noltewerk

# Technical datasheet

## A-PET (amorphous polyethylenterephthalat)

| Example of application |
|---|
| › machine guard<br>› Displays suitable for outdoor use<br>› Cold storage and impregnation |

| Advantage | Disadvantages |
|---|---|
| › Brilliant surface<br>› Easily vacuum formed, does not require pre-drying<br>› Exceptional low-temperature performance<br>› Very good chemical resistance<br>› Very high impact resistance<br>› FDA-conform<br>› Excellent weather resistance | › Temperature resistant up to max. 65 °C<br>› Susceptibility to scratching<br>› No notch toughness |

| Basic information | Specification |
|---|---|
| Format | **Sheets:** 0.8 mm up to 6 mm available in 2.05 m x 3.05 m<br>0.8 mm up to 3 mm available in 1.25 m x 2.05 m<br>3.0 mm up to 5 mm available in 1.25 m x 2.50 m |

| Physical properties | Standard term/Specification* | Unit | Testing method |
|---|---|---|---|
| Density | 1.33 | $g/cm^3$ | DIN EN ISO 1183 |
| Moisture ingress | n.sp. | % | DIN EN ISO 62 |

| Mechanical properties | Standard term/Specification* | Unit | Testing method |
|---|---|---|---|
| Tensile strength | > 55 | MPA | DIN EN ISO 527 |
| Elongation at break | 54 | % | DIN EN ISO 527 |
| E-module | 2.500 | MPA | DIN EN ISO 178 |
| Notch toughness | fracture free | $kJ/m^2$ | DIN EN ISO 179 |
| Rockwellhardness | 50 | Shore D | DIN EN ISO 868 |

| Thermal properties | Standard term/Specification* | Unit | Testing method |
|---|---|---|---|
| Thermal conductivity | n.sp. | W/(m·K) | DIN 52612 |
| Linear thermal expansion coefficient | 0.5 | $K^{-1} \cdot 10^{-4}$ | DIN 53752 |
| | 1.00 | mm | At initial length of 1.000 mm and a temperature difference of 20 °C. |
| Max. operating temperature, short-term | n.sp. | °C | |
| Min. operating temperature, long-term | 65 | °C | |

| Electrical properties | Standard term/Specification* | Unit | Testing method |
|---|---|---|---|
| Resistance | n.sp. | Ω·cm | DIN 53482 |
| Outer surface coefficient | n.sp. | Ω | DIN 53482 |
| Puncture resistance | n.sp. | | DIN 53481 |

| Legend |
|---|
| n.sp.= not specified |

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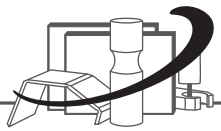

transparent plastics

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