

Technical Data Sheet



Polystone[®] G B 100 BIO (mb) black

Typical characteristics

- Chemical resistance
- Suitable for contact with drinking water

Typical industries

- Výroba nádrží a zařízení pro chemický průmysl
- Skladovací nádrže
- Technologie pitné a odpadní vody

Sustainability

- Mass-balanced
- Bio-based raw materials reduce the use of fossil raw materials

| | Test method | Unit | Guideline value |
|--|-------------------------|----------------------|-----------------|
| General properties | | | |
| Density | DIN EN ISO 1183-1 | g / cm ³ | >0,96 |
| 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 | >23 |
| Elongation at break | DIN EN ISO 527 | % | >50 |
| Tensile modulus of elasticity | DIN EN ISO 527 | MPa | >1100 |
| Notched impact strength | DIN EN ISO 179 | kJ / m ² | >16 |
| Shore hardness | DIN EN ISO 868 | scale D | 63 |
| 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 | -50 ... 80 |
| Service temperature, short term (max.) | Average | °C | 100 |
| Vicat softening temperature | DIN EN ISO 306, Vicat B | °C | 67 |
| Electrical properties | | | |
| Dielectric constant | IEC 60250 | | 2,5 |
| Dielectric dissipation factor (10 ⁶ Hz) | IEC 60250 | | 0,0004 |

Röchling Industrial SE & Co. KG

Röchlingstr. 1 • 49733 Haren (Ems)/Germany (DE) • Tel. +49 5934 701-0
info@roechling-plastics.com • www.roechling.com/industrial/haren

Print: 02/05/2024 • Release: 20/09/2023 • Version: 1.0
 PIM-Version: 89 • PIM-ID: 718495 • PIM-Code: 89-8-27.11-7.6.6-5.9-4



| | Test method | Unit | Guideline value |
|----------------------------|------------------|----------|-------------------|
| Volume resistivity | DIN EN 62631-3-1 | Ohm * cm | >10 ¹⁴ |
| Surface resistivity | DIN EN 62631-3-2 | Ohm | >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. (*) literature values



Röchling Industrial SE & Co. KG

Röchlingstr. 1 • 49733 Haren (Ems)/Germany (DE) • Tel. +49 5934 701-0
info@roechling-plastics.com • www.roechling.com/industrial/haren

Print: 02/05/2024 • Release: 20/09/2023 • Version: 1.0

PIM-Version: 89 • PIM-ID: 718495 • PIM-Code: 89-8-27.11-7.6.6-5.9-4

Page 2 / 2 (Dates in DD/MM/YYYY)

