ORTHOFLAX® 0-90°

Bidirectional fabric with fibers oriented at 0° and 90°, suitable for manufacturing fiber reinforced composite products with a high performance and a low environmental impact. ORTHOFLAX 0-90° has a very good drapability and is ideal for complex shapes. High laminate stiffness is obtained thanks to the low crimp satin weave.

Technical specifications

		*Dry fibers***	*Composite**
Tension	Modulus // to fibers	60 GPa	14.8 GPa
	Modulus ⊥ to fibers	6.1 GPa	-
	Strength // to fibers	630 MPa	139 MPa
	Strength ⊥ to fibers	-	-
	Strain to failure // to fibers	-	1.26%
	Strain to failure ⊥ to fibers	-	-
Flexural	Modulus // to fibers	54 GPa	13.3 GPa
	Modulus ⊥ to fibers	6.1 GPa	-
	Strength // to fibers	692 MPa	178 MPa
	Strength ⊥ to fibers	-	-
	Yield strength // to fibers	190 MPa	-
	Density	1350 kg/m^3	

Fabric construction

Fiber type: Flax (EU)
Construction: 0°/90°, balanced satin weave
Fiber tex: 200 TEX
Fabric weight: 200 gsm +/-5%, 100gsm in each direction

Measurements

Standard width: 1270mm
Roll length: 5, 10, 20, 50m

** Properties measured on samples with 5 layers aligned at 0°, manufactured in a press with 5 bars pressure (45% fiber weight, 40% fiber volume fraction), with Epoxy.*
*** Properties calculated from tests with UD fabrics with the same fibers*

Ecological aspects

Flax fibers are grown in France and Belgium, it is a regional resource. Production of flax has a negative global warming indicator because of the CO_2 sequestration by photosynthesis.

Reference and packaging

ORTHOFLAX 0-90° 200 (1270mm) 5mL	SA1 005
ORTHOFLAX 0-90° 200 (1270mm) 10mL	SA1 010
ORTHOFLAX 0-90° 200 (1270mm) 20mL	SA1 020
ORTHOFLAX 0-90° 200 (1270mm) 50mL	SA1 050

CUSTOMS' CODE

ORTHOFLAX 0-90	53091110

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