

# ZENPREG<sup>®</sup> Carbon Fiber Prepreg

ZENPREG<sup>®</sup> prepreg is produced using hot-melt process with epoxy resin, allowing a wide range of fiber average weight (low, medium and high GSM), with different resin properties. Our production quality is stable and could meet the applications including wind turbine blades, industrial equipment, sports equipment, electronic industry, etc.



## RESIN SYSTEM

Products	Types	Curing Conditions	Tg (°C)	Characteristics	Applications
2551	Epoxy	100°C-9.5h 120°C-2h	115-125	High-GSM prepreg Medium temperature curing resin system	Wind power blades Building reinforcement
2554-N	Epoxy	120°C-2h	115-125	Medium temperature curing resin system High toughness Good compatibility with carbon fiber Flame retardant up to EN45545-2 HL2	LCD bracket Robot arm Medical equipment Sports equipment Pipe and sheet
2558	Epoxy	150°C-1h	115-125	Halogen-free flame retardant,UL94V0	Electronic industry New energy battery shell
2559	Epoxy	150°C-2h	230-250	High-temperature-resistant resin system Used in applications requiring high-temperature resistance	Bicycle Wheels

## MECHANICAL PROPERTIES OF PREPREG LAMINATES

Products		2551	2554-N	2558	2559	Test Standard
Curing Methods		Vacuum-Bag Moulding	Thermal Forming			
Curing Conditions		120°C/2h	150°C/0.5h	150°C/1h	160°C/1h	—
Fiber		TC-35R	TC-35R	TC-36P	TC-36P	
Resin Content	wt%	33	42	37	37	
0°Tensile Strength	MPa	1966	1720	2100	1700	ISO 527-5
0°Tensile Modulus	GPa	126	127	126	130	
90°Tensile Strength	MPa	54.5	72.4	54.5	60.8	ISO 527-5
90°Tensile Modulus	GPa	8.8	7.4	9.3	8.4	
0°Compressive Strength	MPa	1332	919	—	1320	ISO 14126
0°Compressive Modulus	GPa	126	107	—	120	
90°Compressive Strength	MPa	169	145	—	240	
90°Compressive Modulus	GPa	9.1	7.9	—	9.4	
ILSS	MPa	73.5	—	—	110	ISO 14130
Tg	°C	115	125	125	240	ISO 11357-2

## PRODUCT APPLICATIONS

