# 111 F E SINO POLYMER 华昌聚合物

MERICAN 9709 is an unsaturated polyester resin based on orthophthalic acid, which has the advantages of good wet-out to fiberglass, it is suitable for hand lay-up, spray-up and filament winding.

## **FEATURES**

- Resistance to water
- High elongation
- Excellent mechanical properties
- Lloyd's Approved

#### **APPLICATIONS**

 Suitable for the FRP products reinforced with glass fiber, carbon fiber and other reinforcements, such as storage tanks, pipes, boats and other products

## LIQUID RESIN PROPERTIES (1)

Property	Value	ТМ
Appearance	Yellow viscous liquid	Visual
Acid value,mg KOH/g	17 - 25	ISO 2114
Viscosity, cps(25°C)	700 - 1100	ISO 2555
Gel Time <sup>(2</sup> ), min	22 - 32	ISO 2535
Solid Content, %	64 - 70	ISO 3233
Thermal stability, hr (80 °C)	≥ 24	ISO 584

# **PROPERTIES OF PURE RESIN CASTING** <sup>(1)</sup>

Property	Value	ТМ
HDT (1.8 MPa), °C	65 - 70	ASTM D648
Tensile Strength, MPa	60 - 65	ASTM D638
Tensile Modulus, GPa	3.0 - 3.3	ASTM D638
Tensile Elongation, %	2.5 - 3.0	ASTM D638
Flexural Strength, MPa	110 - 120	ASTM D790
Flexural Modulus, GPa	3.1 - 3.3	ASTM D790
Barcol hardness	35 - 40	ASTM D2583

(1) Typical physical properties, should not be considered as product specifications.

(2) Water bath at 25 °C, 100g of resin was added with 2.0g Butanox M-50 (AKZO-Nobel), 1.5g NL49P (AKZO-Nobel).

# MERICAN® 9709

# **TESTING CONDITIONS**

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

# PACKING

Net weight 20 Kg / iron drum, 220 Kg / iron drum, 1000 Kg / IBC tank.

## **STORAGE**

The storage environment should be dry and ventilated. The storage period below 25 °C is 6 months, Improper storage or transportation conditions will cause a shortening of the resin's storage period. The products shall comply with the provisions on the storage, transportation, loading and unloading of hazardous chemicals in the Regulations on the Safety Management of Hazardous Chemicals of the State Council. It is recommended to transport resin by refrigerated truck when the temperature exceeds 35 °C, and transport it at night to avoid direct sunlight.

## **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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