

## Technical datasheet

PETG (polyethyleneterephthalate glycol)

| Example of | application |
|------------|-------------|
|            | appuouton   |

## › Machine guard

- > Packaging for medical equipment
- > Displays suitable for outdoor use
- Cold storage and refrigeration

| Advantage   | Disadvantages  |
|---|--|
| <ul> <li>&gt; Easily vacuum formed, does not require pre-drying</li> <li>&gt; Exceptional low-temperature performance</li> <li>&gt; Very good chemical resistance</li> <li>&gt; High impact resistance</li> <li>&gt; FDA-conform</li> <li>&gt; Cold &amp; warm mouldable</li> </ul> | <ul> <li>Temperature resistant up to max. 70 °C</li> <li>Susceptibility to scratching</li> </ul> |

| Basic information   | Specification   |      |                |
|---------------------|---|------|----------------|
| Format              | Sheets: 2 mm up to 20 mm available in 2.05 m x 3.05 m |      |                |
|                     |   |      |                |
| Physical properties | Standard term/Specification*                          | Unit | Testing method |

| Physical properties | Standard term/Specification* | Unit              | Testing method  |
|---------------------|------------------------------|-------------------|-----------------|
| Density             | 1.27                         | g/cm <sup>3</sup> | DIN EN ISO 1183 |
| Moisture ingress    | n.sp.                        | %                 |                 |

| Mechanical properties | Standard term/Specification* | Unit    | Testing method  |
|-----------------------|------------------------------|---------|-----------------|
| Tensile strength      | 50                           | N/mm²   | DIN EN ISO 527  |
| Elongation at break   | 54                           | %       | DIN EN ISO 527  |
| E-module              | 2.280                        | N/mm²   | DIN EN ISO 527  |
| Notch toughness       | fracture free                | kJ/m²   | DIN EN ISO 179  |
| Rockwellhardness      | 105                          | R-scale | DIN EN ISO 2039 |

| Thermal properties                     | Standard term/Specification* | Unit                              | Testing method   |
|--|------------------------------|-----------------------------------|--|
| Thermal conductivity                   | 0.2                          | W/(m·K)                           | DIN 52612  |
| Linear thermal expansion coefficient   | 0.68                         | K <sup>-1</sup> ·10 <sup>-4</sup> | DIN 53752  |
|  | 1.36                         | mm                                | At initial length of 1.000 mm and a temperature difference of 20 °C. |
| Max. operating temperature, short-term | 70                           | °C                                |  |
| Max. operating temperature, long-term  | 65                           | °C                                |  |

| Electrical properties     | Standard term/Specification* | Unit  | Testing method |
|---------------------------|------------------------------|-------|----------------|
| Resistance                | > 10 <sup>15</sup>           | Ω·cm  | ASTM D257      |
| Outer surface coefficient | > 10 <sup>15</sup>           | Ω     | ASTM D257      |
| Puncture resistance       | 16                           | kV/mm | ASTM D149      |

Legend

n.sp.= not specified

\*Higher specification on request.

All information based on current knowledge and experience. Information provided shall not exempt the contractor or user from conducting own tests. A legally binding warranty as to product features or its suitability for specific purposes may not be derived therefrom. Compliance with any proprietary rights as well as existing laws or regulations is the responsibility of the recipient of our products. No liability assumed for printing and any other errors. Technical data subject to change without notice. Reproduction or duplication of this document or its contents - whole or in part - is only permitted with express approval by company noltewerk. The German version of this data shall prevail. As of 0122.



\_\_\_\_\_