

Polystone® M natural

Product characteristics

- High abrasion and wear resistance
- Low coefficient of friction
- High impact strength

Typical field of application

- Bottling and food industry
- Mechanical engineering
- 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 | N/mm ² | 20 |
| Elongation at break | DIN EN ISO 527 | % | >200 |
| Tensile modulus of elasticity | DIN EN ISO 527 | MPa | 680 |
| Impact strength | DIN EN ISO 527 | % | no break |
| Shore hardness | DIN EN ISO 868 | scale D | 63 |
| Wear resistance | Sand-slurry | | 80 |
| Thermal properties | | | |
| Melting temperature | ISO 11357-3 | °C | 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 | 80 |
| 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 | 45 |

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.