

## Technical Data Sheet

## Polystone® G 100 grey extruded

PE-HD (PE 100)

### Typical characteristics

- Chemical resistant

### Typical industries

- Chemical Processing Industry

|                                                    | Test method             | Unit                 | Guideline value   |
|----------------------------------------------------|-------------------------|----------------------|-------------------|
| <b>General properties</b>                          |                         |                      |                   |
| Density                                            | DIN EN ISO 1183-1       | g / cm <sup>3</sup>  | >0,96             |
| Water absorption                                   | DIN EN ISO 62           | %                    | <0,01             |
| 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                  | >1100             |
| Notched impact strength                            | DIN EN ISO 179          | kJ / m <sup>2</sup>  | >16               |
| Shore hardness                                     | DIN EN ISO 868          | scale D              | 63                |
| <b>Thermal properties</b>                          |                         |                      |                   |
| Melting temperature                                | ISO 11357-3             | °C                   | 130 ... 135       |
| Thermal conductivity                               | DIN 52612-1             | W / (m * K)          | 0,40              |
| Thermal capacity                                   | DIN 52612               | kJ / (kg * K)        | 1,90              |
| Coefficient of linear thermal expansion            | DIN 53752               | 10 <sup>-6</sup> / K | 150 ... 230       |
| Service temperature, long term                     | Average                 | °C                   | -50 ... 80        |
| Service temperature, short term (max.)             | Average                 | °C                   | 100               |
| Vicat softening temperature                        | DIN EN ISO 306, Vicat B | °C                   | 67                |
| <b>Electrical properties</b>                       |                         |                      |                   |
| Dielectric constant                                | IEC 60250               |                      | 2,5               |
| Dielectric dissipation factor (10 <sup>6</sup> Hz) | IEC 60250               |                      | 0,0004            |
| Volume resistivity                                 | DIN EN 62631-3-1        | Ω * cm               | >10 <sup>14</sup> |
| Surface resistivity                                | DIN EN 62631-3-2        | Ω                    | >10 <sup>14</sup> |
| Comparative tracking index                         | IEC 60112               |                      | 600               |

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|                     | Test method | Unit    | Guideline value |
|---------------------|-------------|---------|-----------------|
| Dielectric strength | IEC 60243   | kV / mm | 45              |

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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