

## Technical Data Sheet

## Trovidur® ESA-S

PVC-U

### Typical characteristics

- Swimming pool Approval
- High impact resistance
- UV-resistant
- Weatherability
- RoHS compliant
- ELV compliant
- WEEE compliant
- RLAP compliant
- High cold impact strength
- Good weldability
- Good thermoformability
- Good glueability

### Typical industries

- Pool gratings - Swimming pool grating
- Sports & Leisure

|                                     | Test method       | Unit                | Guideline 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          |                     | B1              |
| Flammability (Thickness 1 ... 4 mm) | NF P 92-501       |                     | M1              |
| <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>           |                   |                     |                 |
| Thermal conductivity                | DIN EN ISO 8302   | W / (m * K)         | 0,16            |

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|                                                    | Test method             | Unit    | Guideline value   |
|----------------------------------------------------|-------------------------|---------|-------------------|
| 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.

