

## Technical Data Sheet

# Polystone<sup>®</sup> P (Homopolymer) EHS natural

PP-H

### Typical characteristics

- High rigidity
- Good weldability
- Corrosion resistant
- Heat resistant

### Typical industries

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

|  | Test method             | Unit                 | Guideline value   |
|--|-------------------------|----------------------|-------------------|
| <b>General properties</b>                          |                         |                      |                   |
| Density  | DIN EN ISO 1183-1       | g / cm <sup>3</sup>  | >0,90             |
| Water absorption                                   | DIN EN ISO 62           | %                    | <0,1              |
| Flammability (Thickness 3 mm / 6 mm)               | UL 94                   |                      | HB                |
| <b>Mechanical properties</b>                       |                         |                      |                   |
| 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 <sup>2</sup>  | >4                |
| Shore hardness                                     | DIN EN ISO 868          | scale D              | >70               |
| <b>Thermal properties</b>                          |                         |                      |                   |
| 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 <sup>-6</sup> / 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                |
| <b>Electrical properties</b>                       |                         |                      |                   |
| Dielectric constant                                | IEC 60250               |                      | 2,4               |
| Dielectric dissipation factor (10 <sup>6</sup> Hz) | IEC 60250               |                      | 0,00019           |
| Volume resistivity                                 | DIN EN 62631-3-1        | Ω * cm               | >10 <sup>14</sup> |

[ri-inquiry@roechling.com](mailto:ri-inquiry@roechling.com) • [www.roechling.com/industrial/materials](http://www.roechling.com/industrial/materials)



|                     | Test method      | Unit     | Guideline value |
|---------------------|------------------|----------|-----------------|
| Surface resistivity | DIN EN 62631-3-2 | $\Omega$ | $>10^{14}$      |
| 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.



[ri-inquiry@roechling.com](mailto:ri-inquiry@roechling.com) • [www.roechling.com/industrial/materials](http://www.roechling.com/industrial/materials)

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