

TECHNICAL DATA SHEET

Name of semi-product:

MANIFICA-UD

IUT de bordeaux
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FRANCE

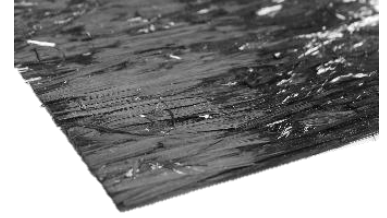
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MANIFICA
CARBON FIBRE RECYCLING PROCESS

MANIFICA-UD is a range of unidirectional fabrics made of recycled carbon fibres.

High strength & standard modulus aeronautic carbon fibres.



Semi-product description

Typical Product Properties	Unit	Values		
Areal weight (ply thickness)	g/m ²	300 (0.5 mm)	500 (1 mm)	700 (1.5 mm)
Areal weight Tolerance	%	± 15		
Format length x width	mm ²	300 x 300		
		500 x 500		
		1000 x 1000		
Binder content	w%	1-2		
Binder type		Polyamide or Epoxy (to be specified)		
Binder granulometry	µm	50		

Typical Fibres properties

	Unit	
Fibre type		Standard & Intermediate modulus
Fibre diameter	µm	7 ± 2
Fibre length	mm	50-250
Fibres Alignment	%	80 % of fibres aligned within ± 10°

Typical Composite properties:

Compression moulding with cold curing epoxy system

12 bars, 40°C during 3 hours – 24 hours at ambient temperature – 100°C during 4 hours

Typical composite Properties	Unit	Value (range)		Standards
		Min	Max	
Tensile modulus	GPa	80	120	EN 2561
Tensile Strength	MPa	500	850	EN 2561
Interlaminar Shear Strength	MPa	39	50	EN 2563
Fibre volume fraction	%	57	64	
Density	g/cm ³	1.5	1.55	

Health and Safety: Dust and short fibres may cause skin and eye irritation. It is strongly advised to wear, gloves, mask, protective goggles and clothing. Carbon fibres are electrically conductive and may damage unprotected electric installations