Property Data

Envalior
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Tepex® dynalite 201–C200(x)/50%

PA66–CF62

Tepex® dynalite 201–C200(x)/50%
3K Carbon – PA66 consolidated composite laminate

Tepex®
BOND LAMINATES
A company of Envalior

The datasheet is valid for this specific composition only, the characteristics of composites depend on reinforcement level and fiber orientation. Non–standard thickness may alter some or all of these properties. The data listed here are given as average product properties and should not be used to establish specification limits nor used alone as basis of design. The underlying tests were conducted at room temperature and (where possible) with 2 mm specimen thickness. For tensile and flexural tests a specimen width of 25 mm was used and is highly recommended to achieve representative results.

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
LAYUP	**VALUE**		
Fiber	3K Carbon		
Weaving style	Twill 2/2		DIN ISO 9354
Area weight (dry fabric)	200	g/m²	DIN EN 12127
Weight rate (0°/90°)	50/50	%/%	
Polymer	Polyamide 6.6 (PA66)		
Fiber volume content	50	vol.–%	nominal
Thickness per layer	0.22	mm	nominal
MECHANICAL PROPERTIES	**DRY / COND**		
Tensile Modulus	55 / –	GPa	ISO 527–4/5
Tensile Strength	700 / –	MPa	ISO 527–4/5
Elongation at Break	1.5 / –	%	ISO 527–4/5
Flexural Modulus	47 / 43	GPa	ISO 14125
Flexural Strength	840 / 650	MPa	ISO 14125

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
THERMAL PROPERTIES	DRY / COND		
Density	1460 / –	kg/m³	ISO 1183
Melting temperature (10°C/min)	260 / *	°C	ISO 11357–1/–3
Heat deflection temperature (0.1% flex. Modulus)	250	°C	ISO 75–1/3
CLTE –35°C to 23°C (0°)	4.5	E–4/°C	ISO 11359–1/–2
CLTE 23°C to 80°C (0°)	4.7	E–4/°C	ISO 11359–1/–2