



MFE 780HT is a novolac-based epoxy vinyl ester resin. It is developed based on MFE 780, which already successful used in heavy duty industrial applications over many years and provides an economical alternative to exotic alloys by allowing the use of lower cost FRP over traditional materials. 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
- ◆ FRP equipment produced using MFE 780HT retains strength and toughness at elevated temperature

## APPLICATIONS

- ◆ Suitable for the applications such as FGD processes, industrial waste treatment facilities, metal pickling and solvent extraction processes used in mining
- ◆ The formulation of heavy anti-corrosion coatings such as glass flake coatings

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

Property	Value	TM
Appearance	Light yellow transparent liquid	Visual
Viscosity, cps (25 °C)	750 ± 150	ISO 2555
Density, g/cm <sup>3</sup>	1.18 ± 0.03	ISO 1675
Solid Content, %	68.0 ± 3.0	ISO 3233
Shelf Life <sup>(2)</sup> , Dark (25 °C)	4 months	

## PROPERTIES <sup>(1)</sup> OF PURE RESIN CASTING <sup>(3)</sup>

Property	Value	TM
Tensile Strength, MPa	70 - 80	ASTM D638
Tensile Modulus, GPa	3.5 - 3.8	ASTM D638
Tensile Elongation, %	2.0 - 3.0	ASTM D638
Flexural Strength, MPa	130 - 140	ASTM D790
Flexural Modulus, GPa	3.7 - 4.2	ASTM D790
Barcol hardness	45 - 55	ASTM D2583
HDT (1.8 MPa), °C	200 - 210	ASTM D648

# MFE ® 780 HT

- (1) Typical values, cannot be constructed as specifications.
- (2) Unopened drum with no additives, promoters, accelerators, etc. added. Shelf life specified from date of manufacture.
- (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 4 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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