

Technical Data Sheet

Polystone[®] P (Homopolymer) EHS grey pressed

Typical characteristics

- High rigidity
- Very good weldability
- Corrosion resistance
- Very high heat resistance

Typical industries

- Chemical Processing Industry
- Galvanic plants
- Steel-pickling plants

| | Test method | Unit | Guideline 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 yield stress | 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 ... 120 |
| 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 | Ohm * cm | >10 ¹⁴ |

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Print: 01/05/2024 • Release: 19/03/2024 • Version: 2.0
 PIM-Version: 320 • PIM-ID: 746675 • PIM-Code: 320-15-10.11.15.9-7.3.5



| | Test method | Unit | Guideline value |
|---------------------|------------------|---------|-----------------|
| Surface resistivity | DIN EN 62631-3-2 | Ohm | $>10^{14}$ |
| Dielectric strength | IEC 60243 | kV / mm | >40 |



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

