



MFE 770 is novolac epoxy vinyl ester resin is a high temperature and corrosion resistant resin with excellent comprehensive properties. It is suitable for FRP fabrication process including hand lay-up, spray-up, pultrusion, infusion (RTM).

## FEATURES

- ◆ Exceptional thermal and chemical resistance properties at higher temperatures
- ◆ High resistance to solvents and chemicals, good retention of strength and toughness at elevated temperatures, and excellent resistance to acidic oxidizing environments

## APPLICATIONS

- ◆ Suitable for FRP protective surface of metallic or concrete structure
- ◆ Suitable for the applications such as FGD processes, industrial waste treatment facilities, metal pickling and solvent extraction processes used in mining
- ◆ Suitable for the formulation of heavy anti-corrosion coatings such as glass flake coatings

## LIQUID RESIN PROPERTIES <sup>(1)</sup>

Property	Value	TM
Appearance	Light yellow liquid	Visual
Viscosity, cps (25 °C)	250 - 550	ISO 2555
Density, g/cm <sup>3</sup>	1.17	ISO 1675
Solid Content, %	63.0 ± 3.0	ISO 3233
Gel Time <sup>(2)</sup> , min	20.0 ± 5.0	ISO 2535
Shelf Life, Dark (25 °C)	6 months	

## PROPERTIES OF PURE RESIN CASTING <sup>(3)</sup>

Property	Value	TM
Tensile Strength, MPa	75 - 90	ASTM D638
Tensile Modulus, GPa	3.4 - 3.8	ASTM D638
Tensile Elongation, %	3.0 - 4.0	ASTM D638
Flexural Strength, MPa	130 - 145	ASTM D790
Flexural Modulus, GPa	3.6 - 4.1	ASTM D790
Barcol hardness	40 - 46	ASTM D2583
HDT (1.8 MPa), °C	145 - 150	ASTM D648

# MFE® 770

- (1) Typical values, cannot be constructed as specifications.  
 (2) 100g resin added with 2.0g Butanox M-50 (AKZO-Nobel), 2.0g NL49P (AKZO-Nobel).  
 (3) Cure schedule: 24 hours at room temperature; 2 hours at 120 °C.

## TESTING CONDITIONS

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

## PACKING

Net weight 20 Kg / iron drum, 200 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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