

# POLYDET® HighGloss PowerStar



|                                  |   |
|----------------------------------|---|
| <b>UV-/Wheatering Resistance</b> | excellent   |
| <b>Composition</b>               | gelcoat, chopped strand mat, woven roving, UP-resin |
| <b>Thickness</b>                 | 1.3 – 2.5 mm  |
| <b>Width</b>                     | up to 2,900 mm                                      |
| <b>Lenght</b>                    | 80 m  |
| <b>Colour</b>                    | RAL, NCS, customer-specific                         |
| <b>Surface Protection</b>        | one-sided protection film                           |
| <b>Bonding Preperation</b>       | one-sided corona or film treatment                  |
| <b>Paintable</b>                 | yes   |

## Product Description

- fibre glass reinforced composite
- smooth surface for highest aesthetical aspects
- combines the look of painted Aluminium with the mechanical properties of FRP
- coated with premium gelcoat resin system
- with additional woven roving for increased mechanical properties

## Technical Data

|                              |                        | Unit              | Norm                        |
|------------------------------|------------------------|-------------------|-----------------------------|
| <b>Thickness</b>             | 1.0   1.3              | mm                |                             |
| <b>Physical Properties</b>   |                        |                   |                             |
| <b>Density</b>               | 1.5                    | g/cm <sup>3</sup> | ISO 1183-1A                 |
| <b>Glass Conent</b>          | 37                     | %                 | ISO 1172                    |
| <b>Water Absorption</b>      | 0.5                    | %                 | ISO 62                      |
| <b>Volatile Content</b>      | <0.5                   | %                 | ASTM D3530                  |
| <b>Linea Expansion</b>       | 20-23*10 <sup>-6</sup> |                   | ISO 11359-2                 |
| <b>Mass per Unit Area</b>    | 1.5   1.9              | kg/m <sup>2</sup> |                             |
| <b>Mechanical Properties</b> |                        |                   |                             |
| <b>Tensile Strength</b>      | 0°                     | 137               | N/mm <sup>2</sup> ISO 14125 |
| <b>Tensile Modulus</b>       | 0°                     | 10,300            | N/mm <sup>2</sup> ISO 14125 |
| <b>Elongation at Break</b>   | 0°                     | 1.68              | % ISO 14125                 |
| <b>Flexural Strength</b>     | 0°                     | 243               | N/mm <sup>2</sup> ISO 527-4 |
| <b>Flexural Modulus</b>      | 0°                     | 3,800             | N/mm <sup>2</sup> ISO 527-4 |
| <b>Flexural Strain</b>       | 0°                     | 5,2               | % ISO 527-4                 |
| <b>Tensile Strength</b>      | 90°                    | 157               | N/mm <sup>2</sup> ISO 527-4 |
| <b>Tensile Modulus</b>       | 90°                    | 10,200            | N/mm <sup>2</sup> ISO 527-4 |
| <b>Elongation at Break</b>   | 90°                    | 1.77              | % ISO 527-4                 |
| <b>Flexural Strength</b>     | 90°                    | 172               | N/mm <sup>2</sup> ISO 527-4 |
| <b>Flexural Modulus</b>      | 90°                    | 3,800             | N/mm <sup>2</sup> ISO 527-4 |
| <b>Flexural Strain</b>       | 90°                    | 3.8               | % ISO 527-4                 |
| <b>Penetration Test</b>      |                        | 8                 | Nm                          |

The indicated values are the result of measurements done on samples from the above-mentioned productions. Consequently, they do not represent any specification.