

**PRODUCT DESCRIPTION**

DEXWIN® CF/PA6-51.01 is a high-quality **UD semi-finished product** made by thermoplastic pultrusion technology for high volume application. The **continuous carbon fibre-reinforced polyamide 6** material is available as **tape or rod** – each produced in a single-stage process. Due its benefits the material is well qualified for a multitude of composite solutions – especially for industrial, automotive, and sporting goods applications.

**BENEFITS**

- Low density – high strength & stiffness
- Completely consolidated
- Good fibre impregnation & distribution
- Adjustable fibre content
- Non-slit (fibre-free edges)
- Continuous, adjustable length
- High reproducibility
- Efficient & economical process

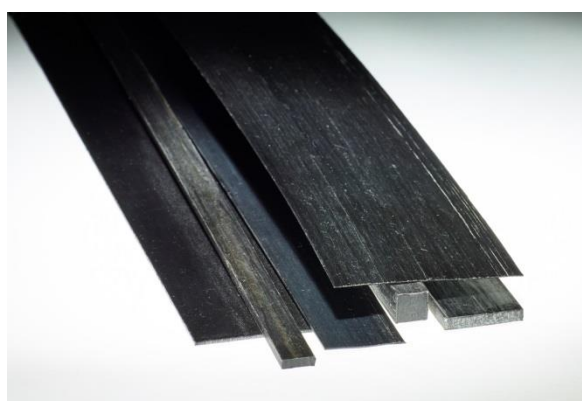
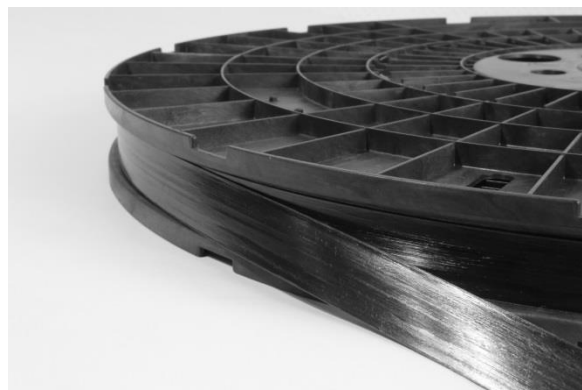
**APPLICATIONS**

- Automated tape winding
- Automated tape laying
- Extrusion
- Injection moulding
- Compression moulding

**FEASIBILITY\***

- Cross section up to 100 mm<sup>2</sup>
- Width up to 100 mm
- Thickness up to 10 mm
- Spool length up to 1.000 mm  
UD rods are cut to desired length

\* Available tools upon request



**TYPICAL PROPERTIES**

Physical properties	Typical values	Units
Fibre	Carbon	-
Matrix	Polyamide 6	-
Color	Black	-
Density	1.40	g/cm <sup>3</sup>
Fibre content	51	wt%
	40	vol%
Mechanical properties		
Tensile strength	1.660	, MPa
Tensile modulus	87	, GPa
Thermal properties		
Melt temperature	220-222	°C

All data are approximate values