

# Matrix Carbon Fiber Prepreg

## 120°C(250°F) Cure Epoxy Resin System

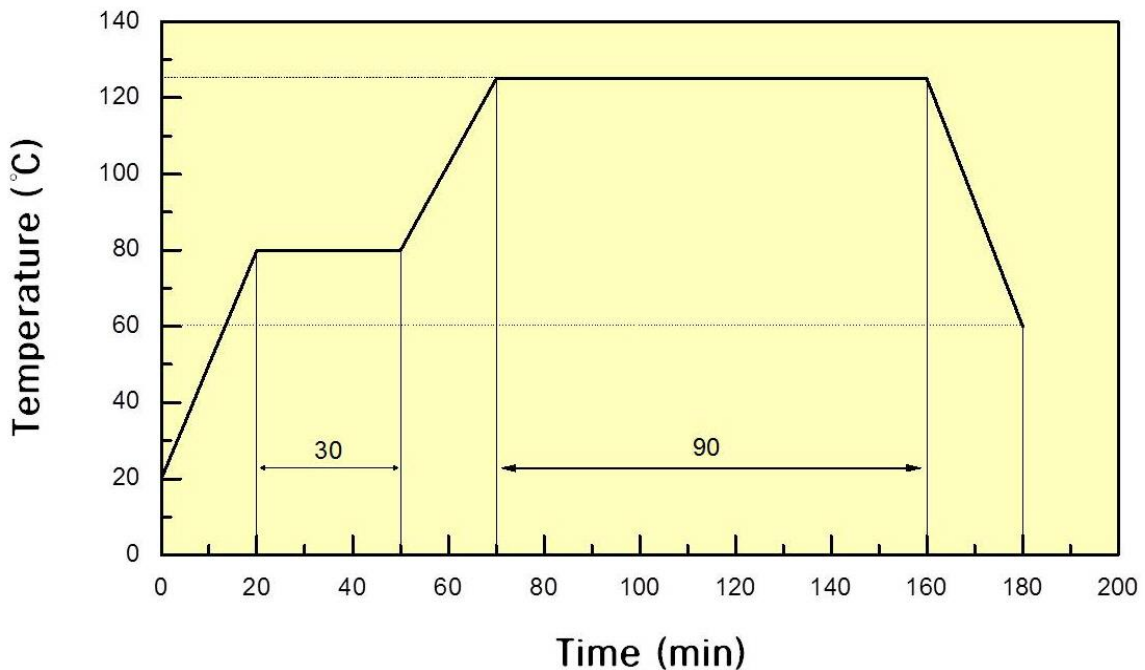
### Standard grade of epoxy resin system

Typical Cure Cycle	Tg	Controlled Flow	Toughened	Application
90min @ 125°C	125	○	○	Golf Shaft, Bike, Fishing Rod, Arrow Shafts, Industrial

### Stepped Cure Cycle

-Process:Sheet Winding, Autoclave

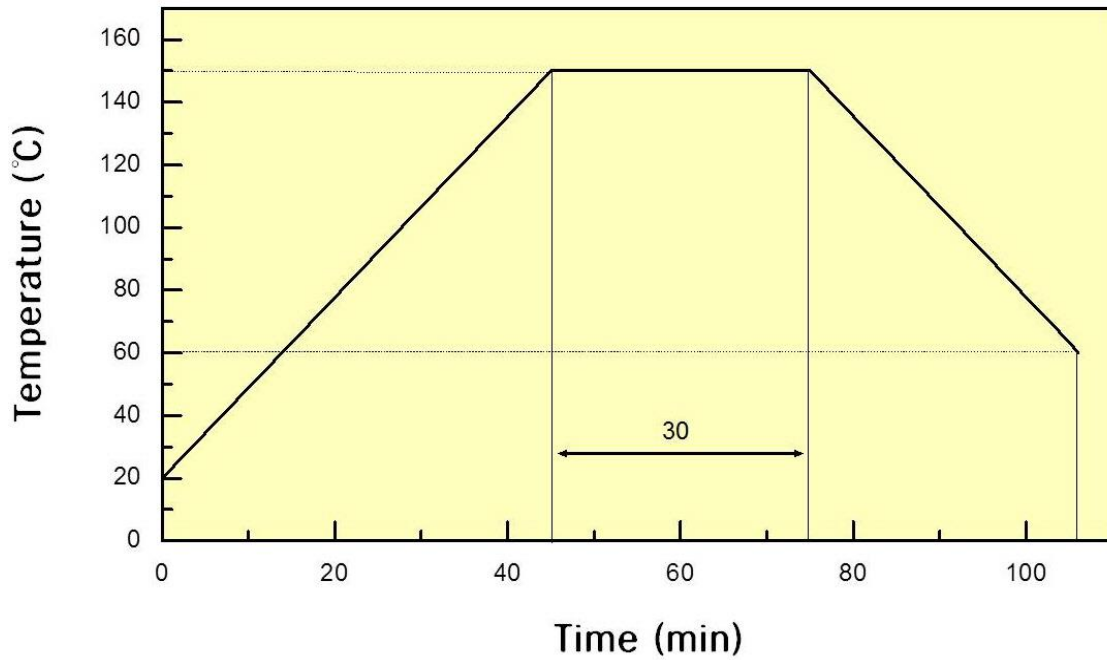
-Typical Applications:Golf Shaft, Fishing Rod and other Industrial applications



### One step Cure Cycle

-Process: Pressure Bag (Bladder Molding)

-Typical Applications: Bicycle Parts, Hockey Stick, Tennis Racket and etc.



### Tensile Properties of UD Prepreg

Grade	Tensile Strength[Mpa]	Tensile Modulus[Gpa]	Test Method
24NS	2,686	128.3	ASTM D 3039
30NS	2,950	147.7	
35NS	2,157	167.7	
40NS	2,476	195.4	
46NS	2,109	216.1	

**Cured Laminate Properties**

<b>Physical Properties</b>	<b>Unit</b>	<b>24NS-150R1</b>	<b>Test Method</b>
FAW	g/m <sup>2</sup>	150	-
R/C	%	36	
Cured Ply Thickness	mm	0.154	
Fiber Volume	%	54.4	

<b>Mechanical Properties</b>	<b>Unit</b>	<b>24NS-150R1</b>	<b>Test Method</b>
Tensile Strength	MPa	2,500	ASTM D 3039
Tensile Modulus	GPa	125.3	
Compressive Strength	MPa	1,200	SACMA, SRM1-88**
Flexural Strength	MPa	1,150	ASTM D 790
ILSS	MPa	88.5	ASTM D 2344
Impact Strength	kJ/m <sup>2</sup>	130	ASTM D 256

**Storage Conditions**

<b>Temperature</b>	<b>Storage Period</b>
30 °C	10days
20 °C	25days
10 °C	2months
0 °C	6months
-10 °C	1year 6months