 | kJ/m ² | no break |
| Shore hardness | DIN EN ISO 868 | scale D | 63 |
| Wear resistance | Sand-slurry | | 70 |
| Thermal properties | | | |
| Melting temperature | ISO 11357-3 | °C | 133 - 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 ⁻¹ | 150-230 |
| Service temperature, long term | Average | °C | -250 ... 80 |
| Service temperature, short term (max.) | Average | °C | 130 |
| Heat deflection 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 | IEC 60093 | Ω *cm | >10 ¹⁴ |
| Surface resistivity | IEC 60093 | Ω | >10 ¹⁴ |
| Comparative tracking index | IEC 60112 | | 600 |
| Dielectric strength | IEC 60243 | kV/mm | 40 |

The data mentioned in this brochure are average values ascertained by current statistical returns and tests. The data above are provided purely for information and shall not be regarded as binding unless expressly agreed in a contract of sale.