

## Product description



FibriMat™ F450 is a 100% mechanical consolidated needlepunched non woven mat, designed for the manufacturing of economical and low environmental footprint parts.

Product nature	Non woven mat
Type of yarn/roving	Fibers
Nature/ Proportion/ Quality of fibers	Short fibers of European flax
Consolidation method	Needlepunching

## Product properties

Property	Value	Unit	Standard
Moisture content	9 ±1	%	NF EN ISO 3344
Surface weight	450 ±45	g.m <sup>-2</sup>	NF G07-150
Fiber density	1,45	g.cm <sup>-3</sup>	-

## Tensile mechanical properties<sup>1</sup>

Property	Data		Unit	Standard
	CD	MD		
Tensile Strength	45 ±4	47 ±3	MPa	ISO 527-5
Young Modulus <sup>2</sup>	6 ±1	5 ±1	GPa	ISO 527-5
Elongation at break	1,3 ±0,2	1,3 ±0,2	%	ISO 527-5
Thickness of 1 impregnated ply	1,46 ±0,05		mm	NF EN ISO 5084

<sup>1</sup> : Flax/Bio-epoxy composite at 20% ±1% of fibers volumic fraction made by vacuum infusion à 0,4mBar

<sup>2</sup> : Modulus measured between 0,02 and 0,1% deformation

### Storage

Dry area and avoid direct sunlight

### Manufacturing methods

Infusion, RTM, thermocompression, hand lay up, ...

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