



MERICAN 3522 is a hot-melt epoxy resin system for prepregs such as carbon fiber and glass fiber. Compared with MERICAN 3512, its mechanical properties are higher.

FEATURES

- ♦ Moderate adhesion, wide processing range
- ♦ High impact resistance
- ♦ Excellent handling and laminating properties

APPLICATIONS

- ♦ Suitable for the manufacture of carbon fiber prepregs
- ♦ Suitable for the recreational products such as bicycles, tennis rackets and ice hockey sticks

TYPICAL PRODUCT VALUES

Property ⁽¹⁾	MERICAN 3522
Appearance	White Solid
Viscosity, cps (70 °C)	30000 - 40000
Gel Time, min (115 °C)	18 - 23
Shelf Life (25 °C)	≤20 days
Shelf Life (0 °C)	≤3 months
Shelf Life (-18 °C)	≤6 months

PROCESS PARAMETERS

Property ⁽²⁾	MERICAN 3522
Oven melting conditions	70 - 80 °C, 30 - 80 min
Gluing temperature, °C	73 - 80
Immersion temperature, °C	80 - 100

Property ⁽¹⁾	MERICAN 3522	TM
Tg, °C	135 - 145	ASTM D3418
Tensile Strength, MPa	70 - 80	ASTM D638
Tensile Modulus, GPa	3.0 - 3.5	ASTM D638
Elongation at Break, %	3.0 - 4.0	ASTM D638
Flexural Strength, MPa	120 - 140	ASTM D790
Flexural Modulus, GPa	3.0 - 3.4	ASTM D790

MERICAN® 3522

Curing Conditions

120 °C / 1 h + 150 °C / 1 h

- (1) Typical values only, should not be considered as product specifications.
 (2) The melting temperature of the oven is recommended to be adjusted according to the viscosity of each product; If the amount of adhesive is insufficient, it is recommended to increase the temperature for better adhesive surface; Note that the resin is easy to cure over 100 °C; If leaching is not enough, it is necessary to increase the temperature.

TESTING CONDITIONS

Temperature: 25 °C. Relative moisture: 50 ± 5 %.

PACKING AND STORAGE

The product is packed in clean and dry carton box, 30 Kg/ ctn.

The storage container should be well sealed, and the environment should be cool, dry and ventilated due to the hygroscopicity of epoxy resin. After receiving the resin, please store it below 0 °C and use it up within the preservation period, to avoid the change of the resin over time, which will affect the preservation period of the prepreg and the quality of the final product.

MATERIAL SAFETY

A Material Safety Data Sheet of this product is available on request.

TEST METHODS

Test methods (TM) referred to in the table(s) are available on request.

SINO POLYMER is a leading manufacturer of epoxy vinyl ester resin, unsaturated polyester, epoxy resin, polysulphone, coating and adhesives since year 1958, with its headquarter and plant located in Shanghai Chemical Industry Park, P.R. China. The company's Total Quality Management Gene's guaranty sustainable product & service quality, lead time and competitiveness, as the Safety & Security Management, Improvement Process, R&D and International developments make Sino Polymer a sustainable partner on long term.

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