

### Technical Data Sheet

# Polystone<sup>®</sup> M EL black pressed

PE-UHMW / PE 1000

#### Typical characteristics

- Electrically conductive

#### Typical industries

- 기계 공학 산업

|   | 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           | %                    | <0,05            |
| Flammability (Thickness 3 mm / 6 mm)    | UL 94                   |                      | HB               |
| Molecular weight                        |                         | g/mol                | ~9               |
| <b>Mechanical properties</b>            |                         |                      |                  |
| Yield stress                            | DIN EN ISO 527          | MPa                  | >20              |
| Elongation at break                     | DIN EN ISO 527          | %                    | >50              |
| Tensile modulus of elasticity           | DIN EN ISO 527          | MPa                  | >800             |
| Notched impact strength                 | DIN EN ISO 179          | kJ / m <sup>2</sup>  | >50              |
| 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                   | 79               |
| <b>Electrical properties</b>            |                         |                      |                  |
| Volume resistivity                      | DIN EN 62631-3-1        | Ω * cm               | <10 <sup>5</sup> |
| Surface resistivity                     | DIN EN 62631-3-2        | Ω                    | <10 <sup>5</sup> |

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

