

Tepex® dynalite 102–RGUD600(x)/47%

PA6–GF66

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Roving Glass – PA6 consolidated composite laminate

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.

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
LAYUP	VALUE		
Fiber	E–Glass 1200 tex		
Weaving style	Plain		DIN ISO 9354
Area weight (dry fabric)	600	g/m²	DIN EN 12127
Weight rate (0°/90°)	80/20	%/%	
Polymer	Polyamide 6 (PA6)		
Fiber volume content	47	vol.-%	nominal
Thickness per layer	0.5	mm	nominal
MECHANICAL PROPERTIES	DRY / COND		
Tensile Modulus (0°)	32 / 29	GPa	ISO 527–4/5
Tensile Modulus (90°)	14 / 10	GPa	ISO 527–4/5
Tensile Strength (0°)	620 / 480	MPa	ISO 527–4/5
Tensile Strength (90°)	110 / 120	MPa	ISO 527–4/5
Elongation at Break (0°)	2.1 / 1.7	%	ISO 527–4/5
Elongation at Break (90°)	1.3 / 1.7	%	ISO 527–4/5



Property Data

Tepex[®] dynalite
102—RGUD600(x)/47%

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Flexural Modulus (0°)	26 / 23	GPa	ISO 14125
Flexural Modulus (90°)	12 / 9	GPa	ISO 14125
Flexural Strength (0°)	800 / 520	MPa	ISO 14125
Flexural Strength (90°)	275 / 190	MPa	ISO 14125

THERMAL PROPERTIES	DRY / COND		
Density	1800 / —	kg/m³	ISO 1183
Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Heat deflection temperature (0.1% flex. Modulus)	214	°C	ISO 75-1/3
CLTE -35°C to 23°C (0°)	11	E-4/°C	ISO 11359-1/-2
CLTE 23°C to 80°C (0°)	11	E-4/°C	ISO 11359-1/-2
CLTE -35°C to 23°C (90°)	22	E-4/°C	ISO 11359-1/-2
CLTE 23°C to 80°C (90°)	26	E-4/°C	ISO 11359-1/-2

