

## Technical Data Sheet

# Polystone<sup>®</sup> M blue pressed

### Typical characteristics

- Very wear, cutting and scratch resistant
- Physiologically safe
- Good sliding and wear behaviour

### Typical industries

- Mechanical Engineering Industry

|  | Test method             | Unit                  | Guideline value |
|--|-------------------------|-----------------------|-----------------|
| <b>General properties</b>                          |                         |                       |                 |
| Density  | DIN EN ISO 1183-1       | g / cm <sup>3</sup>   | >0,93           |
| Water absorption                                   | DIN EN ISO 62           | %                     | <0,01           |
| Flammability (Thickness 3 mm / 6 mm)               | UL 94                   |                       | HB              |
| Molecular weight                                   | -                       | 10 <sup>6</sup> g/mol | ~ 9             |
| <b>Mechanical properties</b>                       |                         |                       |                 |
| Elongation at break                                | DIN EN ISO 527          | %                     | >50             |
| Tensile modulus of elasticity                      | DIN EN ISO 527          | MPa                   | >650            |
| Notched impact strength                            | DIN EN ISO 11542        | kJ / m <sup>2</sup>   | >100            |
| 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                    | -250 ... 80     |
| Service temperature, short term (max.)             | Average                 | °C                    | 130             |
| Vicat softening temperature                        | DIN EN ISO 306, Vicat B | °C                    | 80              |
| <b>Electrical properties</b>                       |                         |                       |                 |
| Dielectric constant                                | IEC 60250               |                       | 2,3             |
| Dielectric dissipation factor (10 <sup>6</sup> Hz) | IEC 60250               |                       | 0,0001          |

|                            | Test method      | Unit     | Guideline value   |
|----------------------------|------------------|----------|-------------------|
| Volume resistivity         | DIN EN 62631-3-1 | Ohm * cm | >10 <sup>14</sup> |
| Surface resistivity        | DIN EN 62631-3-2 | Ohm      | >10 <sup>14</sup> |
| Comparative tracking index | IEC 60112        |          | 600               |
| 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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