

## LINEN TAPE D-UD 3.2 TECHNICAL DATA SHEET

Tapes of unidirectional flax fibers, 110 gsm, 40 cm roll width

### Main Markets

Segment	Product Examples	Advantages
Sport & Leisure	Rackets, Bicycle Frames, Skies, Boards, ...	Dampening properties
Transportation	Already used in aeronautic, automotive, boat manufacturing, and railways	Weight reduction, Mechanical & Acoustic properties, Bio-based material

### Mechanical Properties

Composites made with 12 layers of *FlaxTape*® 100 and an epoxy resin process by RTM

Rate of Fibers	By Volume	50%
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Traction (ISO 527)	Modulus	35 GPa
	Tensile Strength	365 MPa
	Failure Strain	1.35%

Flexion (ISO 14 125)	Modulus	31 GPa
	Tensile Strength	294 MPa
	Failure Strain	2.6%

Theoric Density	1.31 gr/cm <sup>3</sup>
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Composites made with 12 layers of *FlaxTape*® 100 and 20 PP films by film stacking and compression molding

Rate of Fibers	By Volume	43%
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Traction (ISO 527)	Modulus	33 GPa
	Tensile Strength	275 MPa
	Failure Strain	1.22%

Flexion (ISO 14 125)	Modulus	23 GPa
	Tensile Strength	210 MPa
	Failure Strain	2.1%

Theoric Density	1.13gr/cm <sup>3</sup>
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### Dampening Properties

Low frequency dampening (flexion/mode 2)

Product	Dampening Ratio
UD Flax	1.47%
UD Carbon	0.18%
UD Glass	0.15%

