

POLYDET® PowerStar Plus EP



UV-/Wheatering Resistance	excellent
Composition	glass fabric, epoxy resin
Thickness	0.7 mm, 1.1 mm, 1.4 mm
Width	up to 2,480 mm
Length	80 m, 120 m
Colour	RAL, NCS, customer-specific
Surface Protection	one-sided protection film
Bonding Preparation	one-sided corona or film treatment
Paintable	yes

Product Description

- fibre glass reinforced thermosetting composite
- surface sealed with high quality gelcoat
- extremely high glass content for outstanding mechanical properties
- very viscoplastic epoxid matrix resin

Technical Data				Unit	Norm	
Thickness		0.7	1.1	1.4	mm	
Physical Properties						
Density		1.60	1.59	1.76	g/cm ³	ISO 1183-1A
Glass Content		54	50	63	%	ISO 1172
Water Absorption		0.7	0.67	0.5	%	ISO 62
Mass per Unit Area		-	1.75	-	kg/m ²	
Mechanical Properties						
Tensile Strength	45°	289	330	387	N/mm ²	ISO 527-4
E-Modul	45°	17,536	15,500	24,600	N/mm ²	ISO 527-4
Elongation at Break	45°	2.28	2.70	2.04	%	ISO 527-4
Tensile Strength	0°	-	-	111	N/mm ²	ISO 527-4
E-Modul	0°	-	-	10,500	N/mm ²	ISO 527-4
Elongation at Break	0°	-	-	14.36	%	ISO 527-4
Tensile Strength	90°	-	133	111	N/mm ²	ISO 527-4
E-Modul	90°	-	7,400	10,600	N/mm ²	ISO 527-4
Elongation at Break	90°	-	25.9	13.06	%	ISO 527-4
Flexual Strength	45°	-	455	638	N/mm ²	EN 14125A
Flexual Elasticity Modul	45°	-	7,600	12,700	N/mm ²	EN 14125A
Outer Fiber Strain	45°	-	6.30	5.26	%	EN 14125A
Flexual Strength	0°	-	-	310	N/mm ²	EN 14125A
Flexual Elasticity Modul	0°	-	-	6.400	N/mm ²	EN 14125A
Outer Fiber Strain	0°	-	-	7.54	%	EN 14125A
Flexual Strength	90°	-	307	308	N/mm ²	EN 14125A
Flexual Elasticity Modul	90°	-	5,600	7,700	N/mm ²	EN 14125A
Randfaserdehnung	90°	-	9.0	7.40	%	EN 14125A
Impact Strength	45°	-	-	167	kJ/m ²	EN ISO179-1/2n
Impact Strength	0°	-	-	106	kJ/m ²	EN ISO179-1/2n
Impact Strength	90°	-	-	111	kJ/m ²	EN ISO179-1/2n
Impact Penetration		15	17.8	33	Nm	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.