

## Technical Data Sheet

# Trovidur® EC N black

PVC-U

### Typical characteristics

- Good resistance to acids, lyes and salt solutions
- Good weldability
- Good glueability
- Good thermoformability
- Electrically insulating
- Easy processing
- Self-Extinguishing after removal of the flame
- Good impact strength

### Typical industries

- Chemical Processing Industry
- Mechanical Engineering Industry
- Chemical storage tanks
- Ventilation plants
- Switchgear
- Drinking & Waste Water Technology

|  | Test method       | Unit                | Guideline value |
|--|-------------------|---------------------|-----------------|
| <b>General properties</b>              |                   |                     |                 |
| Density                                | DIN EN ISO 1183-1 | g / cm <sup>3</sup> | 1,44            |
| Water absorption                       | DIN EN ISO 62     | %                   | 0,2             |
| Flammability (Thickness 1 ... 4 mm)    | DIN 4102          |                     | B1              |
| Flammability from 3 mm                 | UL 94             |                     | V0, 5VA         |
| Flammability from 1 mm                 | UL 94             |                     | V0, 5VB         |
| Flammability (Thickness 1 ... 10 mm)   | NF P 92-501       |                     | M1              |
| Flammability (Thickness 1,5 ... 12 mm) | BS 476 Part 6     |                     | Class 0         |
| Flammability (Thickness 1,5 ... 12 mm) | BS 476 Part 7     |                     | Class 1         |
| Flammability (Thickness 1,5 ... 6 mm)  | EN 13501-1        |                     | B -s3d0         |
| WRAS (Thickness 1 ... 6 mm), grey      | BS6920-1          |                     | listed          |
| <b>Mechanical properties</b>           |                   |                     |                 |
| Yield stress                           | DIN EN ISO 527    | MPa                 | 55              |
| Elongation at break                    | DIN EN ISO 527    | %                   | 20              |
| Tensile modulus of elasticity          | DIN EN ISO 527    | MPa                 | 3000            |
| Notched impact strength                | DIN EN ISO 179    | kJ / m <sup>2</sup> | 4               |
| Shore hardness                         | DIN EN ISO 868    | scale D             | 82              |
| Ball indentation hardness              | DIN EN ISO 2039-1 | MPa                 | 110             |

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|  | Test method             | Unit        | Guideline value   |
|--|-------------------------|-------------|-------------------|
| Compressive strength                               | DIN EN ISO 604          | MPa         | 75                |
| Bending strength                                   | DIN EN ISO 178          | MPa         | 80                |
| <b>Thermal properties</b>                          |                         |             |                   |
| Thermal conductivity                               | DIN EN ISO 8302         | W / (m * K) | 0,16              |
| Vicat softening temperature                        | DIN EN ISO 306, Vicat B | °C          | 75                |
| Service Temperature                                |                         | °C          | - 15 ... + 60     |
| Heat deflection temperature                        | DIN EN ISO 75           | °C          | 68                |
| Coefficient of linear thermal expansion            | DIN EN ISO 11359-2      | mm/m K      | ~ 0,075           |
| Glow wire ignition temperature                     | DIN EN 60695-2-13       | °C          | 925               |
| Glow wire flammability index                       | DIN EN 60695-2-12       | °C          | 960               |
| <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.