

FLAX LINEN DRY FABRIC D-SX 10.3 TECHNICAL DATA SHEET

Non-crimp unidirectional fabric with fibers oriented at +45° and -45°, suitable for manufacturing fiber reinforced composite products with high performance and low environment impact.

Fabric Specification

Fabric Type	Flax (EU)
Construction	+/- 45°
Fiber TEX	954 denier (106 TEX)
Fabric Weight	10.3 oz/yd ² (350 gsm +/- 5%)
Stitching Thread	Textured Polyester
Standard Width	50 inch (1270mm)
Standard Roll Length	164 ft (50 m)

Fiber Properties

Considering that glass fibers have a density of 2.6 and a tensile modulus of 70GPa, the flax ampliTex UD 275 g/m² can replace a 480 g/m² glass fiber UD fabric to have the same stiffness in tension. In compression, the performance of flax is a bit lower, so that the flax ampliTex UD 275 g/m² can replace a 350 g/m² glass fiber UD fabric to have the same stiffness.

Tensile Modulus of fibers	58.5 GPa
Tensile Strength of fibers	700 MPa
Density of fibers	1.35 kg/dm ³

Processing Guidelines

- Good compatibility with epoxy and polyester
- Near-zero CTE, hence good processing compatibility with carbon fibers
- Compatible with infusion-based processes (vacuum infusion, RTM), wet layup, bladder inflation molding (BIM), compressing molding
- Sensitive to humidity, dry fabric before use
- Fiber weight fraction of 60% can be reached with process pressure >5 bars. However, the fibers absorb a lot of resin when laminating the fabric and it tends to look dry (unless too much resin is used) before pressure is applied. We recommend controlling amount of adhesive used for laminating and to impregnate with 50-60% resin in weight. While pressing the fabric, excess resin squeezes out.