

# POLYDET® PowerStar Plus



<b>UV-/Wheating Resistance</b>	excellent
<b>Composition</b>	woven roving, special resin optional
<b>Thickness</b>	0.8 – 1.5 mm
<b>Width</b>	up to 3,300 mm
<b>Length</b>	80 m, 120 m, 240 m
<b>Colour</b>	RAL, NCS, customer-specific
<b>Surface Protection</b>	one-sided protection film
<b>Bonding Preparation</b>	one-sided corona or film treatment
<b>Paintable</b>	yes

## Product Description

- fibre glass reinforced composite in coils and sheets
- high lightweight construction potential
- extremely high glass content for outstanding mechanical properties
- matrix of polyester or epoxy resin
- low thermal expansion
- available as **Antibac-Version**

## Technical Data

				Unit	Norm
Thickness	0.8	1.1	1.5	mm	
<b>Physical Properties</b>					
<b>Density</b>	1.61	1.70	1.59	g/cm <sup>3</sup>	ISO 1183-1A
<b>Glass Content</b>	46	59	50	%	ISO 1172
<b>Water Absorption</b>	0.3	0.2	0.2	%	ISO 62
<b>Volatile Content</b>	0.3	<0.5	<0.5	%	ASTM D3530
<b>Mass per Unit Area</b>	1.28	1.9	2.4	kg/m <sup>2</sup>	
<b>Mechanical Properties</b>					
<b>Flexural Strength</b>	0°	277	424	385	N/mm <sup>2</sup> ISO 14125
<b>Flexural Modulus</b>	0°	6,900	5,700	5,300	N/mm <sup>2</sup> ISO 14125
<b>Flexural Strain</b>	0°	4.9	4.7	4.1	% ISO 14125
<b>Flexural Strength</b>	90°	-	350	320	N/mm <sup>2</sup> ISO 14125
<b>Flexural Modulus</b>	90°	-	5,200	5,700	N/mm <sup>2</sup> ISO 14125
<b>Flexural Strain</b>	90°	-	5.1	4.1	% ISO 14125
<b>Tensile Strength</b>	0°	214	267	237	N/mm <sup>2</sup> ISO 527-4
<b>Tensile Modulus</b>	0°	15,500	17,600	13,000	N/mm <sup>2</sup> ISO 527-4
<b>Elongation at Break</b>	0°	1.7	1.7	2.0	% ISO 527-4
<b>Tensile Strength</b>	90°	-	186	184	N/mm <sup>2</sup> ISO 527-4
<b>Tensile Modulus</b>	90°	-	15,100	11,100	N/mm <sup>2</sup> ISO 527-4
<b>Elongation at Break</b>	90°	-	1.5	1.8	% ISO 527-4
<b>Impact Strength</b>		-	87	100	Nm ISO 179-1/2n
<b>Penetration Test</b>		7.8	13	22	N/mm <sup>2</sup> ISO 6603-2

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