



Revolutionizing Performance in Towpreg

+ Empowering the Future of
Intelligent Manufacturing +

T P - 2 0 0 - R C - W - N K T 7 0 0 M



+ Superior Mechanical
Properties



+ Excellent
Processability



+ Wide Range of
Applications



TOWPREG

■ TP-125-RC-W-NKT700M ■ TP-180-RC-W-NKT700M ■ TP-200-RC-W-NKT700M

Product Description and Technical Data

• TOWPREMAX™ high-performance prepreg tow is manufactured using high-strength carbon fibers and specialized epoxy resin. With a glass transition temperature (T_g) of 125°C, 180°C, or 200°C corresponding to its three models, this product series is suitable for industrial pressure vessels such as hydrogen storage cylinders. Its uniform width and exceptional unwinding characteristics make it particularly well-suited for dry filament winding processes, optimizing production efficiency.

Product Name	Width	RC	T _g	Gel Time	Storage
TP-200-RC-W-NKT700M	3mm; 4mm; 5mm 6mm; 7mm; 8mm (±0.5mm)	21%-40% (±2%)	>200°C	600-900s @120°C GB/T12007.7-1989	25°C: 4 weeks 0°C: 3 months -18°C: 1 year
TP-180-RC-W-NKT700M		21%-40% (±2%)	>180°C	450-750s @120°C GB/T12007.7-1989	
TP-125-RC-W-NKT700M		21%-40% (±2%)	>120°C	650-1050s @120°C GB/T12007.7-1989	

Product Features & Mechanical Parameters

- Standard epoxy resin systems with multiple formulations available
- 100% hot-melt process / solvent-free
- High-strength carbon fiber reinforcement delivering excellent mechanical properties
- Consistent resin content distribution
- Prepreg tow width readily adjustable to customer specifications
- Optimal viscosity / easy unwinding / high-speed dry filament winding

Property	Value	Unit	Test Standard
Single Filament Tensile Strength	≥4900	MPA	ASTM D 4018
0° Tensile Strength	≥2800	MPA	ASTM D 3039
0° Tensile Modulus	≥125	GPA	ASTM D 3039
90° Tensile Strength	≥40	MPA	ASTM D 3039
90° Tensile Modulus	≥7.5	GPA	ASTM D 3039
0° Compressive Strength	≥1200	MPA	ASTM D 6641
0° Compressive Modulus	≥115	GPA	ASTM D 6641
90° Compressive Strength	≥160	MPA	ASTM D 6641
90° Compressive Modulus	≥8	GPA	ASTM D 6641

TP-125-RC-W-NKT700M Typical Data

Data based on Zhongfu SYT49S-24K carbon fiber, normalized to 60% fiber volume fraction. Values may vary with other fibers.
Cured at 125°C for 90 minutes using autoclave process.