

Technical Data Sheet

Polystone® PVDF natural extruded

PVDF

Typical characteristics

- High temperature resistance
- Good weldability
- Chemical resistant
- Good heat ageing resistance

Typical industries

- Chemical Processing Industry
- Clean-Room Technology
- Galvanic plants
- Chemical storage tanks
- Steel-pickling plants

| | Test method | Unit | Guideline value |
|--|-------------------------|----------------------|-----------------|
| General properties | | | |
| Density | DIN EN ISO 1183-1 | g / cm ³ | >1,75 |
| Water absorption | DIN EN ISO 62 | % | <0,4 |
| Flammability (Thickness 3 mm / 6 mm) | UL 94 | | V0 |
| Mechanical properties | | | |
| Yield stress | DIN EN ISO 527 | MPa | >50 |
| Elongation at break | DIN EN ISO 527 | % | >30 |
| Tensile modulus of elasticity | DIN EN ISO 527 | MPa | >2100 |
| Notched impact strength | DIN EN ISO 179 | kJ / m ² | >13 |
| Shore hardness | DIN EN ISO 868 | scale D | >75 |
| Thermal properties | | | |
| Melting temperature | ISO 11357-3 | °C | 172 ... 175 |
| Thermal conductivity | DIN 52612-1 | W / (m * K) | 0,19 |
| Thermal capacity | DIN 52612 | kJ / (kg * K) | 1,20 |
| Coefficient of linear thermal expansion | DIN 53752 | 10 ⁻⁶ / K | 100 ... 140 |
| Service temperature, long term | Average | °C | 0 ... 140 |
| Service temperature, short term (max.) | Average | °C | >145 |
| Vicat softening temperature | DIN EN ISO 306, Vicat B | °C | 140 |
| Electrical properties | | | |
| Dielectric constant | IEC 60250 | | 8,0 |
| Dielectric dissipation factor (10 ⁶ Hz) | IEC 60250 | | 0,02 |

ri-inquiry@roechling.com • www.roechling.com/industrial/materials



| | Test method | Unit | Guideline value |
|----------------------------|------------------|--------------------------|-----------------|
| Volume resistivity | DIN EN 62631-3-1 | $\Omega \cdot \text{cm}$ | $>10^{14}$ |
| Surface resistivity | DIN EN 62631-3-2 | Ω | $>10^{14}$ |
| Comparative tracking index | IEC 60112 | | 600 |
| Dielectric strength | IEC 60243 | kV / mm | 20 |

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.

