

## Biotex Flax/PP Technical Information



### Composition

Volume Fraction	40%	Standard
	Others	On request

### Yarn

Linear Density	250tex 125-2000tex	Standard On request
Processing	The commingled yarn can be consolidated by heating to 180-200°C and applying a pressure of at least 1bar. Typical processes for the yarn include filament winding.	

### Fabric

Weave Style	2x2 twill 4x4 hopsack Other styles	Standard Standard On request
Fabric Weight	420-520gsm 250-800gsm	Standard (depending on weave style) On request
Fabric Width	1.25m Up to 3m	Standard On request
Processing	The commingled fabric can be consolidated by heating to 180-200°C and applying a pressure of 1-50bar. Typical processes include vacuum consolidation, autoclave and press moulding.	

### Preconsolidated Sheet

Thickness	0.8, 1.2, 1.6, 2.0, 2.4 & 2.8mm Others	Standard On request
Processing	The sheets can be formed to shape by heating to 180-200°C and stamp forming with a matched tool in a press at typical pressures of 10-100bar.	

### Typical Properties

Density	1.04g/cm <sup>3</sup>	
Tensile Modulus	8.1GPa	(ISO 527-4)
Tensile Strength	56.0MPa	(ISO 527-4)
Tensile Elongation	1.5%	(ISO 527-4)
Flexural Modulus	4.5GPa	(ISO 14125)
Flexural Strength	79.2MPa	(ISO 14125)
Charpy Impact (flat)	27.4kJ/m <sup>2</sup>	(ISO 179-1 unnotched, flatwise)
Charpy Impact (edge)	23.4kJ/m <sup>2</sup>	(ISO 179-1 unnotched, edgewise)

*Data for laminate made from Biotex 40vol% flax-PP 4x4 hopsack fabric by press moulding and tested at ambient temperature.*