



**ELG Carbon Fibre Ltd.**  
**RECYCLED CARBON FIBRE**

## **CARBISO™** **TM-PP** Nonwoven Mats



**Carbiso™ TM-PP are nonwoven mats made from recycled carbon fibre and comingles with PP and MAPP.**

The unsized fibres are compatible with the polypropylene matrix system.

Carbiso™ TM-PP is ideally suited for press moulding and available in the following fibre ratios (by weight):

- 60% polypropylene / 40% recycled carbon fibre
- 70% polypropylene / 30% recycled carbon fibre



## Carbiso™ TM-PP Nonwoven Mats

### Nomenclature for Carbiso™ TM-PP products

Example:

**CARBISO™ TM PP/60 SM45D- 100-1000**

BRAND NAME	PRODUCT TYPE	POLYMER/ rCF %	FIBRE CLASSIFICATION	DIMENSION
CARBISO™	TM A hybrid nonwoven mat made from recycled carbon fibres blended with thermoplastic fibres	PP/60 Polypropylene fibres at 60% fibre weight fraction	SM45D Standard modulus fibre with a strength of 4-5Gpa, dry fibre	100-1000 Areal weight of 100gsm, 1000mm width

For additional details please see ELG Technical Note 1702: Product Nomenclature

### Material data of Carbiso™ TM-PP (40%rCF / 60% PP)

Typical properties	Units	Values
Carbon fibre content	%	40
Polypropylene content	%	60
Carbon fibre length	mm	40-90
Areal weight	g/sqm	100-500
Fabric weight tolerance	%	+/- 10
Roll length (200g/sqm)	m	50-150
Roll diameter (200/sqm)	mm	300-900
Roll width	mm	500-2500
Core ID	mm	76.2

\* Depending on areal weight of material, roll length and diameter may vary e.g 200gsm = 50LM, 30cm dia.



## Carbiso™ TM-PP Nonwoven Mats

### Material properties of Carbiso™ TM-PP

Typical properties	Units	Values
Tensile Modulus (Weft)*	GPa	Test results pending
Tensile Modulus (Warp)*	GPa	Test results pending
Tensile strength (Weft)*	MPa	Test results pending
Tensile strength (Warp)*	MPa	Test results pending
Compression strength (Weft)*	MPa	Test results pending
ILSS (Weft)*	MPa	Test results pending
ILSS (Warp)*	MPa	Test results pending

\*Laminates made using liquid compression moulding at 30% fibre volume fraction

The information presented in this document is provided in good faith, but no warranty is given or is to be implied regarding its accuracy or relevance to any particular application. Users must satisfy themselves regarding the suitability and safety of their use of the information and products in the application concerned.

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