

### Technical Data Sheet

## Polystone<sup>®</sup> P (Copolymer) natural extruded

PP-C

#### Typical characteristics

- High rigidity
- Good weldability
- Corrosion resistant

#### Typical industries

- Chemical Processing Industry
- Chemical storage tanks
- Galvanic plants
- Ventilation plants
- Exhaust-air cleaning 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                  | >23             |
| 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>  | >40             |
| Shore hardness                                     | DIN EN ISO 868          | scale D              | >65             |
| <b>Thermal properties</b>                          |                         |                      |                 |
| Melting temperature                                | ISO 11357-3             | °C                   | 162 ... 165     |
| 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                   | -30 ... 100     |
| Service temperature, short term (max.)             | Average                 | °C                   | 150             |
| Vicat softening temperature                        | DIN EN ISO 306, Vicat B | °C                   | 85              |
| <b>Electrical properties</b>                       |                         |                      |                 |
| Dielectric constant                                | IEC 60250               |                      | 2,5             |
| Dielectric dissipation factor (10 <sup>6</sup> Hz) | IEC 60250               |                      | 0,00019         |



|                            | 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 | $\Omega$                 | $>10^{14}$      |
| Comparative tracking index | IEC 60112        |                          | 600             |
| Dielectric strength        | IEC 60243        | kV / mm                  | $>40$           |

