

## CIT CF46 12K HS40 PW ER450G 45% 100CM

### PROPERTIES

<i><b>Dry Fabric:</b></i>	<i><b>Unit</b></i>	<i><b>Typical Values</b></i>
Weaving Style	-	Plain Weave
Fiber Type	-	HS40
Fiber Density	g/cm <sup>3</sup>	1.85
Warp	threads/cm	3.1
Weft	threads/cm	3.1
Areal Weight	g/m <sup>2</sup>	46.4 (± 5%)
<i><b>Uncured Prepreg:</b></i>	<i><b>Unit</b></i>	<i><b>Typical Values</b></i>
Tack	-	Medium
Flow	%	23 (± 5%)
Out life @ 23°C	days	45
Storage life @ -18°C	months	12
Nominal Area weight	g/m <sup>2</sup>	84
Nominal Resin content	Wt %	45 (± 3)
Volatile content	Wt %	< 1
Nominal Width	mm	1000
Cured Ply Thickness *	mm	0.056

(\*) The tests were carried out @ 23°C and 60% R.H. on specimens cured in std conditions (dwell @135° for 120 minutes in autoclave. External pressure applied: 6 bar).

*Details provided in this document have been obtained from carefully controlled samples; data are an overview of this product and should not be intended as technical specification.*

*Because the properties of this product can be significantly affected by the fabrication and testing techniques employed and since CIT does not control the conditions under which its products are tested and used, CIT cannot guarantee that the properties provided will be obtained with other processes and equipment.*

*CIT has the right to change any data or information when deemed appropriate.*

<b><i>Cured Material Property</i></b>	<b><i>Test method</i></b>	<b><i>Units</i></b>	<b><i>Nominal Values (Vf 44.8%)</i></b>
Tensile Modulus 0°	ASTM D3039	GPa	95.3
Tensile Strength 0°		MPa	870
Poisson's Ratio 0°		-	0.035
Elongation at failure 0°		%	0.87
Tensile Modulus 90°	ASTM D3039	GPa	94.0
Tensile Strength 90°		MPa	855
Poisson's Ratio 90°		-	0.033
Elongation at failure 90°		%	0.85
Compressive Modulus 0°	ASTM D6641	GPa	87.9
Compressive Modulus 90°		GPa	86.2
Compressive Strength 0°	SACMA SRM 1R-94	MPa	400
Compressive Strength 90°		MPa	390
In Plane Shear Modulus	ASTM D3518	GPa	2.75
In Plane Shear Strength @ failure		MPa	69.0
In Plane Shear Strength @ 5% strain		MPa	115
Inter-laminar Shear Strength 0°	ISO 14130	MPa	69.7

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