

## Technical Data Sheet

### Trovidur® ESA

#### Product characteristics

- UV-resistant in colour white
- Highly impact resistant
- Very good vacuum formable

#### Product applications

- Visual communication
- Sports and leisure industry
- Construction industry

|                                                    | Test method             | Unit                | Value             |
|----------------------------------------------------|-------------------------|---------------------|-------------------|
| <b>General properties</b>                          |                         |                     |                   |
| Density                                            | DIN EN ISO 1183-1       | g / cm <sup>3</sup> | 1,41              |
| Water absorption                                   | DIN EN ISO 62           | %                   | 0,20              |
| Flammability (Thickness 1 ... 4 mm)                | DIN 4102                |                     | BI                |
| VOC                                                | ISO 16.000              | conform             | -                 |
| Flammability (Thickness 2,5 mm)                    | BS 476 Part 6           |                     | Class 0           |
| Flammability (Thickness 1 ... 4 mm)                | NF P 92-501             |                     | M1                |
| Flammability (Thickness 2 ... 4 mm)                | BS 476 Part 7           |                     | Class 1           |
| Flammability (Thickness 2,5 mm)                    | EN 13501-1              |                     | B s3 d0           |
| Flammability (Thickness 4 mm)                      | EN 13501-1              |                     | B s3 d2           |
| <b>Mechanical properties</b>                       |                         |                     |                   |
| Yield stress                                       | DIN EN ISO 527          | MPa                 | 45                |
| Elongation at break                                | DIN EN ISO 527          | %                   | 20                |
| Tensile modulus of elasticity                      | DIN EN ISO 527          | MPa                 | 2500              |
| Notched impact strength                            | DIN EN ISO 179          | kJ / m <sup>2</sup> | 8                 |
| Shore hardness                                     | DIN EN ISO 868          | scale D             | 80                |
| Ball indentation hardness                          | DIN EN ISO 2039-1       | MPa                 | 110               |
| Compressive strength                               | DIN EN ISO 604          | MPa                 | 65                |
| Bending strength                                   | DIN EN ISO 178          | MPa                 | 60                |
| <b>Thermal properties</b>                          |                         |                     |                   |
| Vicat softening temperature                        | DIN EN ISO 306, Vicat B | °C                  | 75                |
| Service Temperature                                |                         | °C                  | -20 ... +60       |
| Heat deflection temperature                        | DIN EN ISO 75           | °C                  | 70                |
| Coefficient of linear thermal expansion            | DIN EN ISO 11359-2      | mm/m K              | ~ 0,075           |
| <b>Electrical properties</b>                       |                         |                     |                   |
| Dielectric constant                                | IEC 60250               |                     | 3,2               |
| Dielectric dissipation factor (10 <sup>6</sup> Hz) | IEC 60250               |                     | 0,02              |
| Volume resistivity                                 | DIN EN 62631-3-1        | Ω * cm              | >10 <sup>15</sup> |
| Surface resistivity                                | DIN EN 62631-3-2        | Ω                   | >10 <sup>13</sup> |
| Dielectric strength                                | IEC 60243               | kV / mm             | 12                |
| Comparative tracking index                         | IEC 60112               | CTI                 | 600               |

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.

Information on the REACh regulation can be found in our Product Handling Information Sheets, in our REACh information letter as well as in the SCIP database.