

# PRODUCT DATA SHEET

## PC POLYCARBONATE

**Color:** Clear

| Mechanical Properties                              | Test Method | Value                                 | Unit              |
|----------------------------------------------------|-------------|---------------------------------------|-------------------|
| Tensile strength at yield (at break)               | ISO 527     | 60 (70)                               | N/mm <sup>2</sup> |
| Elongation at yield (at break)                     | ISO 527     | 6 (110)                               | %                 |
| Elastic modulus                                    | ISO 527     | >2300                                 | N/mm <sup>2</sup> |
| Flexural modulus                                   | ISO 178     | >2300                                 | N/mm <sup>2</sup> |
| Charpy unnotched impact strength -40 °C            | ISO 179/1eU | NB                                    | kJ/m <sup>2</sup> |
| Charpy notched impact strength -30 °C              | ISO 179/1eU | 11                                    | kJ/m <sup>2</sup> |
| Izod notched impact strength +23 °C                | ISO 180/1A  | 65                                    | kJ/m <sup>2</sup> |
| Izod notched impact strength -30 °C                | ISO 180/1A  | 10                                    | kJ/m <sup>2</sup> |
| Physicla Properties                                |             |                                       |                   |
| Density                                            | ISO 1183    | 1,2                                   | g/cm <sup>3</sup> |
| Refractive index (20 °C)                           | ISO 489     | 1,586                                 |                   |
| Moisture absorption 24 hours, 23 °C, 50% RH        | ISO 62      | 0,15                                  | %                 |
| Electrical Properties                              |             |                                       |                   |
| Volume resistivity, dry                            | IEC 62631   | >10 <sup>14</sup>                     | Ω .m              |
| Surface resistivity, dry                           | IEC 62631   | 10 <sup>16</sup>                      | Ω                 |
| Dielectric strength, dry                           | IEC 60243   | 30                                    | kV/mm             |
| Dielectric constant, dry 50 Hz                     | IEC 62631   | 3                                     |                   |
| Dielectric constant, dry 1 MHz                     | IEC 62631   | 2,9                                   |                   |
| Dissipation factor (tan δ), dry 50 Hz              | IEC 62631   | 0,001                                 |                   |
| Dissipation factor (tan δ), dry 1 Hz               | IEC 62631   | 0,01                                  |                   |
| Thermal Propertie                                  |             |                                       |                   |
| Linear coefficient of thermal expansion (20-70 °C) | ISO 11359-2 | 65 x 10 <sup>-6</sup> K <sup>-1</sup> | T.I.              |
| Heat deflection temperature, HDT A (1,80 N/mm2)    | ISO 75      | 132                                   | °C                |
| Heat deflection temperature, HDT B (0,45 N/mm2)    | ISO 75      | 142                                   | °C                |
| Vicat temperature VST/B 120                        | ISO 306     | 149                                   | °C                |
| Vicat temperature VST/B 50                         | ISO 306     | 148                                   | °C                |
| Thermal conductivity                               | DIN 8302    | 0,20                                  | W/mK              |

### Additional Data:

Embossing: IEC <sup>TM</sup>, TEX <sup>TM</sup>, Grain 35, ANTI-REFLEX <sup>TM</sup>

Standard sizes: 3050 x 2050 mm, 2050 x 1250 mm

Thickness range: 0,8 – 20mm

Sizes and thickness on request

Excellent fire performance complying requirements to EN 13501-1 (European building std).

NB: Unless otherwise stated, all values quoted are nominal measurements The information contained in this data sheet is believed to be true at the time of printing. Any statements contained or inferred to within are an expression of opinion and presented without guarantee. It is up to the user to determine suitability of use, or potential patent infringement for specific applications.

rev: 06/2025