Röchling

Industrial

# Technical Data Sheet

# Polystone® P homopolymer white

### Product characteristics

- High rigidity
- Very good weldability
- High chemical and corrosion resistance

### Product applications

- Chemical engineering and tank building
- Ventilation technology
- Pump engineering

| | Test method | Unit | Value |
|---|---|---|---|
| **General properties** | | | |
| Density | DIN EN ISO 1183-1 | g / $cm^3$ | >0,90 |
| Water absorption | DIN EN ISO 62 | % | <0,1 |
| Flammability (Thickness 3 mm / 6 mm) | UL 94 | | HB |
| **Mechanical properties** | | | |
| Yield stress | DIN EN ISO 527 | MPa | >30 |
| Elongation at break | DIN EN ISO 527 | % | >50 |
| Tensile modulus of elasticity | DIN EN ISO 527 | MPa | >1500 |
| Notched impact strength | DIN EN ISO 179 | kJ / $m^2$ | >4 |
| Shore hardness | DIN EN ISO 868 | scale D | >70 |
| **Thermal properties** | | | |
| Melting temperature | ISO 11357-3 | °C | 162 ... 167 |
| Thermal conductivity | DIN 52612-1 | W / (m * K) | 0,20 |
| Thermal capacity | DIN 52612 | kJ / (kg * K) | 1,70 |
| Coefficient of linear thermal expansion | DIN 53752 | $10^{-6}$ / K | 120 ... 190 |
| Service temperature, long term | Average | °C | 0 ... 100 |
| Service temperature, short term (max.) | Average | °C | 150 |
| Vicat softening temperature | DIN EN ISO 306, Vicat B | °C | 90 |
| **Electrical properties** | | | |
| Dielectric constant | IEC 60250 | | 2,4 |
| Dielectric dissipation factor ($10^6$ Hz) | IEC 60250 | | 0,00019 |
| Volume resistivity | DIN EN 62631-3-1 | Ω * cm | $>10^{14}$ |
| Surface resistivity | DIN EN 62631-3-2 | Ω | $>10^{14}$ |
| 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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Date: 17/06/2021 Version: 3.0.0


INTEGRATED MANAGEMENT SYSTEM