



MERICAN 3570 is a hot-melt epoxy resin system, which has the advantages of high temperature resistance ( $T_g$  up to 180 °C), high toughness. It is suitable for prepreg materials such as carbon fiber and glass fiber.

## FEATURES

- ♦ Good wet-out to fiberglass
- ♦ Excellent handling properties and spreadability
- ♦ High impact resistance

## APPLICATIONS

- ♦ Suitable for the Bicycle wheels, high heat-resistant carbon fiber products, automotive components

## TYPICAL PRODUCT VALUES

| Property <sup>(1)</sup> | MERICAN 3570  |
|-------------------------|---------------|
| Appearance              | White Solid   |
| Viscosity, cps (25 °C)  | 30000 - 40000 |
| Gel Time, min (115 °C)  | 22-30         |
| Shelf Life (25 °C)      | ≤4 weeks      |
| Shelf Life (0 °C)       | ≤3 months     |
| Shelf Life (-18 °C)     | ≤12 months    |

## PROCESS PARAMETERS

| Property <sup>(2)</sup>   | MERICAN 3570            |
|---------------------------|-------------------------|
| Oven melting conditions   | 70 - 80 °C, 30 – 80 min |
| Gluing temperature, °C    | 73 - 80                 |
| Immersion temperature, °C | 80 - 100                |

| Property <sup>(1)</sup> | MERICAN 3570 | TM         |
|-------------------------|--------------|------------|
| $T_g$ , °C              | 175 - 185    | ASTM D3418 |
| Tensile Strength, MPa   | 50 - 60      | ASTM D638  |
| Tensile Modulus, GPa    | 2.8 - 3.3    | ASTM D638  |
| Elongation at Break, %  | 4.0 - 4.5    | ASTM D638  |
| Flexural Strength, MPa  | 90 - 110     | ASTM D790  |
| Flexural Modulus, GPa   | 2.8 - 3.3    | ASTM D790  |

# MERICAN® 3570

|                   |                           |
|-------------------|---------------------------|
| Curing Conditions | 150 °C /1 h + 170 °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 the 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.

## SINO POLYMER CO., LTD.

NO. 130, Muhua Road, Shanghai Chemical Industry Park, 201507

Shanghai, China

Phone: +86 21 64252619

Email: [huachang@hchp.com.cn](mailto:huachang@hchp.com.cn)